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VOL. III. Nos. 1 and 2.

PASITELES AND ARKESILAOS, THE VENUS GENETRIX AND THE VENUS OF THE ESQUILINE.

[PLATE I.]

In the present paper it is proposed to give reasons why the two female statues figured on PL. I might be assigned respectively to the schools of Arkesilaos and Pasiteles, about the second half of the first century B. C., and to throw additional light upon these interesting schools of sculpture which mark an attempted revival of Greek art during the rise of the Roman Empire.

I.

In giving a chronological survey of art, Pliny says,[1] that with the 121st Olympiad art died out and was again revived in the 156th Olympiad when a number of artists lived who, though certainly inferior to the earlier ones, were still recognized as skilful sculptors. It is thus that he begins his enumeration of the artists who marked a revival of Greek sculpture. It has been found that this somewhat broad and general statement conforms to the indications offered by our general knowledge of the devolopment of Greek art, and corresponds to cer-

[1] *N. H.* XXXIV, 51, 52: (*Ol. CXXI*) *Cessavit deinde ars ac rursus Olympiade CLVI revixit, cum fuere longe quidem infra praedictos, probati tamen Antaeus, Callistratus, Polycles Athenaeus, Callixenus, Pythocles, Pytheas, Timocles.*

tain definite statements concerning this period which it has served to elucidate.

To appreciate this passage in its historical context we must review the whole history of Greek sculpture in its broadest outlines of development. The works of the Archaic period (previous to 460 B. C.) all manifest, as their most marked and noticeable feature, the struggle of the artist with the reluctant material and with the just and effective application of the instruments of his craft. Thus, while these early monuments possess a certain broad simplicity, which, when added to the sacred and remote associations of their early origin, may well have suggested, even to a traveller of the time of the Antonines, like Pausanias, something sacred and divine; still they have not the power to evoke in the spectator the illusion of life which the artist wished to evoke, and, by the obtrusion of the material and the difficulty of its manipulation, they recall too strongly the technical side of the work to produce the effects of a truly artistic creation.

In the highest period of the fifth century B. C. these difficulties are overcome. The artist has gained complete mastery over the material and the means of manipulation; and at the same time he possesses the supreme artistic tact to choose, from out of all possible subjects in nature and forms of life, those instances which are most completely in harmony with the material he uses. So that, from the technical side, on the one hand, as well as from the imaginative side and the choice of subjects, on the other hand, we are never reminded of the dualism between these two main factors in the function of artistic creation; but both are indissolubly welded together in the artistic perfection of the great statues of Pheidias.

In the second half of this great period, about 350 B. C., with Skopas and Praxiteles, though art still maintains itself at a supreme height, its general development toward sensuousness, fostered and accelerated by the course which the general social and political life takes in this direction, begins to manifest itself on the technical side by the dwelling upon the most careful elaboration of line and texture in the composition of figures, which tendency is heightened by the great rise of the art of painting in this period, and the consequent development of polychromatic sculpture. With regard to the subjects, also, we notice that, while on the one hand the great deities like Zeus, Hera and Athene, the personifications of the highest human spiritual attributes, decrease in number, deities like Apollo, Dionysos, Aphrodite recur with far greater frequency;

that in them the sensuous side is accentuated; and that new figures, such as Eros and the Bacchanalian following, are for the first time thought subjects worthy of being represented in statues. Though in Lysippos, who reflects the humanly-heroic spirit of the age of Alexander the Great, art receives a certain stamp of virility and energy, this spirit in itself contains the germs of a restless and violent sensationalism; and, from the interest in individual life which is encouraged by the personality of Alexander the Great, the keen sense for the actual study of nature which characterized Lysippos readily leads over to pronounced realism. This realism, coupled with an incipient sensuousness inherent in the art of Praxiteles, finds its pronounced and final expression in the works of the son of Praxiteles, Kephisodotos the Younger, upon one of whose works the highest praise bestowed was, that one could almost feel the flesh give way under the pressing finger. This marks the beginning of the decline of Greek art, as in the social and political history of Greece Proper the independence and national importance of Hellas have come to an end.

It is here that the broad current of Greek national life and of Greek art bifurcates: the one half flowing to the East into the empires founded by Alexander, the other mingling with the stream of Roman life in the West, whose waters it will widen and ultimately purify. The eastern current of Hellenic art ends with the great schools of Pergamon and Rhodes with their splendid, though somewhat barbaric, sensational and anatomical art; the western current, like the fountain of Arethusa, is for a time lost from sight, burrowing its way under the sea that separates the Roman and Italic life from the Greek, and, in the middle of the second century B. C., appearing, at first in a weak, yet refreshing, fountain at Rome in the period assigned by Pliny to this revival of the Greek art which to him had ended with the cessation of artistic life in Greece Proper.

It is at about this period that the Hellenization of Rome begins and the earlier indigenous life loses its freshness and vigor. The hundred years from the middle of the second century to the middle of the first century B. C. mark the period of transition from the simplicity of indigenous national life to the Hellenized Roman life which characterized the Empire. The great task is that of the unification of all the various, and often opposed, currents of nationality and civilization which met at Rome. To bind all this into unity, the indigenous civilization was not sufficiently powerful and superior. It required some alloy which should

fuse and make malleable these various elements so that they should take the form of the great ring of the Roman Empire which encompassed the whole of the civilized world of antiquity. The task of forming this renewed Roman nationality, which could be accomplished only by the introduction of the civilization of Hellas, in which art and literature were the most efficient agents, begins to be realized about the year 154 B. C. Perhaps consciously, this nationalizing process receives a definite and effective impulse through Caesar. But what marks the whole of this movement from the very beginning, and continues to characterize it through all the later phases of Roman life, is the indirectness and sophistication of its course, in contradistinction to the spontaneity and immediateness of true Hellenic culture. As with Stilo and Quintus Scaevola the language and literature of the Greeks, which was the immediate national expression of their inner life, becomes a matter of learning; and as the philosophy and mythology of the Greeks, which had been the direct expression of their highest intellectual aspirations, led in Rome to a practical State Philosophy in the Stoa and to Euhemerism, so the art of Greece, at first merely a matter of foreign importation, never entirely lost this foreign character, even after it had been introduced into the public and domestic life of Rome, and generally manifests traces of conscious study and adaptation.

Greek art is at first introduced into Rome by the Roman generals who conquered Greece, and who added to the splendor of their triumphal entry by the introduction of a train of statues and works of art, which were then deposited in the capital. Here, as in so many phases of the history of Greek civilization, Magna Graecia and Sicily played an important part. Marcellus is the first, who after the conquest of Syracuse (212 B. C.) carries off the chief works of art from that capital and deposits them in Rome. Then Q. Fulvius Flaccus follows his example after the destruction of Capua (210 B. C.); and finally Fabius Maximus, a year later, transports to Rome many works of art (notably the colossal statue of Herakles by Lysippos). Then from the wars against the successors of Alexander the Great, chiefly in the East, T. Quinctius Flaminius (197 B. C.), M. Fulvius Nobilior (187 B. C.) and L. Cornelius Scipio (185 B. C.) bring to Rome great treasures of art. But the most extensive importation of works of Greek art into Rome and the beginning of a dilettante love of collecting such works, which ever afterward marked noble Romans, begins with the actual subjugation of Greece itself, when Aemilius Paullus (167 B. C.) vanquished Perseus of Macedonia, and,

returning to Rome, celebrated a triumphal entry which occupied three days and in which 250 wagons were laden with works of art brought from Greece. We also know that the one thing he kept out of the Macedonian spoils of King Perseus was the library, and that, though himself not lettered, he appreciated Greek culture so highly that he engaged Greek teachers for his sons, who were to receive the refining influence of this culture. Of the greatest importance among these generals was Metellus Macedonicus. He not only brought works of art to Rome, but also transplanted thither Greek artists. The first mention we have of Greek artists of really historical times settling in Rome is in connection with those invited thither by Metellus for the building of the Porticus, not only sculptors but also the Greek architect Hermodoros. Brunn has pointed out that the erection of the Porticus and the consequent importation of Greek artists corresponds in time to the date assigned by Pliny to the revival of art, and that, among the artists mentioned by Pliny who marked this revival, one is mentioned as being invited by Metellus. So that it becomes highly probable that the revival referred to by Pliny really signalizes the revival of Greek art in Rome itself, owing on the one hand to the continuous importation of works of Greek art from Greece into Rome (and this custom continued and even grew with the emperors), as well as to the general growth of the assimilation of Greek culture and the special taste for art among the noble Romans; and, on the other hand, to the domestication of Greek artists in the Roman capital.

The course which this artistic activity in Rome will take is necessarily influenced by these circumstances. In the first place, it is not likely that the museum and collecting character which distinguishes the demand for art in Rome, as in the other phases of culture it produced a mosaic pattern devoid of organic unity and spontaneity, will effect an original development or modification of the past art in the new direction of the expression of national life. On the contrary, it will inevitably lead to eclecticism. In the second place, after Lysippos (the preponderance of whose works at Rome points to a predilection on the part of the Romans for his art), and after the Pergamenian and Rhodian schools, whose works began to abound in Rome, with their love for and study of anatomy, it is not likely that the minute study of nature will be less attractive to the artist and essential to his activity. In the third place, the point which the technical advancement of the sculptor's art had, as we have seen, reached with Kephisodotos the Younger and the

Pergamenians and Rhodians, marks the highest development of technical skill. It is not likely that anything can be added in this direction; but rather that an attempt at original productiveness will lead to a reaction from this sensuous hypertrophy of technical skill back to the simplicity of the earlier periods.

Accordingly, for the next hundred years artistic activity in Rome and the products of artists of Greece working for the Roman market appear to have been chiefly reproductive, and this copying craft appears to have continued and to have been fostered in Rome ever after; so that most of the marble statues constituting the collections of Europe are such copies or adaptations of celebrated Greek works called into existence by this Roman demand.

It is about the middle of the first century B. C., however, that an attempt at a comparatively more original artistic activity manifests itself in Rome. Yet, as we shall see, even this attempt at originality will be affected by the three currents of influence just enumerated, nay, will be made up out of the fusion of these three currents into a new whole. It is also interesting to note that the artists who bring about this intermediation between the capital of Italy and ancient Hellas come from that important centre of progressive development of Greek life and culture, namely, the ancient Greek settlements of the south of Italy and Sicily. These artists are Pasiteles and Arkesilaos.

Pasiteles is often, and has been (even in some manuscripts of Pliny), confounded with Praxiteles. He was born in the south of Italy, but received the right of Roman citizenship about the year 87 B. C. He is contemporary with Pompeius, who was born 106 B. C., and assassinated 48 B. C.; and also with Varro, that model of the learned connoisseur and critic of art of the Roman type, from whom most of our information concerning Pasiteles is derived. He is interesting to us, (1) as a sculptor; (2) as a writer on art; (3) as the founder of a school of art.

1.—As an artist he was versatile. He worked in gold, in ivory, in silver, in bronze and in marble; but he attached the greatest importance to the actual modelling in clay, as he called modelling in clay the mother of sculpture in all other materials. And, though the custom of making models in clay previous to the execution in other materials no doubt existed in some form in the earlier times and was insisted on by Lysippos, it appears that with him and his contemporaries the greatest attention was given to these models and to their complete finish. This preference for working in clay has no doubt to be brought into con-

nection with the other notice concerning him, namely, his love for nature and his preference for working from actual life. An anecdote related in Pliny (*N. H.* 36. 39) tells of the danger in which the artist was placed, while modelling a lion from life, by a panther that had broken out of its cage. Few individual works of this artist are mentioned by ancient authors. Though we can derive very little information from their bare mention, still they point to the versatility of this artist, also with regard to choice of subjects.

2.—The theoretical predisposition of Pasiteles, which is indicated in the careful modelling from life just alluded to, is confirmed by the fact that he is mentioned as a writer on art. His attention was not only brought to the study of nature, but he also felt a special interest in the works of early artists of all schools. In the *Index Auctorum* for the four books of his *Natural History* (33 to 36), Pliny mentions Pasiteles with the addition *qui mirabilia opera scripsit*, and in another passage (36 to 39) he says of him *qui quinque volumina scripsit nobilium operum in toto orbe*. According to Jahn,[2] the title of the book of Pasiteles was probably *περὶ ἐνδόξων παραδόξων ἔργων*; according to Bursian,[3] *περὶ τῶν καθ' ὅλην τὴν οἰκουμένην θαυμαζομένων ἔργων*. It has been made probable that certain passages in Pliny referring to artists and works of art are directly derived from the book of Pasiteles, which Pliny had before him.

3.—As might have been expected, the preponderance of the theoretical element in Pasiteles, as was the case with the Peloponnesian artists Ageladas and Polykleitos, was favorable to his becoming the founder of a school. It is an interesting and unique instance in the history of Greek art, that we have two generations of pupils of Pasiteles actually acknowledging themselves as such in inscriptions on extant monuments. These are Stephanos, pupil of Pasiteles, and Menelaos, pupil of Stephanos. On the tree-stem supporting the nude youthful figure in the Villa Albani there is the inscription ΣΤΕΦΑΝΟΣ ΠΑΣΙΤΕΛΟΥΣ ΜΑΘΗΤΗΣ ΕΠΟΙΕΙ; while an inscription on a famous group commonly known as Orestes and Elektra (also Kresphontes and Merope, or Deïanira and Hyllos, or Telemachos and Penelope) in the Villa Ludovisi at Rome ascribes the work to ΜΕΝΕΛΑΟΣ ΣΤΕΦΑΝΟΥ ΜΑΘΗΤΗΣ ΕΠΟΙΕΙ.[4]

[2] *Ber. d. kgl. sächs. Ges. d. Wissensch. z. Leipzig*, 1850, pp. 108 *seq.*

[3] Ersch & Gruber Encyl. *Gr. Kunstgesch.* LXXXII, 384.

[4] KEKULÉ, *Die Gruppe des Künstlers Menelaos:* Leipzig, 1870.

In the work of Stephanos, the immediate pupil of Pasiteles, we have reason to believe that we have more or less adequate indications of the style of the founder of the school; while in the group of Menelaos we already lose some of these marked features, and, especially in the treatment of the drapery, we notice the growth of those characteristics which distinguish the more purely Roman works of the later times from Graeco-Roman as well as from Greek art. Interesting as a comparison between these works is, we can only direct our attention to the work of Stephanos, of which a replica exists in the nude male youth, the left figure in the group at Naples (commonly known as Orestes and Elektra), here figured in the centre of PLATE I. The work of Stephanos, and by implication of Pasiteles, contains somewhat contradictory elements, as far as its style is concerned, which in their combination form the distinctive feature of this school. Almost in opposition to the art immediately succeeding Praxiteles, we here find in the attitude a designed simplicity. The pose is simple without the pronounced curve caused by sideways projection of one hip. It is the simple attitude which points to a style even earlier than the figures of Polykleitos that drag one leg after the other. In the detail work of the head the same severe almost archaic character is met with, and we here recognize a desire to return to the broader treatment of earlier art, in contradistinction to the pronounced vitality of the heads of Lysippos or of the Pergamenian and Rhodian artists. On the other hand, the treatment of the body indicates a careful study of nature which points to the later date, fixed by the inscription. Finally, in the building up of the figure there is something complex and intentional which suggests to the careful spectator that the work has not been sensuously conceived as a whole, by one creative act, but has been the result of various single efforts. This impression is strengthened by the contrast between the severity, leading almost to stiffness, of the figure as a whole, and the life-like modelling of the surface in detail.

It has thus been generally held by archæologists (especially by Brunn and Kekulé) that works of this class mark what is called the *archaizing* or *archaistic* (in contradistinction to the genuinely *archaic*) direction in sculpture; and it is believed that it marks an eclectic tendency on the part of the artists who, in correspondence with the spirit of their age, combine all these various contradictory features in their own personality. Accordingly, we may be permitted to see in the figure of Stephanos the intention to produce a fixed academic type of figure, in

opposition to the post-Polykleitan naturalism of art which had gone beyond the bounds of the monumental requisites of good sculpture. And, as we notice in the simple attitude as well as in the squareness and width of the chest a reminiscence of the Polykleitan canon of proportions, we can trace in the slimness of the whole figure and the comparatively small head the influence of the Lysippian canon. Added to this, we have evidence of a careful study of nature. Now, out of these elements the artist appears to have formed a new canon, which, as it were, should combine the features of the Polykleitan and Lysippian canons into a new academic figure.

The female figure associated in the Naples group with the type of Stephanos (the central group on our PL. I) manifests the same characteristics. Here, too, the general pose, the treatment of the head in all its details, the perpendicular run of the folds below the zone, are simple, almost severe and archaic, in character; while the treatment of the nude as it shines through the drapery, and especially the transparent and clinging quality of the drapery itself, pointing to the custom of hanging wet drapery around the model, place the work in the late period. The combination of these contrasting elements in one work give to it a character which we do not recognize in the works of the Greek artists, and which corresponds to the features of the works belonging to the schools to which the inscription on the statue of the Villa Albani assigns all of this class.

It will be seen that the evidence found in these monuments tallies with the general and special information we have derived from the accounts of ancient authors concerning Pasiteles; and, again, that these characteristics correspond to the general features of Roman life in the age of Pasiteles. It is a question not so much of individuals, as of a common attribute of the age, and we have every reason to believe that the contemporary of Pasiteles, Arkesilaos, manifested in his works the same general tendencies.

The passage in which Pliny (on the authority of Varro) praises Pasiteles for his care in modelling in clay, is immediately preceded by a passage praising Arkesilaos for the same quality. In it (XXXV. 155) he tells us that the models of Arkesilaos were bought at higher prices than the statues of other artists. As an instance, he quotes the fact that a Roman knight paid a talent for the model in gypsum of a krater by Arkesilaos. He also appears to have been very versatile: for, besides the famous statue of Venus Genetrix, with which we are specially con-

cerned, there are mentioned as being by him (Pliny, XXXVI. 33; XXXVI. 41) two works of *genre:* the first, Kentaurs carrying nymphs; the second represented a lioness tamed by winged cupids, some of whom held her down, bound, while others forced her to drink out of a horn, and others again were pulling low shoes (*socci*) over her paws. But we are chiefly concerned with his statue of Venus Genetrix, which he created a few years before his death, which was contemporary with that of Lucullus (42 B. C.) for whom he had undertaken a statue of Felicitas that remained unfinished.[5] The statue of Venus Genetrix was made for Caesar to be placed as the temple-statue (the Julian *gens* tracing their origin back to Venus Genetrix) in her temple dedicated by Caesar in the year 46 B. C. Because of the haste of Caesar, the statue was erected in the temple and dedicated before it was completed. It is with this work that I think it probable the statue of a draped figure holding an apple in her left hand and the end of her cloak in her right, here figured on PL. I, may be identified as a more or less accurate replica.

II.

This statue was for a long time considered to be the type of the Venus Genetrix of ancient Rome. Ottfried Müller is usually quoted by German authorities as the first who drew attention to the parallelism between these statues and the Venus Genetrix on the reverse of the coins of Sabina. Wissowa, in a treatise which we shall have occasion to quote frequently, pointed to Visconti[6] as the first to have established this parallelism. Visconti himself, however, in a foot-note to p. 44 mentions the brothers Zanetti as the original interpreters.[7] But Müller does appear to have been the first to have definitely brought this work into connection with the name of the famous sculptor Arkesilaos. From the similarity existing between the coins and the statue, as well as from the fact that the coins of Sabina bear the inscription *Veneri Genetrici*, and that the type of Venus Genetrix as the ancestress of the Julian *gens* was established by Arkesilaos, the step to this identification was a very natural one.

Since then, however, owing chiefly to the work of Reifferscheid,

[5] PLINY, *N. H.* XXXV. 156: *Ab hoc factum Venerem Genetricem in foro Caesaris, et priusquam absolveretur, festinatione dedicandi positam; eidem a Lucullo HS. LX signum Felicitatis locatum, cui mora utriusque inviderit.*

[6] *Museo Pio Clementino*, III, p. 44.

[7] *Statue di Venezia*, tom. II, pl. XV.

Kekulé, and Wissowa, the opinion, formerly universally received, has been doubted, nay, generally rejected (except by Bernoulli[8]); so that Overbeck in the third edition of his *Geschichte der griechischen Plastik* (II, p. 421) corrects his former identification, chiefly because there is no "positive and definite ground for ascribing it to Arkesilaos."

Now, without considering the possible ascription of this work to Arkesilaos, it has always appeared to me that the numerous statues corresponding to the one in the Louvre, here figured, had in themselves the peculiar characteristics which would make the careful student of such works assign them to the age of Pasiteles and Arkesilaos. For the period near Praxiteles and Kephisodotos the Younger, it has, in the general pose, as well as in the treatment of the larger folds (especially in the side view, when one stands to the left of the figure), elements of simplicity bordering on severity, which are out of keeping with the character of the art of the fourth and beginning of the third century B. C.; while entirely out of keeping with fifth-century art, are the transparency of the drapery (which is moreover not justified by any action or marked personal attribute of the figure), the conscious arrangement of the drapery at the left breast, and the mechanical working of the marble after the Roman fashion. The work possessed that fusion of different elements of style which, as we have seen, marked the age of Pasiteles and Arkesilaos. Unfortunately, the heads of none of the replicas can without doubt be considered to have formed portions of the work as found, though most are antique heads. But the figure by itself tells its story. Furthermore, to my knowledge, of all extant works there is none to which these statues bear so close a relationship as to the female figure from the Naples group in the centre of our Plate. Considering the difference of motif, the general pose, the treatment of nude and drapery, the ropy treatment of the border of the garment in its course over breast and shoulder, the heavy, hanging quality of the broader perpendicular folds that run down the centre, at the side, and in the portions hanging from the left arm, must be recognized as of the same character in both figures. In their general characteristics both works have in common the eclectic tendency already referred to. Now, considering that the original, of which the Louvre statue is a replica, must have been a famous statue of Venus, for, beside twenty extant statues enumerated by Bernoulli, the type is figured on several

[8] *Aphrodite:* Leipzig, 1873, cap. VI.

Roman coins; considering, further, that the type as given on the coins does bear the inscription Venus Genetrix (though different ones do also), and that Arkesilaos established the type of this goddess in a temple-statue which was specially sacred to the whole of the Julian family—we may consider it probable that we here have a replica of this famous statue. At all events, as the archæological material at present stands, we are bound to assign this statue to the age of Arkesilaos, if we assign it to any period.

Unfortunately, circumstances over which I have no control force me to defer the criticism of the views of the authorities above mentioned to a future occasion, especially as regards the bearing of Roman coins upon the question. Suffice it to say that, on examining all Roman coins with types of Venus that were accessible at the British Museum, I have come to the conclusion that they do not prove anything definite for or against the attribution, in spite of the arguments of Wissowa and Kekulé. The real definite index we possess, and this I claim is archæologically of great importance, is in the comparative study of the style of the works themselves.

III.

The nude marble figure to the left of the central group on PL. I appears to me also to be a derivative of the same artistic movement. The statue (when complete, represented as tying the band round the head) was discovered, in December, 1874, on the Esquiline at Rome, at the site of the *Orti Mecenaziani* and *Lamiani*.[9] It is described by Carlo Lod. Visconti, who considered the work to point back to a type established by Skopas. For this ascription I see no grounds whatever. My own views have been anticipated and confirmed in an interesting memoir by the late Fr. Lenormant,[10] who also quotes Helbig as sharing his opinion.

In this work, too, we find a combination of discordant elements. The head, on the one hand, has marks of a quaint treatment belonging to works of early Greek art, whereas the body manifests a study of nature of a kind that, to my knowledge, is unexampled among extant works of classical art. The broad, simple treatment of forehead and brow, and the ridge of the nose, together with the almost conventional

[9] *Bullettino d. Commiss. Archeol. Municipale di Roma*, 1875, pp. 16 *seq.*
[10] *Gazette Archéologique*, pls. 23, 24, 1877, p. 138.

modelling of the hair in parallel ridges on the head, and in quaint short curls round the forehead, shows the artist's reminiscences of works of the first half of the fifth century B. C. On the other hand, the dwelling on the *morbidezza* of the surface in the modelling of the nude, points to a late period. There are great inequalities in the working of this figure, parts of which are of exceeding excellence of execution, while others are hasty or inferior. This, the general character of the figure, and its peculiar proportions (*e. g.*, the shortness of the waist), give the impression that the artist followed one definite model in the nude. In the whole statue we have evidences of the influence of earlier types of art, coupled with keen appreciation of nature. The statue is probably a later derivative of the school of Pasiteles.

Whatever the value of this fragmentary article may be, I feel assured that the juxta-position of these three interesting works on one plate must be suggestive to the genuine student, and may lead to more definite results in confirming or disproving my own opinions.

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FORGERIES OF BABYLONIAN AND ASSYRIAN ANTIQUITIES.

[PLATE II.]

Through the cupidity excited by the rage for *bibelots*, fraud has to-day invaded all branches of art, to the great detriment of science. A skilled forger has sometimes lent his talent for a more or less ingenious mystification in which he himself was mystified, and in this case there is not much danger. We remember the story of a made-up plant, presented to Jussieu with the object of puzzling him; the learned botanist showed not the slightest surprise and, by simply analyzing the various elements that had been combined on the same stem, unveiled the innocent deception. This kind of joke passes all limits when it becomes the basis for speculation: it is then a crime, and, though followed by public reprobation and repressed by law, the difficulty of reaching the culprit allows this industry to increase and multiply. It must be confessed that archæology is much injured by this state of things, for, though it should interest only specialists, the general public always hear echoes of the facts. Everyone will remember that manufactory which inundated with false Moabite antiquities one of the most enlightened countries of Europe, and which succeeded for some time in deceiving the eyes of specialists. But the trade has its dangers,—witness the forger who paid with his life for an attempt at fraud for which legal redress could not, perhaps, have been obtained.

I.—Mention will be made only of the counterfeits of Assyro-Babylonian monuments: they have only begun, and I think it is time to nip them in the bud. The art of Assyria revealed itself in too striking a manner not to tempt the forger. As soon as the explorations at Nineveh attracted public attention, the forgeries began, though at first but timidly and on a small scale. Besides, the value of such objects was as yet too little known to make it profitable to imitate things that would not have

a certain sale: it was far more advantageous to the marauders to steal from the excavations, than to imitate.[1]

Gradually forgery took the proportions of a regular commerce. At Baghdad it is the Jews who give themselves up to this industry, in which medals are the favorite objects, as Assyrian antiquities are too difficult a branch. As it is not so easy to manufacture a Khorsabad bull and put him in circulation, smaller objects, such as inscriptions, statuettes, and engraved stones are chosen. I remember having heard, a short time after the return of the French expedition to Mesopotamia, of a plan of Babylon engraved on a stone coming from the quarries of Montmartre! What has become of this marvel?

I have seen a collection of casts, Assyro-Babylonian terracotta prisms, which a dealer wished to dispose of by adding a certain number of genuine antiquities.[2] The discoveries of M. de Sarzec have again called attention to Babylonia, and the favor enjoyed recently by the engraved cylinders leads to their manufacture. I would like to forewarn against these productions and indicate their characteristics. If the amateur is at all familiar with the genuine objects in our Museums he can hardly be deceived, but all are not within reach of the Louvre or the British Museum, and they are more or less at the mercy of speculators when their taste is not sufficiently enlightened.

The subject is not a sufficient criterion by which to recognize a forgery. At all times an artist may be inspired by an idea that has already been, or will be, realized by others, but he remains a child of his generation, of his environment, of his instruments and material, so that his workmanship differs according to time and place. There are certain conditions from which neither the ancient artist nor the modern forger can free themselves, and they entail certain characteristics in the execution which can be discovered by close observation, thus infallibly disclosing the most skilfully-executed forgery.

II.—Forgery has its history: perfection is not reached at once, but follows the steps of the science that enlightens it as to the nature of the objects it wishes to imitate and the processes it must employ. At first

[1] How strange that, for more than thirty years, basreliefs from the mounds of Khorsabad and Nimrûd are lying, abandoned, at the bottom of the Euphrates, a few miles from Bassora, and that no attempt has been made to raise them.

[2] M. Clermont-Ganneau calls attention to a false bilingual inscription with Moabite letters imitated from the stele of Mesha, and cuneiform characters imitated from inscriptions on bricks from Babylon: *Les fraudes archéologiques en Palestine*, p. 61.

timid and clumsy, the forger produces a work that bears merely a general resemblance to the original, but, as science makes progress, he also perfects his work and puts it in circulation; still as, on the one hand, he is always, happily, quite a distance behind science, and, on the other, cannot entirely rid himself of familiar habits, he shows the cloven hoof in details the meaning of which he is quite ignorant of. Before reaching imitations of Assyro-Babylonian monuments it will be best to speak of Persian forgeries, especially as we here find forgery in its earliest stage.

At Teheran the Sassanid engraved stones have long been systematically imitated. The types of the Sapors and the Ardeshirs have been exploited with a skill so remarkable as to deceive the most practised eye. These works would not come within the limits of this inquiry

FIG. 1.

FIG. 2.

were it not that it has often been attempted to pass them off for portraits of Achæmenid princes, with the help of cuneiform inscriptions. The first two examples (*figs.* 1, 2) are chosen from the collection of the Comte A. de Gobineau, which he published in his treatise on cuneiform writings.[3] His collection has been sold and I am ignorant of the present owner. The material of these intaglios is, apparently, a carnelian: the work, quite modern in appearance, seems to have been executed hastily, though the engraver was fond of details. The two figures are of a type resembling that of the princes of the time of the Sophis. Although certain technical details show the hand of the mod-

[3] *Traité des écritures cunéiformes*, t. I, pp. 198, 327. In view of M. de Gobineau's notions about cuneiform writing, it is hardly to be wondered at that he fell into this error.

ern workmen, the intaglios might have circulated as portraits of Ardeshirs and Sapors had it not been that the forger engraved around each figure, on the obverse, an inscription in cuneiform characters in which he stands convicted. It is evident that the heads were arranged with the premeditated intention of leaving room for an inscription. On the other hand, the inscription is engraved with sufficient knowledge of the progress made in the study of the characters of the first column of Persepolis[4] to deceive for a moment. They are Persian characters, more or less regular, which are the basis for attributing these works to the Achæmenian period. The engraved stones of this period are rare; I know of but four cylinders with Persian characters.[5] Our two intaglios, therefore, were they genuine, would be of the utmost rarity; but any illusion, which there may be, disappears on a study of the Persian monuments, for we there find figures of a clearly defined type, completely different from those on our intaglios. The portraits of Achæmenid princes have to-day become classic, as well as the type of the figures of this period. They are found at Persepolis, Naksh-i-Rûstam, Bisitoun, and even on a quantity of anonymous cut-stones where we see a Persian ruler fighting lions or chimeras. On the other hand, the figures before us bring to mind the types of the Sophis. Without going any further, this would be sufficient to prove the deception, but it is interesting to prove it to the end.

In examining the inscriptions that accompany these two figures, we find that the wedge is correctly shaped, with dove-tailed head and wedge-shaped body, as in the Persepolitan inscriptions, but they are not properly combined, being without that elegance which caused the large inscriptions to be taken for architectural decoration. The signs have the awkward aspect of first copies, like those of the early travellers, Flower, Chardin and Le Bruyn, which is hardly perceptible in Niebuhr and Ker-Porter, and disappears in Texier and Coste and Flan-

[4] At Persepolis the cuneiform inscriptions consist of three tablets or three columns which reproduce the same text in three different languages, the Persian, the Median, and the Assyrian. In each of these tablets the wedge which has given its name to the cuneiform writing is differently combined. The first column is written in Persian characters that can easily be deciphered. The reader is referred, for the rest, to the works of Burnouf, Lassen, Rawlinson and other more recent writers who have occupied themselves with the reading of these texts.

[5] These are: (1) the seal of Darius, in the British Museum; (2) the seal of Arsaces, in the same Collection; (3) the seal of the woman Ksarasi at Brussels (Musée des Armures); and (4) the seal of Nandakhiya, in the British Museum.

din. On *fig.* 1 we read the name *Vasdasba*, probably for Hystaspes, notwithstanding its peculiar form, for at Persepolis and elsewhere it is written *Vistaspa*. The change of *p* into *b* and of *t* into *d* can be explained by a faulty pronunciation:[6] it shows in the forger a sufficient acquaintance with the Persian alphabet to make this substitution and to use the character *v* in the form accompanied by the vowel *a* instead of the ordinary one with *i*. In this way a general resemblance of pronunciation was preserved.

On the second intaglio (*fig.* 2) the inscription is well executed and more complicated, but in a style similar to the preceding. It also contains the name Hystaspes, here written *Visdaspâya*, incorrectly, of course, as it is placed in the genitive, and as the correct form of this case would be *Vistaspahija*. The only anomaly here, is the change of the dental, the *v* conforming to the Achæmenid spelling. This genitive case requires, after it, the complement *Putra* (son), which is here understood: here the name is preceded by three characters, to be read *D. r. h.*, rather incorrectly traced, but suggesting the name Darius, although the form is not like that of the texts.

These two intaglios are, therefore, forgeries; they were probably executed after a knowledge of Persian writing had led to the decipherment of the Achæmenid texts—even after the mechanism of the Persian alphabet had been disclosed by Burnouf, Lassen and Rawlinson, and translations of the Median text had been published by Westergaard and Norris (1853).

III.—The next example to be noticed is a curious specimen of another kind belonging to M. de B * * *. It is cut in a hard black stone, either marble or basalt, and consists of two parallelopipeds of unequal size placed so as to form two steps of a small staged pyramid 285 mm. high. The faces of the lower block are slightly trapezoidal, and all four sides are covered with cuneiform inscriptions framed in an ornamentation of square lines, each line of writing being separated by a stroke. At each corner of the lower story is a kneeling figure with long beard and folded arms (*fig.* 3). It is easy to see that this object was imitated from the upper part of Shalmaneser's obelisk, found by Layard at Nimrûd, which is also of basalt or black marble, and that it cannot antedate the time when this became famous (1850).[7] The imitation extends even to the framework

[6] Still, this spelling accords precisely with the requirements of the 2nd column texts.

[7] Sir Henry Rawlinson published a translation of it in the *Journal of the Royal Asiatic Society* of London, vol. xii, part 2, p. 432.

of the inscriptions, which resembles that surrounding the basreliefs on the obelisk. The kneeling figures seem to be rude imitations of the genii, adoring the sacred tree, that we meet in Assyrian reliefs. The forgery is very apparent from the inscriptions, which are not nearly so well executed as those of the preceding intaglios. The forger wished to copy the Assyrian inscription, but, after starting with well-formed wedges, he got weary of the work, and fell first into the Persepolitan form, with which he was doubtless far more familiar, and then ended by producing simple scratches. The Assyrian groups were more complicated and difficult, so that the mistakes are numerous, and here and there a Persian character appears: the engraver had, evidently, but crude notions as to cuneiform writing.[8]

FIG. 3.

IV.—Of style and origin similar to the basalt pyramid is a pentagonal prism belonging to M. D*** who purchased it in a lot of antiquities not belonging to Assyria, and has allowed me to publish it (*fig.* 4). This prism is 30 cent. high and 10 cent. in diameter, and is cut in a soft black stone, hollowed out so as to leave a thickness of but one centimetre. All genuine Assyrian prisms are in terracotta, and none bear figures or are made of basalt.[9] The prism here illustrated contains subjects on three of its sides, and inscriptions on the other two. To begin with the

[8] To facilitate the sale of this forgery it was made the pedestal of an apparently genuine magnificent Chinese elephant, of bronze, in war costume.

[9] *Cf.* the prisms of Tuklat-pal-asar I, of Sennacherib and Assur-bani-pal, at the British Museum.

figures, we see in the centre the sacred tree, in one of the many forms in which it is found on the Assyrian basreliefs, and above it a line of inscription. To the left is a tall bearded figure wearing a conical tiara, with his hand resting on a sword, while above him is the crescent of the moon, the symbol of the god Sin. On the other side is a figure, somewhat similar, but without the tiara, above whose head is the winged disk,

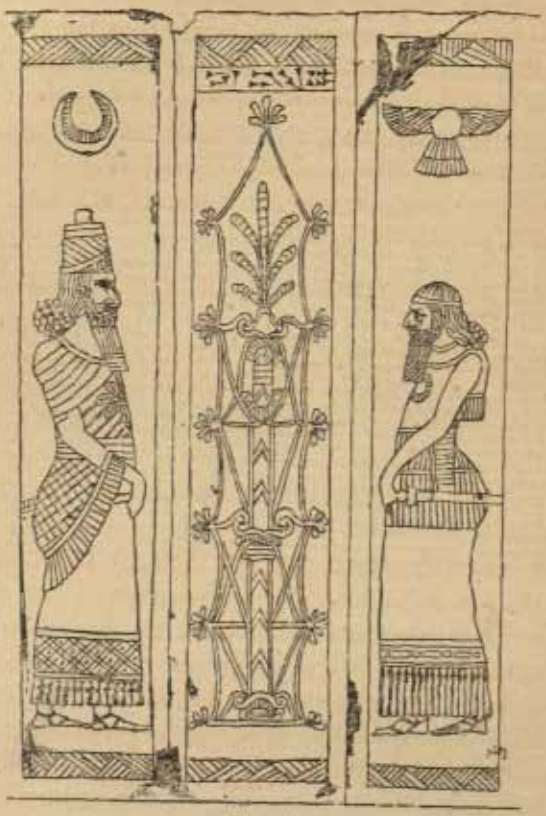

FIG. 4.

the symbol of the national god Aššur. The forger evidently imitated the basreliefs of Nimrûd. The type of the sacred tree is that so often carved with a kneeling or standing genius on either side, the main difference being that the flowers have five instead of seven petals. It is easy to see, in the first figure, an imitation of the well-known figure of Aššur-nazir-pal, and, in the second, that of one of his officers, though the details, as the sun on the king's breast, sufficiently betray the forgery. In

the inscriptions on the remaining two faces of the prism, we can note the progress made since previous specimens, and how the forger had followed the progress of knowledge. The signs are quite correctly and faithfully copied from some Nimrûd inscriptions, but the words are taken at hap-hazard, and form no connected sense. We read, here and there, such words as *rabuti*, *udannina*, *kisatim*. Unaware of the fact that words should never be divided at the end of the line, the forger ends his inscription with *a-na za* . . . , evidently taken from the closing formula of the royal inscriptions (*a-na za-at yumi rukuti*) in which the kings besought of their successors to protect their palace. The execution, also, of this work is contrary to that of any Assyrian work, and evidently possesses the same qualities (entire absence of relief, and rudeness of outline) as those shown by the workman who manufactured the work in basalt previously described.

V.—To the same manufactory I would attribute a large cylinder an impression of which was given me by M. D * * *, though I have not seen the original. It is probably made of very soft gypsum (h. 8 cent., diam. 45 mill.), and its surface bears a subject and an inscription, while a head in profile is cut on each base (*fig.* 5). The figure is that of an Assyrian priest with double wings, tiara with single horn, basket in one hand, and what was intended for a pomegranate in the other. It is an imitation of the figure often seen, in the basreliefs of Nimrûd, in adoration before the sacred tree, but the nude parts, especially, are badly imitated, not having the well-known conventional expression of the original. The inscription shows what this original was, for, notwithstanding some mistakes, it is easy to read: "Palace of Aššur-nazir-pal, King of Aššur, son of Tuklath-Adar, King of Aššur:" it is the genealogy of the famous founder of Kalah, as found in all his inscriptions.[10] A comparison of the border with the ends of the branches of the sacred tree in the basalt prism (*fig.* 4), both ending in a five-petaled flower, shows that both works were produced by the same hand. Finally, the heads (*fig.* 6) on the ends are but rude, modernized copies of the well-known beardless eunuchs of the basreliefs, and would be sufficient to stamp the work as a forgery.

VI.—Although the frauds noticed above seem to be connected with

[10] A certain acquaintance with the Assyrian language on the part of the forger is evinced by the fact that, after reading the first line, the cylinder must be turned around to read the last two.

a regular industry, the taste for such things was then too small to ensure much circulation. But this general ignorance with regard to ancient Oriental antiquities had its advantages for the forger. In counterfeiting classical antiquities so well-known and appreciated, great skill is required in order to deceive, but this is not required in imitating the antiquities of Western Asia, in which a rude fraud generally passes with most amateurs, who mentally substitute in these cases the term *barbarous*

FIG. 5.

FIG. 7.

FIG. 6.

for *antique*. Lately, the trade in Assyro-Babylonian imitations has for this reason taken large proportions, and they sometimes even reach America, when they are not stopped on the way by some inexperienced European amateur. They consist either of cameos or of basreliefs and statuettes; all having common characteristics which point to a single manufactory, which I could mention. There are two lots that I will here describe, one belonging to an enlightened collector, who was not victimized but purchased them in order to stop the circulation of these

objects; the other, consisting of pieces now in America, on which my opinion has been asked: the origin and nature of both is the same, though they come from different sources.

I shall commence with the counterfeit cameos: they are quite attractive, being cut in a soft greenish, semi-translucid stone[11] between four and six centimetres in diameter. The example given in *fig.* 7 is sufficient to show the character of the series, and is of the original size: it contains a half-figure with a long beard and head in profile, wearing a rich cap and a necklace, while in the field there is a cuneiform inscription. Although a cameo, and not an intaglio, a great resemblance is apparent to the two heads first mentioned (*figs.* 1, 2) which passed for Darius and Hystaspes. On account of his unsuccess in the line of Achæmenid work, the forger changed his plans, making use of the same types, but changing the process for the easier method of working in relief, and giving an Assyro-Chaldæan air to his productions by the imitation of early inscriptions. The characters seem at first well drawn, and the wedge well shaped, recalling the archaic Babylonian writing:[12] the ideogram for god is especially successful. A close examination, however, shows that most of the characters are mutilated, and that the whole makes no sense: so we are unable to find out with what Chaldæan name the artist wished to dub his Persian monarch. I have seen quite a number of the cameos representing apocryphal sovereigns of the same family. What has become of them I do not know, but their type was almost identical, and the inscriptions included the same signs and the same mistakes, so that they are easily recognized.

But the forger became ambitious to go beyond the simple head, and I remember having seen, on some of these pseudo-cameos, entire figures, adoration-scenes, allusions to well-known myths. I especially recall a man-fish, who seemed to personify Ea-Oannes, whose figure is found at Khorsabad and on seals, but it also reminded one of Jonah and the whale: the human figure was issuing from the jaws of an enormous fish! The head of this figure, with its short hair and pointed beard, impressed me, and we shall meet it again later on.

The second series of forged monuments to which I must refer is composed of small basreliefs of gypsum, a sort of alabaster, somewhat oily

[11] A sort of *péridot* or crysolith.

[12] It is hardly necessary to remark that Assyro-Babylonian writing is of two distinct types, usually distinguished as *modern* and *archaic*: the former resembles that of the second Persepolitan column; the latter is more complicated.

in texture and very easy to work. These carvings are executed on tablets varying in size from a square decimeter to a length of thirty centimetres, and the scenes represented are sometimes very elaborate. Having seen quite a number of these objects, I am able to give their general characteristics. The figures are of several types; some are bare-headed, others wear a characteristic ornate cap; some are robed in a long close-fitting robe, others in a short tunic stopping above the knee. These personages are grouped in processions, adoration-scenes, and other scenes purely fantastic; in the field there often are monuments, altars, towers, and various accessories which are meant for symbols. On all

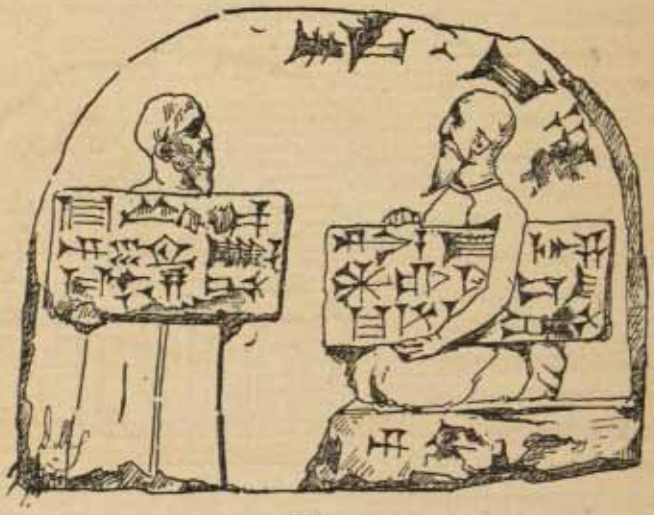

FIG. 8.

these basreliefs there are inscriptions of more or less length: their type—the archaic Babylonian—has already been given on the pseudo-cameo. The technic is in general very poor, and the figures are badly drawn: by the side of a well-studied head and some careful detail in costume we meet with faults that would be incomprehensible if they were not intentional.

The subject reproduced in *fig.* 8 represents two figures, one seated and the other standing, both carrying a tablet inscribed with three lines of cuneiform writing. Comparing these figures with those in PL. II–4, one for the costume and the other for the pose, and with PL. II–5 for the type, the relationship of them all is quite obvious. If a further

comparison is made between the head on our cameo (*fig.* 7) and that of the seated figure in PL. II–4, the resemblance is so striking that there can be no hesitation in connecting all these basreliefs with the manufacture of the cameos in *péridot* mentioned above. Before passing to another subject, it is well to notice that neither the Babylonians nor the Assyrians ever gave to their figures the position occupied by this seated figure, which shows how fully the forger is under the influence of the habits of modern Persia.

Passing to a description of the scenes on the tablets illustrated on PL. II.; No. 3 represents an adoration-scene before an altar, badly imitated from a Babylonian cylinder. The sort of standard in No. 1 is repeated, I remember, on quite a number of specimens that I have seen, and has thus become very characteristic. In No. 4 a dependent seems to be offering gifts to a king. The subject in No. 5 seems to have been a favorite one with the forgers, as I have seen a number similar to it. In all these different scenes there is a reminiscence of so many confused elements that it is difficult to decide on the principal source, though there seem to be echoes of the Telloh monuments, and an evident desire to imitate, in the inscriptions, the archaic texts.

FIG. 9.

I will mention here (*fig.* 9) a grotesque subject which shows the audacity of the forger and his reliance on public credulity. It represents an adoration-scene in which a boar or some such animal is being worshipped: this filthy animal rests on an altar, and before him stands an adorer. I know of an analogous scene quite frequently given on Babylonian cylinders, in which a dog is placed on the altar: this scene is quite authentic, as I have found an impression of it on a contract dated from the 26th year of Nebuchadnezzar.[13] It is probably this scene that inspired the fancy of the artist. Did the forger push still further his audacity? It would seem so, as he manufactured isolated images of

[13] *Glyptique orientale*, vol. II, pp. 134, 135.

this unclean pachyderm. I have seen a number of examples like that illustrated in *fig.* 10, to which it is unnecessary to add any comment.

Inscriptions are very numerous on these small basreliefs: in fact, every available part is covered with inscriptions in the most incoherent manner—on a tablet, in the field, on the edge, or on the garments of the figures. These peculiarities are seen on genuine monuments, but not arranged hap-hazard. As for reading these inscriptions, it is impossible; for, though a certain amount of skill is shown in imitating the shape of the characters, they are generally incomplete and fantastically combined. Although care is taken often to vary the arrangement, so as to pretend them to be different, the same characters, correct and incomplete, are

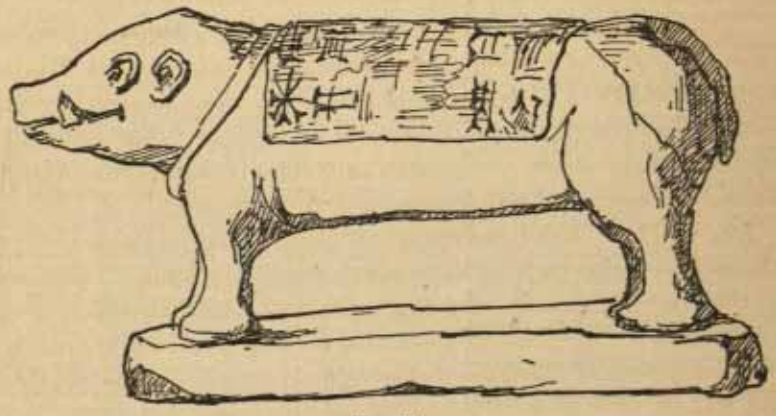

FIG. 10.

repeated everywhere, so that the same inscription practically reappears on all the basreliefs and cameos. This is another proof that all come from the same manufactory, but even surer proof than this can be given.

The forgers have also manufactured statuettes, very rudely executed. Some recall the innumerable nude figurines of Beltis, standing or seated, some isolated, some bearing a child. Several, however, are of a different type, like the one given on PL. II. It is hardly necessary to prove that there is nothing Babylonian either in the pose or in the costume of these figures. In the archaic characters engraved on them we recognize the same signs already noticed above; and this is sufficient to attach them to the same manufactory.

VII.—Where do these works come from? In the autumn of 1883, a friend of mine, M. de C * * *, received from Baghdad specimens of

these peculiar productions, and showed them to me. There were some cameos in *péridot* and some basreliefs, among others those which he retained and consented to have me publish here. His correspondent said that he had received them from an Arab who had found them on the site of Babylon. I had grave doubts as to their authenticity; the cameos brought to my mind the so-called intaglios of Darius and Hystaspes, and I could not succeed in reading a single word of the inscriptions, though this might not be considered a sufficient motive for suspicion, as many non-Assyrian languages use cuneiform characters. I advised an inquiry into the place and circumstance of the discovery, before purchasing. M. de C*** therefore wrote to his correspondent. The answer was long in coming: no information could be obtained.

In the meantime, I learned that a collection of analogous objects was on sale in Paris. On examining it, I found it to be composed of cameos in *péridot* and alabaster basreliefs similar to the specimens here illustrated —with the same figures, and the same inscriptions. The astonishing number of these objects was in itself sufficient to convince me. When I wished to see this collection again, it had disappeared.

During May 1885 I had the pleasure of meeting in Paris Dr. Wm. Hayes Ward who had just travelled through Babylonia. I presented him to my friend and showed him the famous specimens which he had kept. Dr. Ward at once told me that he had seen similar objects in Babylonia, and informed me of what he had learned. A dealer in Baghdad had offered him some basreliefs: as they seemed suspicious, he refused them and heard nothing further. Some time after, he went to Kerbella where a Persian showed him five or six analogous objects. Dr. Ward again refused, remarking that they were evident frauds, a fact which the Persian did not deny. Somewhat later a person in Baghdad offered to take him to a dealer who had Babylonian antiquities. Suspecting nothing, he went, and had offered to him a dozen small basreliefs in alabaster like the previous ones he had rejected; also 15 or 20 cameos in green stone. Dr. Ward upbraided his introducer for making him lose valuable time on such evident forgeries, and the accomplices, while admitting the charge, refused to disclose the origin of this merchandise. At last, however, Dr. Ward learned, from credible persons at Baghdad, that all these objects were manufactured by a family of Persians established at Kerbella. This, then, is the *officina* which produces all the forgeries we have noticed, and its activity is evident from the great number of objects in circulation. Amateurs should be on their guard.

From this source evidently come also the objects represented on PLATE II, which were brought to New York, during the summer of 1884, by M. M * * * who had lived at Baghdad for more than a year. He related having got them from a Kurd, in exchange for a mule!

VIII.—Seal-cylinders must also have tempted forgers, but, being difficult to manufacture, this branch cannot have been very lucrative. The price brought recently in Paris by some fine Babylonian cylinders was below the cost of a modern forgery, and the price asked by the *Sakkars*[14] for the seals which they find in their excavations prevents the possibility of thinking of manufacturing them for fraudulent purposes. It is only of late that much importance has been attached to

FIG. 11.

cylinders and their price raised. I have probably contributed to this rise by calling attention to these monuments, but even now the price is not sufficiently remunerative: still there have been some attempts, and I will give (*fig.* 11) a curious example communicated to me by M. de C * * *. A glance will show that it belongs to the same manufactory, but a few details will prove it better. In the first place, it is cut in the same stone as the basreliefs: it is of a soft, moist and soapy texture which lends itself easily to the graving tool. Its surface is adorned with a scene accompanied by an inscription. A seated figure bears a sort of standard, while before it stands a worshipper: further on a goat rises on its hind legs and turns its head toward the figures. The general effect of animal, figures and inscription is similar to that of genuine Babylonian cylinders, but the forgery betrays itself in every detail. The seated figure wears the well-known cap, and bears the standard of the

[14] The *Sakkars* are the men who dig out bricks from ancient Babylonian buildings to sell them for use in modern constructions.

basreliefs. The profile, headdress and beard of the standing figure have the same resemblance: the symbols in the field are also arranged in a way not known in genuine symbols. The forger, though he tried to free himself from the conventionality shown in his basreliefs, did not fully succeed. Great skill is shown in the inscription. The forger evidently had made a careful study of the cylinders, for he knew that the inscription should be engraved in inverse order, that the first line should have a proper name, the second the ideogram of filiation, the third a divine name—all of which are found here, but evidently copied from the incorrect inscriptions of the basreliefs, a fact which attaches it with certainty to the manufactory at Kerbella. The skill shown is a proof that this was by no means a first trial, and that many similar works are probably in existence, and the forger, if these lines come under his eyes, will at least be forced to change his type.

There is one disadvantage in disclosing forgeries and showing how to detect them; for the forger himself learns a lesson. Besides, the illusions of many an amateur, of many a collector, are rudely disturbed: they would far rather preserve these illusions than become acquainted with the truth. But the true savant has a secret which prevents him from falling a prey to forgers. He avoids, as far as possible, all dealers. His collections are not picked up here and there at hap-hazard, but are, if possible, collected directly or by reliable descent from the results of excavations and according to a well-arranged and scientific plan. If he meets with forgeries he stops them on the way and exposes them. It is the unreasoning admirer of *bibelots*, who causes this confusion in the archæological and artistic market, and for whom the forger prepares his wares.

IX.—The forgery of seal-cylinders was comparatively easy in soft stones, but wellnigh impossible in *pietra dura*, for various reasons. In the first place, beginning with the royal cylinders, no forger could hope to counterfeit these with success, as he would have to be a specialist in Oriental history. Then, in ordinary cylinders, the favorites are those cut in jasper, porphyry, hematite, rock-crystal, and the different varieties of onyx, chalcedony, carnelian, and other gems: beauty of execution as well as of material is also sought for—two conditions the modern forger cannot fulfil. He can only imitate the rudest of early Babylonian seals, which have, for this very reason, been suspected by collectors. But the forgeries are of so rudimentary a workmanship that it is impossible to be mistaken in them. They are all cut in soft materials of dif-

ferent kinds—some even pressed in a kind of mastic covered with a black varnish. They are covered with curious figures, and with inscriptions in which the cuneiform element can hardly be recognized. The forger will certainly be tempted to improve his work, if the rise in price of the article promises any remuneration.

Finally, by a curious contrast, after suspecting the authenticity of a seal because it was of mediocre workmanship and engraved on a common stone, others have been suspected because the material appeared too fine and the subject too well executed. It was not thought possible that at so early a date (more than thirty centuries before our era) the Babylonians knew how to cut so skilfully rock-crystal, amethyst and chalcedonies of all shades. It was conjectured that these fine cylinders were ancient copies,[15] an improbable hypothesis which I have elsewhere refuted (*Glypt. orient.* 1, p. 142).

What I have said of cylinders is also applicable to cones, pyramids, and to all flat seals of any form whatsoever, with this difference, that forgery is relatively easier. These seals came into use, in the place of the seal-cylinders, toward the VIII century B. C., and the use continued through a long period, as we find them at the time of the Seleucidae and Sassanidae. The types of this period are well known, especially the beautiful intaglios of the Arsacidae and the coins of the Ardeshir, and in this field the forger can use his skill with profit.

The forger is also familiar with the trick of taking a genuine work and increasing its market value by adding a subject or a detail, skilfully combined on scientific data. These frauds are the most dangerous and difficult to detect.

X.—The engraved stones of Western Asia have not, however, been the cause of nearly so numerous and deplorable forgeries as those that have afflicted Greco-Roman glyptics, and the works of the Renaissance. Recent discoveries have brought to light so much that is unforeseen that it is often difficult to have an opinion on an object whose type appears for the first time. It is instantly considered doubtful, and depreciates in value. I know of bronzes which have been, in this way, sold for a song: monuments on which a mental reservation was made, which have not remained in France, but were received abroad with a readiness justified by the results.

Before bringing these remarks to a close, mention should be made of a kind of forgery on which it is often very embarrassing to give an opin-

[15] FR. LENORMANT, *La Langue primitive de la Chaldée*, p. 387.

ion: I mean *ancient forgeries*, which have their value and should be accepted as such. All the productions of Phœnician art should be classified in this category, for this art is a permanent forgery, in accord with the character of this trade-loving and roving people without originality. In their religion, for example, nothing was spontaneous but the desire to follow some worship: it is composed of confused notions gathered by traders at the different ports where they stopped. The images of their gods were inspired by these recollections, and executed after types borrowed, according to circumstances, from Assyria, Asia Minor, Egypt or Greece. What confusion have the Phœnicians not made! After manufacturing for themselves hybrid divinities, they have spread their worship over the globe, and it has sometimes come back, thus travestied, to the country of its origin, where it has been received anew.[16] M. Perrot in his great work on the history of art has well defined the results of this blind and fruitful activity: "Pendant plusieurs siècles, dans les ateliers de Tyr, de Sidon, de Byblos et d'Arad, on a fabriqué pour l'exportation du faux Egyptien auquel on a mêlé quelques éléments empruntés à l'Assyrie, et ces produits d'un éclectisme tout industriel ont trouvé *leur débit assuré sur les côtes de la Mediterranée.*"[17]

In reality, if we follow the Phœnicians to their various stations from Kypros to Sardinia, we find there the results of the ideas which they propagated. Kourion and Salamis have given many cylinders whose subjects are borrowed from Assyria and Asia Minor, and from the necropolis of Tharros have come seals in the form of scarabs, whose motifs are due to Egypt and Assyria.

This forging art was, however, the national art of Phœnicia, and its manifestations should be studied with all the greater care that their incoherence characterizes the entire life of the people. But now comes the most delicate part, for this forging art has in its turn been the subject of forgeries. These forgeries in the second dilution are more difficult to recognize. The forger knows how to make use of the confusion to which these works lend themselves. I have already remarked how easy it is to detect frauds when they imitate the products of an art of well-marked originality: this becomes less easy at periods of transition, when various elements are confounded: but how can they be detected when the forger imitates a forgery?

J. MÉNANT.

Rouen, France.

[16] This is what M. Heuzey has so well called *l'action en retour*. See: *Catalogue du Musée du Louvre*, p. 84.

[17] PERROT et CHIPIEZ, *Histoire de l'Art*, t. III, p. 76.

THE STATUE OF ASKLEPIOS AT EPIDAUROS.

Pausanias (II, 27. 2) describes this statue as follows: *τοῦ δὲ Ἀσκληπιοῦ τὸ ἄγαλμα μεγέθει μὲν τοῦ Ἀθήνησιν Ὀλυμπίου Διὸς ἥμισυ ἀποδεῖ, πεποίηται δὲ ἐλέφαντος καὶ χρυσοῦ· μηνύει δὲ ἐπίγραμμα τὸν εἰργασμένον εἶναι Θρασυμήδην Ἀργνώτου Πάριον. κάθηται δὲ ἐπὶ θρόνου βακτηρίαν κρατῶν, τὴν δὲ ἑτέραν τῶν χειρῶν ὑπὲρ κεφαλῆς ἔχει τοῦ δράκοντος, καὶ οἱ καὶ κύων παρακατακείμενος πεποίηται. τῷ θρόνῳ δὲ ἡρώων ἐπειργασμένα Ἀργεῖων ἐστὶν ἔργα, Βελλεροφόντου τὸ ἐς τὴν Χίμαιραν καὶ Περσεὺς ἀφελὼν τὴν Μεδούσης κεφαλήν.*[1]

Athenagoras (*Leg. pro Christ.* 14, p. 61: ed. Dechair) says: *ὁ ἐν Ἐπιδαύρῳ Ἀσκληπιὸς ἔργον Φειδίου.*[2]

How little weight this passage carries with it, is evident: Pheidias was the great master of chryselephantine sculpture; the Asklepios in Epidauros was a chryselephantine statue; therefore, Athenagoras, who wrote in the middle of the second century after Christ, asserts that the Asklepios in Epidauros was a work of Pheidias. Athenagoras had no authority for his words: nevertheless, this passage has influenced some modern writers so far as to lead them to call Thrasymedes a pupil of Pheidias.[3]

Several coins of Epidauros[4] represent the god very nearly in the manner described by Pausanias; one[5] corresponds in every particular

[1] "The statue of Asklepios is half as large as the Olympian Zeus at Athens. It is made of ivory and gold; and an inscription informs us that the artist was Thrasymedes, son of Arignotos, a Parian. The god sits upon a throne holding a staff, but the other one of his hands he holds over the head of the serpent, and a dog is represented lying down beside him. And on the throne are represented, in relief, exploits of Argive heroes, that of Bellerophontes against the Chimaira, and Perseus carrying off the head of Medusa."

[2] "The Asklepios at Epidauros, a work of Pheidias."

[3] Overbeck, *Plastik*, 1^3, p. 279 f; *cf.* Mrs. Mitchell, *Hist. of Anc. Sculp.* p. 319; Brunn, *Gesch. d. griech. Künstler*, I, p. 246 f., *cf.* p. 300.

[4] Panofka, *Asklepios und die Asklepiaden* (*Abhdlgn. d. Berl. Akad.* 1845, Taf. I. 7, 9).

[5] Friedländer, *Berliner Blätter für Münzkunde* III, p. 25, pl. XXX. 3 and *Arch. Ztg.* 1869, Taf. XXIII. 8; Mionnet, *Descr.* 2. 239, 70; W. M. Leake, *Numismata Hellenica, Europ. Greece*, p. 50.

except that the reliefs on the throne are omitted. These coins have heretofore been regarded as the only reliable representations of this statue.

Brunn, in his *Archäologische Miscellen* 4,[6] calls attention to two terracotta reliefs from Melos,[7] one representing the contest of Bellerophon with the Chimaira, the other, Perseus riding off with the head of Medusa. These he believes to be copies of the reliefs on the throne of Asklepios. In his lectures, before the publication of the article in question, he had apparently stated his belief that these reliefs were not copies of those at Epidauros, because, without change, they could not well be used to decorate the throne. This belief, however, as he expressly states, he had given up; for, although the style of the reliefs is archaic, or at any rate borders upon the archaic, their appearance does not force us to place the date of their execution (or of that of the originals from which they are copied) before Pheidias, but only at about the time of Pheidias. Brunn therefore considers Thrasymedes a contemporary and pupil of Pheidias,[8] and thinks the Melian reliefs are copies of those on the throne of Asklepios. It seems, however, that this plain statement was mis-

[6] *Sitzungsber. d. München. Akad.* 1872, p. 535.

[7] MILLINGEN, *Anc. uned. mon.* II, pl. 2, 3; MÜLLER-WIESELER, *Denk.* I, XIV. 51, 52.

[8] I give part of this article in Brunn's own words: "Am Throne des Asklepios zu Epidauros waren nach Pausanias (II, 27, 2) das Abenteuer des Bellerophon gegen die Chimaera und Perseus, welcher der Medusa das Haupt abgeschlagen, in Relief dargestellt. Eben diese beiden Scenen finden wir, offenbar als Seitenstücke gearbeitet, auf zwei Terracotta-Reliefs aus Melos im Brittischen Museum wieder (Millingen, *Anc. uned. mon.* II, 2–3). Es lag daher nahe, diese letzteren für Copien nach den Darstellungen des Thrones zu halten. . . . Der Styl der Terracotten würde der Annahme, dass Thrasymedes, der Künstler der Statue in Epidauros, ein Zeitgenosse des Phidias gewesen, nicht gerade widersprechen. Er scheint allerdings noch auf der Grenze des Archaismus zu stehen, ist aber dabei von einer fast raffinirten Feinheit, und eine gewisse Herbigkeit in der ganzen Linienführung, welche diese Reliefs mit andern einer gleichen Kategorie gemein haben, lässt sich vielleicht darauf zurück führen, dass sie als für decorative Zwecke bestimmt, sich auch im Styl bestimmten tektonischen Gesetzen unterordnen mussten. . . . Obwohl sonach Alles für die im Anfange ausgesprochene Vermuthung zu sprechen schien, so glaubte ich sie doch bei meinen letzten kunstgeschichtlichen Vorlesungen aus einem scheinbar sehr positiven Grund wieder in Zweifel ziehen zu müssen: brachten wir nemlich die beiden Reliefs, so wie sie sind, an den beiden Seiten eines Thrones an, so würde die eine Gruppe nach der Vorder-, die andere nach der Rückseite gewendet erscheinen, was offenbar unstatthaft wäre. Eine genauere Betrachtung wird aber auch diesen Einwand beseitigen." Brunn proceeds to show that the maker of the terracottas turned his model round in the Perseus scene, and that, if this be true, the originals of these reliefs would be well adapted to the adornment of a throne.

understood by W. Klein, for he cites[9] Brunn in such a way as to make him seem to be authority for the statement that Thrasymedes preceded Pheidias.

Misled apparently by Klein, Mrs. Mitchell goes still further. In her *History of Ancient Sculpture*, p. 319, she says: "Thrasymedes of Paros was also reckoned among those who came under Pheidias' influence." Then follows a description of the statue of Asklepios, accompanied by a cut of the coin first published by Friedländer. Then: "Thrasymedes' costly colossus was once thought to be reflected in coins found at Epidauros." The note on this passage (612 *a*) reads: "This coin has recently been shown to be older than Pheidias (Brunn, *Arch. Misc.* S. 4; Klein, *Arch. Epig. Mitt. aus Oest.* VII. S. 70), and hence cannot be dependent upon Pheidias' statue in any way." Brunn, in the article referred to, makes no mention whatever of the coin in question, a glance at which as it is published in the *Archäologische Zeitung* is enough to make it evident that it belongs to a time long after Pheidias.[10]

Kabbadias (in the *Ἐφημερὶς Ἀρχαιολογική* of 1885, pl. 2, No. 6) published a relief from Epidauros representing Asklepios seated in a very easy and nonchalant posture facing toward the right of the spectator. The slab is broken off at the top and the left side, and the right arm

[9] *Arch. Epigr. Mitth. aus Oesterreich*, VII (1883) note 9, p. 70: "Auch der epidaurische Asklepios von Thrasymedes wurde später dem Phidias zugeschrieben, ohne ihm zu gehören, weil Technik und Motiv äusserlich an dessen olympischen Zeus erinnern mochten, wie denn Pausanias an den im Athenischen Olympieion erinnert. Dann braucht man aber der Zutheilung des Athenagoras nicht die Concession zu machen (worin ich Brunn früher gefolgt bin) Thrasymedes für einem Schüler des Phidias zu halten. Dass er älter war als sein angeblicher Lehrer, darauf führen schon die Copien der Thronreliefs, wie sie Brunn Arch. Misc. 4 erwiesen hat." These words do not actually make Brunn responsible for Klein's opinion, but they seem to imply that Klein follows Brunn in making Thrasymedes older than Pheidias, as well as in considering the Melian reliefs copies of those at Epidauros.

[10] As I know this coin only from the publication referred to and the cuts given by Overbeck and Mrs. Mitchell, I shall not venture to assign an exact date. Even from these publications, however, it can be seen that the coin belongs to a period not preceding the fourth century, and it may well belong to a later time. The obverse has a youthful male head with a wreath of bay leaves (or possibly olive leaves). Perhaps this represents Apollon Maleatas, who is mentioned by the Epidaurian poetaster Isyllos (Ἐφ. Ἀρχ. 1885, p. 66, l. 2; WILAMOWITZ, *Isyllos von Epidauros*, p. 4).

Perhaps the confusion in Mrs. Mitchell's note arises from the imperfect citation by Klein. One would hardly know that "Brunn, *Arch. Misc.* 4" was meant to refer to the *Sitzungsberichte* of the Munich Academy for 1872.

of the god is gone from the shoulder. The left arm is nearly parallel to the body as far down as the elbow, but the forearm is extended at an angle somewhat above the horizontal line. The forefinger (the only one left) is also extended. The figure is clothed with a himation so draped as to cover the legs, back, left shoulder and arm, leaving the front and right side of the body uncovered. Portions of the feet are missing, but enough remains to show that they were covered by shoes or sandals with elaborate straps. There is no trace of staff, serpent, or dog. Kabbadias (p. 48 ff.) considers this relief the best extant imitation (*ἀντίτυπον*) of the statue by Thrasymedes. The coins, however, give the figure with the right hand extended over the head of the serpent, and the raised left hand holding the staff. If the relief in the *Ἐφ. Ἀρχ.* were restored as nearly as possible to correspond to the coins, the hands would still be reversed. Besides, it is highly improbable that, if the relief were a copy of the great statue, all the characteristic attributes of the statue—staff, serpent, and dog—would have been so broken off as to leave no trace. Moreover, the position of the figure in the relief is suggestive of ease and comfort, rather than of the dignity which must certainly be ascribed to the great statue of the temple. Similar figures occur on votive reliefs found in Athens. Perhaps the closest parallel is the one published in the *Mitth. d. deutschen Inst.* 1877, Taf. 16; the resemblance lying not so much in the exact correspondence of details, as in the general easy effect of the position. No one would take this relief for a copy of a temple-statue, though it is not unlikely that the great statue of Thrasymedes influenced later artists at Athens as well as at Epidauros; but this influence would naturally extend only to the general type of Asklepios, not to details. The artist of the relief in the *Ἐφ. Ἀρχ.* was doubtless subject to this influence, and his conception of Asklepios was probably formed in accordance with the appearance of the god as executed by Thrasymedes, but there is no reason for considering the relief to be a direct copy of the great statue.

We must, then, as heretofore, derive our idea of the work of Thrasymedes from the coins. The figure represented upon them reminds us, however, less of the Zeus of Pheidias than of later works, as, for instance, the Zeus of Antioch. It seems almost incredible that such a figure should be executed by a contemporary of Pheidias, and still more incredible that it should be the work of him who designed the originals of the Melian reliefs. Kabbadias (*Ἐφ. Ἀρχ.* 1885, p. 44) mentions an inscription, since published (*Ἐφ. Ἀρχ.* 1886, p. 147 ff.), which

records the expenditures for the building of the temple of Asklepios. This inscription he assigns to the first part of the fourth century. The statue which Pausanias describes as existing in his day must have been in this temple (or certainly not in the temple which preceded this one); so that Kabbadias is quite justified in drawing the inference (p. 50, note) that the statue by Thrasymedes must have been made after the erection of the temple; and that Thrasymedes himself flourished, not in the days of Pheidias, but, at the earliest, in the early part of the fourth century. Perhaps he belonged to a still later period. L. Ross (*Inscr. gr. ined.* fasc. III, No. 298) published the following inscription which he found at Kalymna: *Νεικίας με ἀνέθηκεν Ἀπόλ|λωνι υἱὸς Θρασυμήδεος | ἔργων ὧν ὁ πατὴρ ἠργά|σατο τὴν δεκάτην σοι.* From the form of the letters, Ross assigned the third century as the probable date of the inscription. Seeing that the expression *ἔργων ὧν ὁ πατὴρ ἠργάσατο* made it probable that Thrasymedes here mentioned was a sculptor, Ross suggested that it might be the Parian, son of Arignotos, who executed the statue at Epidauros. As we have seen that Thrasymedes the son of Arignotos was not a contemporary of Pheidias, and cannot be assigned to a date earlier than the fourth century, it may well be that he lived so late that his son was the author of the inscription at Kalymna. At any rate, the suggestion of Ross is not without probability.[11]

To return to the Melian reliefs: they can no longer be considered imitations of the work of Thrasymedes, for, though their style may possibly not be too archaic for the age of Pheidias, it certainly is so for the age of Lysippos, or for that of Skopas and Praxiteles. But the throne at Epidauros was not the only place where these scenes were represented. Both appear on the throne of Apollon at Amyklai:[12] among the paintings in the Propylaia at Athens was one representing Perseus carrying the head of Medusa:[13] on the chest of Kypselos, Perseus carrying off Medusa's head was pursued by her sisters:[14] one of the metopes of Selinous represents Perseus slaying the Gorgon: both scenes are represented in the reliefs of Gjöl Baschi,[15]—at least the conflict of Bellerophon and the Chimaira is certainly there represented, and

[11] QUATREMÈRE DE QUINCY, *Le Jupiter olympien*, p. 356, placed Thrasymedes arbitrarily, as he himself says, between Ol. 120 and 155. This agrees with the date of this inscription. It is a strange coincidence that Quatremère's date is supported in this way.

[12] PAUS. III, 18. 11 (Perseus) and 13 (Bellerophon).

[13] PAUS. I, 22. 7. [14] PAUS. V, 18. 5.

[15] BENNDORF, *Arch. Epigr. Mitth. aus Oesterreich*, VI (1882) p. 202 (Bellerophon), p. 225 (Perseus).

probably that of Perseus and Medusa; though, as the slab with the Perseus is only partially preserved, the interpretation is not quite certain. This suffices to show that these scenes were both represented more than once by Greek artists in decorative sculpture, so that there is no sufficient reason for regarding the Melian reliefs as copies of the reliefs of Thrasymedes. Thus, the last ground assumed for considering Thrasymedes a contemporary of Pheidias is removed, and we must henceforth class him among the artists of the fourth century, or, if we adopt the conjecture of Ross, of the third century.

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AN ATTIC DECREE,

THE SANCTUARY OF KODROS.[1]

[PLATE III–IV.]

TEXT.

Θεοί.

Εδ]οχσεν τῇ βουλῇ καὶ τῷ δήμῳ· Πανδιονὶς ἐπρυτάνευε· Ἀριστόχ-
σε]νος ἐγραμμάτευε· Ἀντιοχίδης ἐπεστάτει· Ἀντιφῶν ἦρχε· Ἀδούσι[ο-
ς ε]ἶπε· εἰρχσαι τὸ Ηιερὸν τοῦ Κόδρου καὶ τοῦ Νηλέως καὶ τῆς Βασίλης κ[α-
ὶ μισθῶσαι τὸ τέμενος κατὰ τὰς συνγραφάς. οἱ δὲ πωληταὶ τὴν εἴρχσ[ι-
ν] ἀπομισθωσάντων· τὸ δὲ τέμενος ὁ βασιλεὺς ἀπομισθωσάτω κατὰ [τ-
ὰς χσυνγραφάς, καὶ τοὺς ὁριστὰς ἐπεπέμφσαι ὁρίσαι τὰ Ηιερὰ ταῦτα
ὅπως ἂν ἔχῃ ὡς βέλτιστα καὶ εὐσεβέστα· τὸ δὲ ἀργύριον ἐς τὴν εἴργ-
σιν ἀπὸ τοῦ τεμένους εἶναι· πράχσαι δὲ ταῦτα πρὶν Η ἐχσιέναι τήνδε
τὴν βουλήν, Η εὐθύνεσθαι χιλίοισι δραχμῆ[σ]ι ἕκαστον κατὰ τὰ εἰρη-
μένα· Ἀδούσιος εἶπε· τὰ μὲν ἄλλα καθάπερ τῇ βουλῇ, ὁ δὲ βασιλεὺς μι-
σθωσάτω καὶ οἱ πωληταὶ τὸ τέμενος τοῦ Νηλέως καὶ τῆς Βασίλης κα-
τ]ὰ τὰς χσυνγραφὰς εἴκοσι ἔτη. τὸν δὲ μισθωσάμενον εἴρχσαι τὸ Ηιερ-
]ὸν τοῦ Κόδρου καὶ τοῦ Νηλέως καὶ τῆς Βασίλης τοῖς ἑαυτοῦ τέλεσιν· ὁπ-

[1] In making both the copy and the transcription of this decree the strict στοιχηδὸν order has been followed. The stone shows a few unimportant irregularities, but no attempt has been made to reproduce these. In other respects, I hope the copy is a careful one. The regular number of letters to the line is fifty-two, but there are in all six lines which vary from this standard. In the transcription the ordinary characters and spelling have been used, except in the case of ψ and ξ, and, inasmuch as the rough breathing is in general not indicated by the stone-cutter and the long *e*-sound is for the most part represented by E, the character H has been given wherever it is found on the stone. [From the stone-cutter's habit of omitting the rough breathing (as in *ἕκαστος, ἕκαστον*, ll. 10, 15; *ἁλαδε*, l. 35; *ὁριστάς, ὁρίσαι*, l. 7; in *ἑαυτοῦ*, l. 14; in forms of the articles; in relative words—but note *καθάπερ*, l. 11: retaining it only in *ἱερόν, ἱερά*, ll. 4, 7, 30), no safe inference can be drawn as to any distinction made by him between the aspirated and unaspirated forms of *εἴρξαι* and *εἰρξις*.—EDITOR.]

TRANSLATION.

Θεοί.

A decree passed by the Senate and the people: The Pandionis held the prytany: Aristoxenos was Scribe: Antiochides was Epistates: Antiphon was Archon: Adousios made the motion:—To enclose the Sanctuary of Kodros, Neleus and Basile, and to let the temenos in accordance with the provisions of the commissioners.[2] The Poletai shall let the contract for the fencing in, and the Basileus shall let the temenos according to the provisions of the commissioners, and he shall further send the Horistai to fix the boundary of these Sanctuaries in whatever way shall be best and most after reverent usage. The money for the fencing in shall be taken from the treasury of the Sanctuary (*τέμενος*); and these matters shall be attended to before the present Senate is dissolved, or the Poletai and the Basileus (*ἕκαστον*) shall be liable to a fine of 1,000 drachmae, in accordance with the previous determinations (*εἰρημένα*).

Adousios moved the amendment: The provisions of the Senate are accepted; and the Basileus and the Poletai shall let the temenos of Neleus and Basile, according to the provisions of the commissioners, on a lease of twenty years; and the lessee shall enclose the Sanctuary of Kodros,

The letters *κλεπτης* at the end of the inscription, and whatever may have preceded them, have no connection with the decree. They are in later characters and, as Koumanoudes suggests, may have been the work of some *παιδόσχολος*.

[2] *κατὰ τὰς ξυγγραφάς.* See DITTENBERGER, *Sylloge Inscriptionum Graecarum*, p. 24: "Haud raro populus Atheniensium aut uni homini aut collegio decemvirorum vel triginta virorum mandabat ut de certa quadam re legem conscriberent, quae deinde senatus populique suffragiis rata fieret. Hoc legum genus, medium quodammodo inter *νόμους* et *ψηφίσματα*, intellegendum est, ubi quid fieri dicitur *κατὰ τὰς ξυγγραφάς*, *cf.* *C. I. A.* I, 31, A. 15 (*Sylloge*, 12). *C. I. A.* I, 96, 533. Lysias XXX, 17." For a more extended discussion of the *ξυγγραφαί*, see *Bulletin de Correspondance Hellénique*, IV, pp. 248 ff. The inscription there discussed is published *Sylloge*, 13.

ὁσ̣η]ν δ' ἂν ἀλῷ μ[ισθ]ωσιν τὸ τέμενος κατὰ τὸν ἐνιαυτὸν ἕκαστον κ-
ατα̣βαλλέτω τὸ ἀργύριον ἐπὶ τῆς ἐνάτ[ης] π[ρ]υτανείας τοῖς ἀποδέκ-
τα[ις]. οἱ δὲ ἀποδέκται τοῖς ταμίαισι τῶν ἄλλων θεῶν παραδιδόντων
κατὰ τὸν νόμον· ὁ δὲ βασιλεὺς ἐὰν μὴ ποιῇ τὰ ἐφεσταλμένα ἢ ἄλλο]ς τις οἷς προστέτακται περὶ τούτων ἐπὶ τῆς Λιγηίδος πρυτανεί-
α]ς, εὐθυνέσθω μυρίαισι δραχμαῖσιν τὸν δὲ ἐωνημένον τὴν ἰλὺν ἐκκομ]ίσασθαι ἐκ τῆς τάφρου ἐπὶ τῆσδε τῆς βουλῆς ἀποδόντα τὸ ἀργύριον τῷ Νηλεῖ ὅσου ἐπρίατο. ὁ δὲ βασιλεὺς ἐχσαλειφάτω τὸν πριάμενον τ-
ὴν ἰλὺν ἐπειδὰν ἀποδῷ τὴμ μισθωσιν, τὸν δὲ μισθωσάμενον τὸ τέμ-
ενος καὶ ὁπόσου ἂν μισθώσεται ἀντενγραφσάτω ὁ βασιλεὺς ἐς τὸν τ-
οῖχον καὶ τοὺς ἐγγυητὰς κατὰ τὸν νόμον ὅσπερ κεῖται τῶν τεμένων. τὸ δὲ ψαήφισμα τόδε, ὅπως ἂν ᾖ εἰδέναι τῷ βουλομένῳ, ἀναγράφσα-
ς ὁ γραμματεὺς ὁ τῆς βουλῆς ἐν στήλῃ λιθίνῃ καταθέτω ἐν τῷ Νηλεί-
ῳ παρὰ τὰ ἴχρια, οἱ δὲ κωλαχρέται δόντων τὸ ἀργύριον ἐς ταῦτα. μισθοῦν δὲ τὸν βασιλέα τὸ τέμενος τοῦ Νηλέως καὶ τῆς Βασίλης κατὰ
τάδε· τὸν μισθωσάμενον εἰργσαι μὲν τὸ Ηιερὸν τοῦ Κόδρου καὶ τοῦ Νηλέ-
ως καὶ τῆς Βασίλης κατὰ τὰς χσυνγραφὰς ἐπὶ τῆς βουλῆς τῆς εἰσιούσ-
ης, τὸ δὲ τ[έμ]εν[ος] τοῦ Νηλέως καὶ τῆς Βασίλης κατὰ τάδε ἐργάζεσθαι· φυτεῦσαι φυτευτήρια ἐλαῶν μὴ ὀλείζων ἢ διακόσια πλέονα δὲ ἐὰν β-
ούληται, καὶ τῆς τάφρου καὶ τοῦ ὕδατος κρατεῖν τοῦ ἐγ Διὸς τὸν μισθωσά-
μενον, ὁπόσον ἐντὸς ῥεῖ τοῦ Διονυσίου καὶ τῶν πυλῶν, ἢ ἄλαδε ἐ[χ]σελα-
ύνουσιν οἱ μῦσται καὶ ὁπόσον ἐντὸς τῆς οἰκίας τῆς δημοσίας καὶ τ-
ῶν πυλῶν αἳ ἐπὶ τὸ Ἰσθμονίκου βαλανεῖον ἐκφέρουσι· μισθοῦν δὲ κατὰ εἴκοσι ἐτῶν.

— κλεπτης

This important inscription (PL. III–IV) was found in the winter of 1884–85 while diggings were made for the foundation of a new house some distance southeast of the Akropolis of Athens, to the left of the steam-tramway which leads to Phaleron.[1] It is inscribed on a stele of Pentelic marble 1.49 met. in height, 0.64 met. in width and 0.20 met. in thickness. The top of the stele is finished in the shape of a small pediment, and in this are the traces of a relief which, together with the protecting cornice, was much mutilated when the stone was subsequently dressed for building into a wall. The relief seems to have contained, on

[1] The inscription is now in the yard of the National Museum.

Neleus and Basile at his own cost, and whatever money the temenos yields as its annual rent he shall pay down to the Apodektai in the ninth prytany; the Apodektai, in accordance with the law, shall hand it over to the Treasurers of the other gods. And the Basileus, or any other person in whose charge these things have been placed, if he shall not do that which has been decreed, during the prytany of the Aegeïs, shall be fined 1,000 drachmae. The person who buys the mud shall remove it from the trench, when he has payed its price to Neleus, during the existence of the present Senate. The Basileus shall erase (the name of) the buyer of the mud, whenever he shall make the payment, and in its place he shall write (*ἀντεγγραψάτω*) upon the wall (the name of) the lessee of the temenos with the amount of the rent and (the names of) the bondsmen, according to the law for the regulation of sanctuaries. For the information of such as desire it, the Scribe of the Senate shall cause the decree to be engraved upon a stone stele and shall set it up in the Neleion next the staging, and for this purpose the Kolakretai shall give the money. The Basileus shall let the temenos of Neleus and Basile under the following conditions: The lessee shall enclose the Sanctuary of Kodros, Neleus and Basile according to the provisions of the commissioners during the term of the Senate now entering upon its duties, and he shall cultivate the temenos of Neleus and Basile in the following way: He shall set out no less than two hundred young olive trees, and more if he chooses; and the lessee shall have control over the trench and all the rain water which flows within the Dionysion and the gate at which the mystai go forth to the sea, and within the *οἰκία δημοσία* and the gate which leads to the Bath of Isthmonikos. The lease shall run for twenty years.

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the left, a bearded man seated, and with his left arm extended forward and upward; on the right, a man on horseback whose chlamys floats behind him in the wind. The first publication of the inscription was by Koumanoudes in the *Ἐφημερὶς Ἀρχαιολογική* (1884, p. 161), but he has not treated it in detail; Ernst Curtius also briefly discusses the inscription (*Sitzungsberichte der Berl. Akademie*, May 21, 1885), but without publishing the text, his chief object being to determine, if possible, the exact location of the Sanctuary in question.[4] In my own study of the decree, I have been greatly assisted by Dr. J. R. S. Sterrett, who not only

[4] Brief notices of the inscription are in the *Am. Journal of Archæology*, I, pp. 228, 469.

made for me a careful copy directly from the stone, but sent me also an impression of the inscription which has been of great help. This has enabled me to correct, in two places, readings given by Koumanoudes, and thus to discover the sense where the meaning has hitherto been obscure. In l. 18, where Koumanoudes has ΠΟΛΕΞΕΙ, I have given ΠΟΙΕΞΕΙ, a reading which the impression makes perfectly clear, and which the sense demands.[5] Again, in l. 22, I have given ΕΧΞΑΛΕΥΑΤΟ for the incorrect form ΕΧΚΑΛΕΞΑΤΟ of Koumanoudes. After the Χ the impression shows a Ξ without any doubt, and the Υ, although greatly blurred, is reasonably certain.[6] The general sense of the passage, too, and especially *ἀντεγγραψάτω* l. 24, assures the correctness of the reading.[7] In l. 35 at the end, I have restored *ἐ[χ]σελα|ύνουσιν* where Koumanoudes reads *εἰσελα|ύνουσιν*. The second letter of the word is hopelessly gone, but the indentation upon the stone in the place of the missing letter is round and thus points rather to Χ than to Ι. *Ἀλλὰ ε ἰ σ ελαύνουσιν* cannot be the right reading.

[5] Dr. STERRETT writes: "There can be no doubt about any of the letters in this word except the last Ε which is exceedingly faint."

[6] In regard to the form ψ Dr. STERRETT writes: "My opinion, after a prolonged and careful inspection of the stone *and* the impression, is that the letter is ψ."

Against the restoration of *ἐξαλειψάτω* the fact that the undoubtedly genuine diphthong *ει* is represented by the character Ε and not by ΕΙ—as it is in the inscription cited in Note 8— can hardly count as a weighty argument. This irregularity may be due to the carelessness of the stone-cutter, of which there is abundant evidence, or to the confusion common at this time in the writing of the genuine and spurious diphthong *ει*. Carelessness in engraving is shown (l. 8) by the form *εἰσεβέσατα* and by the fact that (l. 27) the iota adscripta in *στήλην λιθίνην* were evidently left out in the first place and subsequently added (this irregularity does not appear in the copy). Further (l. 35) we have Ε = *ψ*.

Cases of *ει* representing the spurious diphthong are common enough in inscriptions of the latter half of the fifth century B. C., with a few instances still earlier. See MEISTERHANS, *Grammatik der attischen Inschriften*, p. 7, and P. CAUER in Curtius's *Studien* VIII, pp. 230 and 255 ff. This is, of course, evidence that the genuine and spurious diphthong were coming to be no longer distinguished in pronunciation. On the other hand, instances like the one before us (ΕΧΞΑΛΕΥΑΤΟ), in which Ε stands for the genuine diphthong, are rare though not unknown. *Cf. C. I. A.* IV, 373 a. Πε(*ι*)σιδος, and the instances in which *ἀλείζων* is written with the simple Ε, *C. I. A.* I, 9. 10; 37 a, 17; and the inscription now under consideration, l. 33. In this word etymologists may not agree as to the precise *origin* of the diphthong *ει*, but, so far as I know, there is no difference of opinion about its being classed as genuine. A few similar irregularities exist in regard to the writing of *ου*.

[7] *Cf. C. I. A.* I, 32. 10: *ἀποδόντων[δὲ τ]ὰ χρήματα οἱ πρυτάνεις μετὰ τῆς βουλῆς καὶ ἐξαλειφόντων ἐπει[δὰν] ἀποδῶσιν, κ. τ. ἑ.*

In considering the inscription, I will first examine the character of the letters, methods of spelling and the like, and will then comment on the subject-matter.

The decree is dated in the Archonship of Antiphon (Ol. 90. 3 = 418 B. C.), and the confusion which existed at Athens in the spelling at this time is singularly well illustrated in it. The character H occurs seven times: four times it is used to mark the rough breathing, and always in the word *ἱερὸν* (ll. 4, 7, 13, 30); three times it represents the long ε-sound (ll. 9, 10, 23). The Attic form ⊦ is used by the stone-cutter, except in two instances (l. 12, ΝΕΛΕΟΣ, l. 26, ΒΟΛΟΜΕΝΟΙ). A more uncommon form in the early inscriptions is the Ionic letter Υ (l. 22);[8] indeed, so far as I know, the only other inscription before Eukleides in which it exists is *C. I. A.* I, 13 (before 444 B. C.), where it occurs twice in the word *ψήφισμα*. *C. I. A.* I, 283, where it is also found (l. 22), though referring to 434–3 B. C., was not engraved until after 403 B. C. In l. 5 we have *συνγραφάς*, in ll. 7, 13, 31, *χσυνγραφάς*. The following words afford examples of the spurious diphthong *ει* written as if it were genuine: *ἐπεστάτει*, l. 2. *εἶναι*,[9] l. 9. *εἰρεμένα*, l. 10. *εἰσιόσες*, l. 31. For the character ε representing the genuine diphthong see Note 7, where the mistake also of the stone-cutter (l. 8) is noted. The spelling of the genuine and spurious diphthong *ου*, however, presents no peculiarities. In the examples of the dative plural of *o*-stems (ll. 16, 17, 19) the shorter form in *-οις* occurs, a not unusual thing even in much earlier inscriptions;[10] whereas, on the other hand, those of *α*-stems, which occur ll. 10, 17, 20, are the latest examples of the long endings which the Attic inscriptions have yet afforded (see Meisterhans, p. 48). In stems where the *α* is retained, the ending is ΑΙΣΙ, *i. e. ῃσι* (see Meisterhans, p. 49, Note 480); in those, however, which take *η*, the simple *-ησι* is used. Especially to be noted is *μῃνίῃσι* (l. 20), a violation of Attic usage difficult to account for. The shorter form of the dative plural occurs once (ll. 16, 17) in the word *ἀποδέκταις*. Lines 20, 23 afford, I believe, the only evidence we have from *inscriptions* that the spelling *ἰλύς*, not *εἰλύς*, is correct. Noteworthy is *πλέονα*[11] (l. 33) as an example of the longer form. The statement, therefore, of Meisterhans (*Grammatik*,

[8] KIRCHHOFF, *Studien zur Gesch. d. griech. Alphabet*, p. 82.

[9] This spelling of *εἶναι* is so common, even earlier, that it can hardly be reckoned as a peculiarity.

[10] MEISTERHANS, *Grammatik der attischen Inschriften*, p. 51.

[11] Probably not *πλείονα*: MEISTERHANS, p. 68.

p. 67), that down to 100 B. C. only the shorter forms in -ω and -ους are found, must be modified.[12] Among peculiarities of syntax may be noticed particularly (ll. 37, 38) *κατὰ εἴκοσι ἐτῶν*, where we should, of course, expect either the preposition with the accusative, or the accusative alone as in l. 13.

Examining the subject-matter of the decree, we find that it clearly consists of two parts: the first, extending as far as l. 11, is the original *προβούλευμα* of the Senate, the second, from l. 11 to the end, is the amendment which was doubtless added in the Assembly. The *προβούλευμα* belongs to that class of these documents in which the Senate did not content itself with merely introducing a given question to the Assembly, but also made definite proposals on its own account.[13] Adousios,[14] who introduced before the Senate the bill for the restoration and better administration of the Sanctuary in question, was led, we may suppose, by the discussion of the *προβούλευμα* in the Assembly to make his proposals more definite, and thus he himself becomes the mover of the amendment to his own bill. The *προβούλευμα* is complete in itself, and all that the Scribe had to do in preparing the decree for publication was to complete the formula of sanction by adding *καὶ τῷ δήμῳ*, and to append the amendment.[15] The Scribe and Epistates cannot be identified with any others of the same names.

The Sanctuary, in regard to which this decree was passed, and which very likely fell into decay in consequence of the vicissitudes of the Peloponnesian War, is variously styled *τὸ ἱερὸν τοῦ Κόδρου καὶ τοῦ Νηλέως*[16]

[12] RIEMANN, *Revue de Philologie*, 1885, p. 184.

[13] GILBERT, *Gr. Staatsalterthümer*, I, pp. 276, 281 f.

[14] It seems hardly possible to determine with certainty whether this name was Adousios or Adosios. If it can be connected in any way with the word *ἀδούσιον*, which HESYCHIOS defines as *ἐραστόν, σύμφωνον* (*cf.* also HESYCH., *s. v. ἀδουσιασάμενοι· διελόμενοι, ὁμολογοῦμενοι*), the former spelling would seem most probable. See, however, also the word *ἀδόσιος* in Hesych. The form *ἀδουσιάσασθαι* is to be found in an inscription published in the *Ἐφημερὶς Ἀρχαιολογική*, 1884, p. 133, and noticed in *Am. Journal of Archæology*, I, p. 264. KOUMANOUDES (*Ἐφ. Ἀρχ. ll.*) says of this word: *Ἐνταῦθα δὲ φαίνεται κείμενον ἐπὶ τῆς σημασίας τοῦ ἑλέσθαι ἢ στέρξαι ἢ συμφωνῆσαι λαβεῖν.* It seems, however, to have some meaning in connection with tribal registration. The only other place besides our inscription in which the name Adonsios occurs is XEN. *Kyropaid.* 7. 4. 1 and 8. 67, where by the latter reference it is the name of a Karian Satrap. It would, however, hardly be safe to base the form of the Athenian's name on these passages.

[15] GILBERT, *Jahrbb. f. Phil.* Vol. 119 (1879) p. 228.

[16] This name is also found written *Νειλεύς*, and it may be questioned whether, when it refers to the son of Kodros, it should not always be so written. *Cf.* STEPH. *Thesaurus*, *s. v. Νειλεύς*.

καὶ τῆς Βασίλης[17] (ll. 4, 14, 30), τὸ τέμενος τοῦ Νηλέως καὶ τῆς Βασίλης (ll. 29, 32), and also simply τὸ Νήλειον (l. 27).[18] It appears, too, from the beginning of Plato's *Charmides* that it was also known as, τὸ τῆς Βασίλης ἱερόν.[19] Apart, however, from this inscription, and the hitherto uncertain passage in the *Charmides*, nothing whatever is known of the existence of the cult which has now come to light. That Kodros should be honored in this wise is most natural, and the location of the Sanctuary at no great distance from the Ilissos (see ll. 34 ff.) makes it probable that the legend of the king's death may have been connected with the creation of a temenos in honor of his memory. Pausanias (I, 19. 5), in speaking of the Ilissos, says that Kodros was killed near it, and the epigram (*C. I. A.* III, 943 = Kaibel, 1383) tells us that his grave was ὑπ' ἀκροπόλῃ.[20] What could have been the special reason, however, for including Neleus in the Sanctuary is not so clear. With Athens, except as the son of Kodros, he has little connection, and his grave, Pausanias says (VII, 2. 6), was at Branchidai (Didymoi) near Miletos.

[17] CURTIUS writes Βασιλῆ instead of Βασίλῃ. The former accentuation is preferred by Boeckh, who discusses the point *C. I. G.* II, p. 108; with which *cf.* especially his *Adn. Crit. ad Pindar. Nem.* I, 39; and *Pyth.* IV, 5. *Cf.* also BUTTMANN, *Ausf. Gram.* § 119, 51. These would make the form a contraction of Βασιλέα. But LOBECK (*Pathologiae sermonis graecae prolegg.* pp. 43 *sqq.*) shows conclusively that we are not justified in changing the traditional accent Βασίλη to Βασιλῆ on this theory. He quotes ARKADIOS, p. 109, τὰ εἰς ιλη ὑπερδισύλλαβα βαρύνεται παστίλη (σπαστίλη) μαμίλη, μυστίλη, and adds, "ubi *βασίλη* excidisse apparet ex canone Theognosti p. 111 barytona in ηλη et ιλη complexo. *Cf.* STEPH. BYZ. *s. v.* Ἀγάμεια λέγεται δὲ καὶ Ἀγάμη, ὡς πρέσβεια πρέσβη, καὶ τὸ βασίλεια κατὰ συναλοιφὴν βασίλη, οὕτως Ἀγάμεια Ἀγάμη. Etym. Mag. 397, 43, Πλειστοδόκη, Πλειστοδόκεια. Λαοδάμη, Maxim. 93, Schol. Eurip. *Orest.* 5, Λαοδάμεια, Ἱπποκράτη—εια, Διομήδη—εια, Τιμάρτη—εια, *Anth.* app. Ἀλέξανδρα—εια." *Cf.* LOBECK, *Paralipomena grammaticae graecae*, p. 321.

[18] CURTIUS prefers to write τὸ Νηλήϊον.

[19] The passage from the *Charmides* is usually given as follows: καὶ δὴ καὶ εἰς τὴν Ταυρέου παλαίστραν τὴν καταντικρὺ τοῦ τῆς βασιλικῆς ἱεροῦ εἰσῆλθον. Codd. A and B (Bekker) have *βασιλῆς* and *βασίλης*. URLICHS (*Rhein. Mus.* N. F. 12, p. 307) proposed to read Βασιλείας instead of the obscure form *βασιλικῆς*, and Loeschcke suggests the same emendation in a Dorpat Program for 1884 (*Vermuthungen zur griechischen Kunstgeschichte und zur Topographie Athens*, III). The inscription shows that the true reading is without doubt τοῦ τῆς Βασίλης ἱεροῦ.

[20] The words of PAUSANIAS are: δείκνυται δὲ καὶ ἐνθα Πελοποννήσιοι Κόδρον τὸν Μελάνθου βασιλεύοντα Ἀθηναίων κτείνουσι. The epigram is as follows:

Κόδρον τοῦτο πέσημα Μελανθειδάο [ἄνακτος],
ξεῖνε, τὸ καὶ μεγάλην Ἀσίδα τειχίσατ[ο].
σῶμα δ' ὑπ' ἀκροπόλοι φέρων τάρχυσεν [Ἀθηνέων]
λάος, ἐς ἀθανάτους δόξαν ἀειράμενος.

On the death of Kodros, see GROTE, *Hist. of Greece*, Part I, c. XVIII, section III (2).

Nevertheless, as oekist of Miletos,[21] he was the means of spreading Athenian influence and doing honor to his mother city; and it is not without weight that this is suggested in the epigram by the words *πέσημα—τὸ καὶ μεγάλην Ἀσίδα τεκμήσατο*, which may doubtless be interpreted to mean that the death of Kodros was the indirect cause of the settlements on the coast of Asia Minor; that is, of the going forth of the *ἀποικία* with Neleus.[22] Curtius, in his brief discussion of this decree, already alluded to, takes the not unlikely view that the establishment of the Sanctuary to Neleus belongs to the period when the Athenians lent their assistance to the twelve Ionic cities in their revolt against Persia about 500 B. C.

It should be noted that, although the temenos was common to Kodros, Neleus and Basile, more than one Sanctuary existed (*cf.* l. 7, *τὰ ἱερά*); and further, that Neleus seems to have been of special importance, since it is provided (l. 27) that the stone be set up *ἐν τῷ Νηλείῳ* and that the buyer of the mud shall pay its price to Neleus (l. 22).

A still more difficult matter to understand is the connection of Basile with Kodros and Neleus. It seems, however, most reasonable to consider, with Curtius, that she was simply a personification of kingly power, since thus her union with Kodros and Neleus at Athens would be singularly fitting. In this connection, it is interesting to note the fine personification of kingly might which Hermes is represented as showing to Herakles under the form of a beautiful woman, in the first Oration of Dio Chrysostomos. Here *Βασίλεια* appears as *μακαρία δαίμων, Διὸς βασιλέως ἔκγονος*, and she is represented as being surrounded by *Δίκη, Εὐνομία, Εἰρήνη* and *Νόμος*. Again (Diodoros, III, 57) *Βασίλεια* is described as one of the daughters of *Οὐρανὸς* and *Γῆ, σωφροσύνῃ τε καὶ συνέσει τῶν ἄλλων διαφέρουσα*. Aristophanes also (*Birds*, 1535 ff., 1753) personifies the kingship of Zeus under the figure of *καλλίστη κόρη Βασίλεια*, and the Scholiast tells us that Kratinos used a similar figure.[23]

[21] GROTE, *Hist.* Part I, c. VI, section I, and Part II, c. XIII. Also GILBERT, *Gr. Staatsalterthümer*, II, p. 138 f.

[22] *Cf.* Commentary of *C. I. A.* on the epigram, where, in answer to the view that Ἀσίδα refers to Attika, which was anciently also called Ἀσίς (Euphorio, *ap. schol.* Dionys. Perieg. *ad* v. 60), it is said: "quamquam potest etiam ita explicari, ut morte Codri (praeter Atticam ab incursione hostium liberatam) etiam id effectum esse dicatur, ut Asiae ora oppidis munitis cingeretur."

[23] Various attempts have been made to identify Βασίλεια at Athens with other divinities. For instance, WIESELER (*Adversaria in Aeschyli Prometheum et Aristophanis Aves*, p. 124) seeks to prove that she is Athena, and more recently LOESCHCKE (see Note 20) has attempted to identify her with *ἡ μεγάλη Μήτηρ*, and to place her sanctuary in the

The personification, therefore, of kingly power in some such way as in the instances cited can hardly be deemed a forced conception, and the association in a common Sanctuary of such a being with the two persons who represent in an eminent degree the royalty of Athens is surely very appropriate. Yet it is not to be denied that, after all, this explanation of Basile is little more than a conjecture.

The location of the temenos of Kodros, Neleus, and Basile may, in general, be considered certain. The inscription (ll. 34 ff.) gives four points within which the lessee of the temenos is to have control of the rain-fall for purposes of irrigation, and, if we can fix even three of these approximately, we shall know about where the Sanctuary lay. The points are the Dionysion and the gate at which the mystai go forth to the Sea, the *οἰκία δημοσία*, and the gate which leads to the bath of Isthmonikos. It is evident, roughly speaking, that the first two points constitute the northern and southern, the last two the western and eastern boundaries of this space. The position, then, of the first two points, the Dionysion and the gate used by the mystai, which must, at any rate, have been near the Itonian gate, may within narrow limits be known. The eastern point also, the gate leading to the bath of Isthmonikos, which we must suppose to have been near the Ilissos, was doubtless somewhere not very far distant from Kallirrhoë. The position of the *οἰκία δημοσία*, the western boundary, we can unfortunately not fix, but, from our approximate knowledge of the other three points, we shall not be far wrong in placing the temenos in the neighborhood of the present military hospital. This is the position Curtius has assigned to it; indeed any other is hardly possible, and, to illustrate his article, he has published a little map which is helpful, if we remember that it can only indicate the *general* location of the Sanctuary.[24] The

Μητρῷον. To this article I shall have occasion to refer in another connection. The following inscription seems to show that Βασίλεια was worshiped in Thera. Θεᾶ(ι) *βασιλεία*(ι) Ἐπ[ὶ]οχος καὶ [Π]ε[σ]ι[χ]αρίστα χαριστήριον. *Cf.* L. Ross, *Mon. dell' Inst.* III, 26. 9; *Annali dell' Inst.* XIII, p. 20. The inscription has been more lately published in the *Gazette Archéologique* 1883, p. 221 ff. pl. 37, where there is a representation of the small temple in which it was found. In the *Gazette* the view is taken that the building was sacred to Basileia; Ross, on the other hand, held her to be only the protectress of the Sanctuary, which he thought was a Heroön.

[24] It may not be without profit, in this connection, to note some of the topographical conjectures which have been overthrown by the discovery of the general location of τὸ τῆς Βασίλης ἱερόν. From the passage in the *Charmides* (see Note 20) it is evident that, if the Sanctuary of Basile can be located, the position of the Palaistra will, in a general way, be known. Thus KONRAD LANGE (*Haus und Halle*, p. 99) would identify τὸ τῆς Βασίλης ἱερὸν with ἡ βασιλειος στοά, a hardly possible identity in any case,

position of the τάφρος mentioned in l. 21 cannot be known with perfect certainty. Curtius has given it on his map as running from the Dionysion to a point in the city-wall just east of the Itonian gate and thence to the Ilissos. This, in all probability, was the general direction of the trench, since it can hardly have served any other purpose than to drain the once marshy quarter of the city known as αἱ Λίμναι. It is not unreasonable to suppose that such a trench formed the outlet of the subterranean gutter which carried the water from the Orchestra of the Theatre, where during the winter months great quantities must have collected.

It remains to consider a few matters of interest in our decree which may perhaps be classed under the heading of Public Antiquities.

The fact that among the Greeks generally the State had the right to let, at any rate in many cases, the lands of temples, is so well known as to need no more than passing comment. The question is treated in Boeckh's *Staatshaushaltung* (3d ed.) I, pp. 372–377, and somewhat more specially in relation to the inscriptions bearing upon it in Reinach's *Traité d'Épigraphie Grecque*, pp. 94 ff. The most notable inscriptions in this connection are those from Herakleia in Lucania, *C. I. G.* 5774/5. A difficult and uncertain point is that in regard to the constitution of the board called Horistai (l. 7). Were they, at Athens, a permanent body, or were they appointed in a given case, perhaps κατὰ τὰς ξυγγραφάς? The most important evidence for the permanent existence of such a board that literature affords is to be found in Hypereides, ὑπὲρ Εὐξενίππου XXIX, where the orator uses these words: ταύτας τὰς φυλὰς ἔγραψας ἀποδοῦναι τὸ ὅρος τῷ Ἀμφιαράῳ καὶ τὴν τιμὴν ὧν ἀπέδοντο, ὡς πρότερον τοὺς ὁριστὰς τοὺς πεντήκοντα ἐξελόντας αὐτὸ τῷ θεῷ καὶ ἀφορίσαντας κ. τ. ἑ.. I am aware that some scholars have not thought that this passage gives any real evidence of the existence at Athens of

and he would in this manner bring the Palaistra of Taureas among the endless questions which concern the Agora. Our inscription does away with this. Again, LOESCHCKE, in the article already referred to (Notes 20, 24), having skilfully made out the identity of Βασίλεια with ἡ μεγάλη Μήτηρ and placed her sanctuary in the Μητρῷον, would locate the Palaistra of Taureas on the southern half of the eastern side of the Agora, where Lange places the Eleusinion. He then proceeds to use the fact of the identity of Μήτηρ and Βασίλεια to prove that the temple of Εὐκλεια and Εὐνομία mentioned by PAUSANIAS (*Cf.* WACHSMUTH, *Stadt Athen*, I, p. 173) must have been on the Agora, since the mutual connection of Εὐκλεια and Βασίλεια with Εὐνομία (*cf.* ARISTOPH. *Birds*, v. 1540) justifies such a view, and a stone has been found in the region of the Agora (*C. I. A.* III, 207) bearing the inscription Μητρὸς [θε]ῶν καὶ [Ἀρ]τέμιδος. See *Papers of the Am. School at Athens*, I, p. 167, inscription No. 32. LOESCHCKE's interesting argument can now be set aside.

a permanent boundary commission;[25] and yet it seems to me that the burden of proof rests with those who deny it. The date of this oration of Hypereides falls between 330 and 324 B. C., but Blass (*Att. Beredsamkeit*, III. 2. p. 54) holds the probably correct opinion, that the fixing of the boundary in question, that of the land sacred to Amphiaraos at Oropos, took place many years before. The evidence, therefore, of this passage points very likely to a period earlier than might at first seem to be the case. A passage also in Bekker's *Anecdota* (I, 257) should not be passed over in this connection. It is as follows: *ὁρισταί· ἀρχή τίς ἐστιν, ἥτις ἀφώριζε τὰ ἴδια καὶ δημόσια οἰκοδομήματα πρὸς τὰ οἰκεῖα ἑκάστου μέτρα, ὥσπερ τινὲς ὄντες γεωμέτραι καὶ ὁριοδεῖκται.* Nor does it seem without weight that we know *ὁρισταί* to have existed in Chios and in Herakleia of Lucania[26] as early as the fourth century B. C. Against the view that the Horistai at Athens were a permanent body it might possibly be argued that in the important Eleusinian inscription found a few years ago,[27] and not much older than the one before us, we have a provision for fixing the boundaries of the Pelargikon, where no mention is made of the Horistai. It runs: *τὸν δὲ βασιλέα ὁρίσαι τὰ ἱερὰ τὰ ἐν τῷ Πελαργικῷ.* At the same time, that which concerned the Pelargikon might be held to partake of an exceptional character and hence to require the offices of the Basileus in person. We cannot perhaps prove that the Horistai were a permanent board at Athens, but, on the whole, it seems to me that the weight of evidence is in favor of that view. In conclusion, attention must be called to the Apodektai (ll. 16, 17), who are not elsewhere mentioned in inscriptions of the fifth century B. C. This fact has led some scholars to doubt the truth of the statement in Harpokration, that they were introduced first by Kleisthenes, and by such they have been placed among the changes introduced at the time of the archonship of Eukleides.[28] We have now no reason to doubt the statement in Harpokration.

J. R. WHEELER.

[25] HERMANN'S *Rechtsalterthümer* (ed. Thalheim, 1884), p. 49. *C. I. A.* II, 564 (*Syll.* 295) which is cited does not seem to me to furnish any evidence against the existence of a board of Horistai.

[26] GILBERT, *Gr. Staatsalterthümer*, II, pp. 155, 246, 333.

[27] Published, *Bulletin de Correspondance Hellénique*, IV, p. 225 ff. (DITT., *Sylloge* 13).

[28] This is the view taken in MEIER and SCHOEMANN, *Attischer Process* (ed. Lipsius) I, p. 110; where J. CHRIST is cited, *De publicis populi Atheniensium rationibus*, 1879, p. 15 ff. BOECKH always held to what now seems certainly the correct view; *cf. Staatshaushaltung* (3d ed.), I, 193.

NOTES ON ORIENTAL ANTIQUITIES.

[PLATE V–VI, FIGS. 1–13.]

IV. THE RISING SUN ON BABYLONIAN CYLINDERS.

There is a peculiar little family of Babylonian cylinders which have thus far been, I think, misconceived, and which it will be well to bring together for study and comparison. They are those in which George Smith fancied he saw the building of the Tower of Babel, and in which I lately suggested (*Scribner's Monthly*, January, 1887, p. 89), following Ménant, that there were represented the gates of the under-world opening to receive the dead. Of these there are ten known to me as published, besides one of my own collection, now belonging to the Metropolitan Museum of New York. I give figures of them all, that the full data may be in the hands of the reader.[1]

I omit one cylinder with the "tower," and a deity, half man and half serpent (Lajard, *Culte de Mithra*, pl. XLII, fig. 13); also three in which the "tower" is winged at the top (*ibid.*, pl. XVIII, fig. 1; pl. XVIII, fig. 2 (Cullimore, *Oriental Cylinders*, No. 165); and pl. LIV, fig. 1). These

[1] They are reproduced from the following sources:

FIG. 1.—From SMITH, *Chaldean account of Genesis*, p. 159, upper figure (Sayce's revised edition, p. 162, second figure).

FIG. 2.—LAJARD, *Culte de Mithra*, pl. XXVIII, fig. 10 (MÉNANT, *Cyl. Or. à la Haye*, fig. 15; *Cyl. de la Chaldée*, p. 123, fig. 72).

FIG. 3.—MÉNANT, *Cyl. de la Chaldée*, p. 121, fig. 68.

FIG. 4.—*Collection de Clercq*, No. 85.

FIG. 5.—MÉNANT, *Cyl. de la Chaldée*, p. 123, fig. 71 (LONGPERIER, *Notice Antiq. Ass. du Louvre*, No. 540).

FIG. 6.—LAJARD, *op. cit.*, pl. XVIII, fig. 3.

FIG. 7.—LAJARD, *op. cit.*, pl. XL, fig. 8 (SMITH, *op. cit.*, p. 159, lower figure; or *ib.*, Sayce's revised edition, p. 162, lower figure).

FIG. 8.—LAJARD, *op. cit.*, p. XXVIII, fig. 15 (MÉNANT, *Cyl. Or. de la Haye*, fig. 16; *Cyl. de la Chaldée*, pl. III, fig. 3, and p. 122, fig. 69).

FIG. 9.—LAJARD, *op. cit.*, pl. XVIII, fig. 4 (SMITH, *op. cit.*, p. 158; or, *ibid.*, Sayce's revised edition, p. 162, upper figure; MÉNANT, *Cyl. de la Chaldée*, p. 122, fig. 70).

FIG. 10.—From my own collection, hitherto unpublished.

FIG. 11.—MÉNANT, *Cyl. de la Chaldée*, p. 121, fig. 67 (unfinished).

four cylinders must have a different meaning from those we are now considering, and are very difficult to understand.

What George Smith fancied to be a tower is correctly explained, by Ménant and others, as a gate. The projections for the sockets above and below, and the ornamental lion resting on it in one case, as also the bands across, as in the gates of Balawat, are sufficient evidence that nothing but gates can be represented. The fact that some of the gates are narrower in the middle comes from their being engraved on seals which are not pure cylinders, but are concave in form. The god, with the horned headdress, standing beside the gate, and holding it with his two hands, is evidently either opening or shutting it. The repetition of the gate on some of these seals means nothing more than the repetition of Gisdubar or the lion on some of the finest seals, as that of Sargon I—it is merely for symmetry, and does not indicate that two gates and two porters are intended. These gates suggest to Ménant (*Cyl. de la Chaldée*, p. 125) the gates of the abode of the dead, as described so vividly in the *Descent of Ishtar into Hades*. She was obliged, as she passed each gate, to strip off one of her garments or ornaments, until she was left naked. Ménant does not see in these cylinders a representation of Ishtar, to be sure; but, as the route is the same for all souls, he finds here an incident in the passage of the soul through some one of these gates, and its submission to a deity, perhaps a god of vengeance, who stands within the gates. The evident objection to this explanation is that in only one of these cylinders, eleven in all, does any representation appear of what can be supposed to be the soul of the dead. We have the porters and the god, but no deceased person.

The god on the other side of the gate from the porter, and therefore outside of it, is more curiously represented than any other deity figured on these cylinders. He is bearded, wears a cap with a horn turned up on each side, and has rays proceeding from his shoulders. These rays are not straight and feathered, like the wheat stalks rising from the shoulders of the god of agriculture, with whom the figure of the plow is associated (see my article, *Am. Journal of Arch.* vol. II, pp. 261–66), but are simple and wavy. On one side, or both sides of the god, is a prominence half the height of his body. If it is single, then the god is lifting one foot very high to mount it (*figs.* 2, 3). If it is on both sides of the god, he is either climbing one, and has his back to the other (as in *figs.* 1, 4), or he has both hands lifted and resting one upon each, as if he were either lifting a weight with each hand, or were pushing

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himself up by bearing his weight upon them (*figs.* 6, 7, 8). On some examples, he stands between the two prominences with a hand resting upon one of them, and with his peculiar weapon in the other hand (*figs.* 9, 10). This weapon, if it be such, and not a branch, as Ménant calls it (*Cylindres de la Chaldée*, p. 122), is short, broad, and notched along its whole length, except where held by the handle. In one case (*fig.* 8) an attendant, or armor-bearer, stands beside him holding the weapon, while the god's two hands are engaged. In a single case (*fig.* 2, but compare *fig.* 13), a worshipper, or soul of the dead, is being led by the hand into the presence of the god.

What is indicated by the prominences upon which the god lifts his foot, or on which he rests his hands? In some cases (*figs.* 6, 7, 8) a basket is suggested by the parallel lines across them: but there is no handle by which they can be lifted. A number of other instances make it perfectly clear that they are hills or mountains. The composite character of these prominences, or mounds (*figs.* 1, 3, 9, 11) made up of little mounds, is precisely that which is the familiar style of representing a hilly country in Assyrian art, as often on the bas-reliefs of Koyunjik.

My own interpretation of the scene depicted on these cylinders seems to me so simple and natural that I wonder it did not occur to me at once, and that it has not struck every student. I regard the deity as Shamash, the Sun-god. He has spent the night in the chambers under the earth. The porter has opened the gate to let him out for his day's course. The beams of light are emitted from his body. He rises from between the mountains of Nizir, or of Elam, in the East, or he climbs up their sides. In his hand is a weapon of power.

The people of the East not only worshipped the Sun, but they personified it. The Hebrew writings bear abundant evidence of it: "In them hath he set a tent for the Sun. And he is like a bridegroom coming out of his chamber; he rejoiceth like a hero to run his road. His outgoing is from the end of the heavens, and his circuit unto their end, and nothing is hid from his heat" (*Ps.* xix: 5–7). So we are told that those that love the Lord are "like the going forth of the Sun in his might" (*Judges*, v: 31). He carries a weapon to smite: "The Sun shall not smite thee by day" (*Ps.* cxxi: 6); "Neither shall the heat smite them, nor the Sun" (*Is.* xlix: 10). When the Sun was conceived as a god, it was as a god resting at night, and coming forth in the morning from the chambers of the East, climbing up over the mountains, and pursuing his course to his setting in the West. All mythologies are

full of this idea which needs no defence. The curious apostrophe to the gates through which Yahveh passed (*Ps.* xxiv: 7–10), "Lift up your heads, O ye gates; lift them up ye everlasting doors, and the King of Glory shall come in. Who is this King of Glory? Yahveh of hosts; he is the King of Glory," might very well have been adopted from an old hymn to the Sun.

We are fortunately able to support this explanation of these seals by the description of the Sun-god given in the Babylonian hymns that have been preserved.

A bilingual hymn to the setting sun is thus translated by Mr. Pinches (*Trans. Soc. Bib. Arch.*, vol. VIII, p. 167. *Cf.* G. Bertin, *Revue d'Assyr.* vol. I, p. 157):

"O Sun-god, in the midst of heaven, in thy setting,
May the bolts of the high heavens speak peace to thee!
May the door of the heavens be propitious to thee!
May Misaru (the director) thy beloved attendant, guide thee!
At Ebara, the seat of thy lordship, thy supremacy shines forth.
May Aa, thy beloved wife, gladly come to meet thee!
May thy rest-giving heart rest!
May the glory (?) of thy godhead dwell with thee!
O warrior, hero, Sun-god, may they glorify thee!
O lord of Ebara, may he (the messenger) direct thy straight path!
O Sun-god, make thy path straight, a straight road for thy beams (?) to go!
O Sun-god, who judgest the country, of her decisions the director art thou!"

With this is to be compared another hymn to the Sun-god, also translated by Pinches (*ibid.*, p. 168, note):

"Sun-god, in the foundation of heaven thou dawnest, and
The bolt of the high heavens thou openest.
The door of heaven opens.
Sun-god, thou raisest thy head to the lands;
Sun-god, thou coverest heaven and earth with glory."

Yet another hymn to the Sun-god is thus translated, in part, by Lenormant (*Records of the Past*, XI, p. 193; also *Études Accadiennes*, III, p. 141):

"Great Lord, from the midst of the shining heavens at thy rising,
Valiant hero, Sun, from the midst of the shining heavens at thy rising,
In the bolts of the shining heavens at thy rising,
In the bar of the door of the shining heavens, in . . . . at thy rising,
In the great door of the shining heavens in [thy (?)] opening it."

These hymns are enough to show that the idea of the Sun-god entering on his daily course by passing through the doors of the East, unbarred for his passage, is exceedingly familiar. It was expressed in various forms, in numerous hymns, and was committed to memory and repeated as a prayer, or charm. This fully explains the representation on the seals, the god passing through the door, surrounded by rays, and rising above the Median mountains. The guide Misaru would perhaps be the attendant holding the weapon for the god in *fig.* 8. In the representation of the course of the Sun-god on the famous stone tablet of Abu-habba, the guides are small figures in the sky directing the disk of the Sun with cords. The Sun appears, as is noticed by Thomas Tyler (*Bab. and Orient. Record*, vol. I, p. 57), repeated under the waters, indicating his passage through the under-world. I venture to repeat the suggestion which I made long ago (*Proceedings of the Am. Or. Soc.*, Oct. 1880, p. xi), that the notched or saw-like object carried in the hand of the god is not a branch, as conjectured by Ménant, but a very archaic weapon of the stone age, like the Mexican *maquahuitl*, being a club armed with flakes of flint set in grooves, as sharp stones are even yet set in Eastern threshing machines. One or two of the Hittite hieroglyphs seem to represent a similar club.

If this identification of the Sun-god be accepted, as I think it must be, it gives the explanation of another series of much more frequent cylinders: I refer to those (*fig.* 12), generally on hematite, which represent a god standing with one foot raised on a low stool, which sometimes takes an animal form, and is frequently imbricated, like some of the hills up which Shamash steps, in the seals we have already considered. In his hand he holds the same notched weapon we have noticed in the hand of the Sun-god or his attendant. In perhaps one case out of five, the god carries a mace or rod, instead of this weapon. In a single case he carries a plow. This god is almost certainly identified by these two marked characteristics, the notched weapon and the lifted foot, which do not appear with any other god. I remember but a single case in which a god otherwise figured carries this notched weapon; and that is the seated god (Lajard, *Culte de Mithra*, pl. L, fig. 1) who is not only unique in carrying this weapon, but nearly so in having his shoulders adorned with the Sun-god's waving rays (see Ménant, *Cyl. de la Chaldée*, p. 106, fig. 60). Before him stand seven identical divine beings, with horned caps. In this case, the weapon happens to have a projection above the handle, somewhat like the guard between the hilt and blade

of a sword; showing that it cannot be a branch or a feather. It is likely that, in this case also, the Sun-god is represented, accompanied by seven spirits.

I have said that the type represented by *fig.* 12 is generally wrought in hematite, although this one is taken from a speckled white and black sienite. A very important cylinder of brown jasper (*fig.* 13) in the possession of M. de Clercq (*Catalogue*, No. 84) connects this type with that which we have first considered. It is probably the oldest example of the type that has come down to us. The inscription on it reads, according to Ménant, apparently endorsed by Oppert: "Kamuma, patesi of Zirgulla, ... the scribe, his servant." Now, not only is the period of the patesis extremely ancient, but this Kamuma is another reading of Gudea, whose date, if we can trust the chronology of Nabonidus, is more than 3500 B. C. On this seal the god has his foot resting on a mountain, and lifted nearly as high as on *figs.* 1, 2, 3, 4. The imperfection of this cylinder leaves but a portion of the weapon visible. The two figures next to the god represent either the worshipper, or the soul of the dead, perhaps, being led into the presence of the god.

On all these seals of the type of *fig.* 12, the god cannot be any one else, I think, than the same Shamash. With him constantly appears a female personage in flounced dress, with both hands raised in an attitude of respect. Although this same figure appears with one or two other forms of male deities, and has generally been taken to be a worshipper, I cannot but take it to be a female deity, in this case the Sun-god's wife, Aa, who represents one phase of the Moon. The worshippers are generally to be easily distinguished by not wearing the horned headdress: but this female figure wears the same horned headdress as the god. A marked illustration of this appears on the stone tablet of the Sun-god found at Abu-habba. Here the seated Sun-god has four horns to his tiara, and the flounced female figure, which I call Aa, has three. Between them are two evidently human figures approaching the god: they represent the king being led into the divine presence. In further support of these identifications of Shamash and Aa on these frequent hematite cylinders, it is to be noticed that this type carries in a number of cases (as in *fig.* 12) the simple inscription: "Shamash and Aa." It affords one of the few cases in which the inscription gives some clue to the mythological design engraved on the seal. This inscription, however, is found on a few other cylinders which show a seated god. The type of cylinders with Shamash and Aa belong to a period

probably from 1000 to 2000 B. C., and they are considerably later than those which we first considered. I think that, in the earliest period, hematite was not used. The most archaic cylinders are generally of green jasper, basalt, lapis lazuli, or serpentine.

The seals we have studied may give some indication of the local origin of the mythological conception portrayed. The mountains of the East were not visible from Ur, or Erech, or Niffer, or Zirgulla, or Sippara, or Babylon. Did this conception arise in the Eastern highlands, where the Sumerian race and writing are supposed to have had their origin? Or can it be possible that the mounds and canal-banks, which were always the preëminent features of Chaldean scenes, are the hills over which the sun rises? It is certain, from their material, size and shape, that these cylinders go back to the earliest Chaldean period.[1]

New York City. WILLIAM HAYES WARD.

[1] We have, in the so-called Hittite sculptures, one other example of a god (?) represented as stepping on the mountains. This is seen in one of the figures at Boghaz-keui (Pterion) copied in Texier's *Description de l'Asie Mineure*, also in Perrot's *Galatie et Bithynie*, from which latter it is repeated in Wright's *Empire of the Hittites*, pl. XXIV, fig. 4. In Van Lennep's *Travels in Asia Minor* (vol. II, p. 121) is another copy of the same figure. Whether god or man, he is represented with his feet resting on two unmistakable hills; and in front of him is the divine winged disk, elaborately designed, and combined with other symbols.

[At the request of Dr. Ward, is added the following Note by Professor MORRIS JASTROW, Jr., Ph. D.]

The opening words of a bilingual Hymn (5 R. 50) lend further weight to Dr. Ward's happy interpretation: *Šamaš ultu šadî rabî ina aṣîka | ištu šadî rabî šâd naḫbi ina aṣîka | ištu šadî ašar šimâtu ina aṣîka.*

"O Sun! In thy rising out of the great mountain,
In thy rising out of the great mountain, the mountain of fate,*
In thy rising out of the mountain, the place of destinies."

This passage fully bears out Dr. Ward's view, as embodied in his article, of the relation which the rising sun bore to the mountain, in the mythological system of the Assyrians. Indeed, the first line might serve as an appropriate device for the very seals of which Dr. Ward treats, so perfectly does it correspond to his explanation. It is also worthy of note that, among other ideographic values of the sign for mountain, we find *napâḫu* and *niphu* "sunrise," and the Assyrian word for mountain, *šadû*, also means "east." The east wind is expressed by the same sign with the determinative for wind.

*In justification of this rendering of *naḫbu* (strongly favored, moreover, by the *parallelismus membrorum*), compare the uses of the stem נ ק ב in Hebrew, viz., "to pierce, to hollow out" (as in Assyrian); then, "to point out, single out," generally in an unfavorable sense; hence, "to doom, curse" (*Lev.* 24: 11, 16; *Numb.* 23: 8; *etc.*), but also in a favorable sense, as the nobles, the "distinguished ones" (*Amos*, 6: 1; *I Chr.* 12: 31). So also in Arabic *naḳîb* means "the chief, the leader."

A PROTO-IONIC CAPITAL, AND BIRD-WORSHIP, REPRESENTED ON AN ORIENTAL SEAL.

[PLATE VII-1, 2.]

The present Oriental cylinder is published (PL. VII-1) as a slight addition to the interesting monuments brought forward by Mr. J. T. Clarke in his paper on *A Proto-Ionic capital from Neandreia*.[1] The origin of the Ionic capital in Mesopotamia is now generally acknowledged, and the materials for this opinion consist mainly in the Sippara Stone (c. 880 B. C.), some Assyrian ivories dating between the eighth and seventh centuries, and a few basreliefs of the latter date from Khorsabad and Koyundjik.[2] In our cylinder there are two points on which I wish especially to dwell, the Ionic column and the image of the bird upon it. The cylinder itself was brought by Dr. Wm. Hayes Ward from Mesopotamia two years ago, and has recently been purchased, with the entire collection, by the Metropolitan Museum of New York. The subject represented on it is an adoration-scene. A male divinity, in the usual flounced Babylonian robes, with head and arms bare, sits on a simple throne-like stool, holding in his hand the *lituus* or curved wand, a symbol often associated with such figures.[3] Before him rises a column with a capital which, though carelessly outlined, evidently consists simply of the Ionic volute. The formation of this capital confirms Clarke's remark on the volute (p. 16), that "the primitive form of this member must have had a much greater projection than that customary in the perfected examples, and that the volutes did not lie upon an echinos moulding, but grew directly from the shaft." On some archaic Greek vases the projection is also remarkable, though not so exaggerated as here: this type is shown in Clarke's article by *fig.* 8, taken from a vase from Volcei. Another peculiarity of the volutes on this cylinder is that they spring outward, instead of upward as in the Assyrian ivories and the Sippara stone, their axis being very close to the centre of the column instead of near the outer edge: in the other examples the capital is of spiral

[1] *Am. Journal of Archæology*, vol. II, pp. 1–20, 136–148.

[2] *Ibid.* pp. 10–13, figs. 3, 5, 6.

[3] In the *Collection De Clercq, Catalogue, etc.*, Nos. 115, 130, 132 *bis*, 134 *bis*, *etc.*, this wand, curved at the end, appears in the field of the cylinders as a symbol merely, while in a number of cylinders in the Ward Collection, and doubtless in others at the Louvre and British Museum, it is placed in the hand of the divinity, as in the present instance. It is of common occurrence on Hittite reliefs (Eujuk).

form and the volutes spring from the shaft. This produces two results: in the first place, the capital so formed is quite incapable of sustaining a heavy weight; and secondly there is no room for the anthemion. But, although the extreme projection of the volute affected the strength, the form thus attained was far closer to that of the developed Greek Ionic capital than any other early Oriental example. The second result, the absence of the anthemion, is another unique peculiarity. Even in the Sippara stone, the anthemion is indicated by a bud, there being no room for the flower; while in the Assyrian ivories it plays, in the formation of the capital, almost as important a part as the volutes. It is true that, in criticising an object so minutely drawn as the capital on this cylinder, great allowance must be made for the impossibility of accuracy and detail on the part of the carver. The capital is separated from the shaft by three annulets, and a similar but broader trio form the base. On the top of the capital stands the image of a bird with well-developed wings and tail-feathers, and well-marked talons, though of what species cannot be ascertained with certainty. This bird is evidently the symbol of the seated divinity. Toward these approach two worshippers, each with a hand raised in adoration, a man and a woman. Behind them are two animals: the upper one a hare, the lower perhaps a kangaroo, from the length of its fore-legs. The style of this monument is so mixed that it is very difficult to specify its age. The seated divinity, both in type and dress, takes us back to the early Babylonian cylinders of 2000 and 3000 B. C.: but this would appear to be merely an archaism, the perpetuation of a traditional type. The two adorers wear a costume that is quite Assyrian (one horizontal and two diagonal lines of fringe ornamenting the outer garment) but the features have rather an Egyptian cast, while the animals remind of certain Syrian or so-called "Hittite" seals. Taken as a whole, this cylinder appears to have been produced, not by the late Babylonian, but by the Syrian school, which, though not as openly eclectic as the Phœnician, still borrowed many elements from Mesopotamia and Egypt. This would place our seal during the middle Assyrian Empire, perhaps in the eighth century, after its kings had broken the Hittite power and introduced the arts and manners of the great valley of the Euphrates into the region of the Mediterranean coast.

If this be correct, our seal would be slightly posterior to the Sippara stone, and probably anterior to the Assyrian works with Ionic capitals, and would thus possess considerable historical interest, beside showing that the proto-Ionic column was becoming known also to the Syrians.

Of equal interest is the question raised by the sight of this free-standing column upholding the image of a divine bird. Let me, in the first place, establish the fact that it is a divine symbol. Commencing with Babylonian monuments,—on the three basalt cones or boundary-stones, containing contracts, dating from the reign of Marduk-idin-ahi, King of Babylon (1120–1100), now in the British Museum,[4] there is a series of symbols of divinities whose names are, for the greater part, mentioned in the text, and under whose sanction the contract is placed. On all these cones is figured, in the series, a bird standing on some kind of support or on the ground. A bird is again figured on the stone relief of Merodach Baladan I,[5] in relation with a similar set of symbols of Babylonian divinities. As I have hinted elsewhere (JOURNAL, vol. II, pp. 192, 457), every god and goddess of this pantheon had one, two or more symbols which were both animate and inanimate objects: these were represented either in connection with the figures of the divinities, or in place of them: in this cylinder we see both, in the basalt cones only the symbol. Two peculiar and early Babylonian seals published in this Journal (vol. II, pp. 46–48, figs. 10, 11) may be mentioned in this connection, as in each appears in the air a divinity mounted on a colossal bird with outspread wings, whom figures below are worshipping. In the De Clercq collection (pl. IV, No. 37) a bird appears in the air as an object of adoration in connection with the seated figure of a divinity, perhaps the god Raman. I have attributed our cylinder to the Syrian school, and it is interesting to note that, in Hittite sculpture, the bird is undoubtedly the symbol of some great divinity. At Eujuk and Boghaz-keui,[6] one of the gods stands on a great double-headed bird with outspread wings, doubtless an eagle; while at Iasili-Kaïa it supports two figures. This bird is repeated on various Syrian monuments: for example, the cylinder published in No. 3 of PLATE VII of this number of the JOURNAL, where it is repeated three times (*cf. Collection De Clercq*, pl. IV, fig. 37). But, in these cases, the bird is invariably heraldic, with outspread wings and facing the spectator, and of a species different from the bird on our cylinder and on Babylonian works.[7] A far closer analogy is to

[4] MÉNANT, *Pierres gravées, etc., Chaldée*, p. 250; OPPERT et MÉNANT, *Documents juridiques*, pp. 86, 109, 124, 129; *Transactions of the Soc. of Bibl. Archæology*, vol. VIII, pt. I, pl. opp. p. 130.

[5] PERROT and CHIPIEZ (Engl. ed.) II, p. 74, fig. 10.

[6] PERROT et CHIPIEZ, vol. IV, fig. 343 and pl. VIII, E.

[7] Birds in profile are represented on some cylinders of doubtful (perhaps Syrian) origin, *e.g.*, MÉNANT, *Glyptique*, I, fig. 111.

be found in a peculiar inedited cylinder of the Ward Collection reproduced in PL. VII–2. A warrior with an Assyrian helmet, so spare of limb as to remind one of Egyptian figures, is offering a sacrifice on an altar in front of a tabernacle at whose entrance is stuck a lance, while the sun and moon are seen above—three very common symbols. The tabernacle itself consists of a square, flat, fringed canopy supported on slender columns with trefoil tops, like in some Assyrian reliefs. Within are the symbols of two divinities: an altar from which arises a horse's head and neck, and a bird standing on a columnar support with a capital whose general shape is lotus-like. It is hardly necessary to add that the bird differs entirely in species from that on our proto-Ionic cylinder, as it has a long slender neck, short tail-feathers and no talons: it is a bird similar to those on the basalt cones.

Passing now to works of Assyrian art, we find, on a relief from Sennacherib's palace at Nimrûd,[8] soldiers represented carrying from the camp the portable images of the gods which always accompanied the army: among these is a bird of a shape very similar to ours.[9] The enamelled-brick frieze that runs along the basement beside the grand entrance of Sargon's palace at Khorsabad is well known, and also the fact that, among the five symbols represented in it, the eagle is placed between the lion and the bull. It would then appear that the figure of a bird was the symbol of one of the twelve great divinities which Babylonians and Assyrians worshipped in common, and that a similar worship was practised by the Syrians ("Hittites").

It would be easy to multiply examples, and to show that several birds were objects of worship among the Assyro-Babylonians. In connection with an interesting and full monograph by the Rev. William Houghton, entitled *The Birds of the Assyrian Monuments and Records*,[10] a number of cylinders and cones in the British Museum are published (pl. XIII) which are to the point in the question of bird-worship. In one Assyrian cone a winged genius stands in adoration before an altar on which is the well-drawn figure of a cock; while, on a cylinder, a figure before a vase-bearing tripod is worshipping a moon-bearing cone and a bird

[8] PERROT and CHIPIEZ, vol. II, fig. 37; LAYARD, *Monuments of Nineveh*, 1st series, pl. 67.

[9] Compare also the antelopes, *etc.*, on the top of Assyrian capitals, as in a relief from Nimrûd (LAYARD, *Monuments*, 1st series, pl. 30), also some of the Persian capitals at Persepolis.

[10] *Transactions of the Society of Biblical Archæology*, vol. VIII, part I, pp. 42–142, with thirteen plates.

that resembles a hen, both standing on altars. There are many other illustrations of this cock-worship (*cf.* Houghton, *ibid.*, p. 98).

It is interesting to connect the example on our cylinder with the instances of free-standing columns bearing images—gods or animals—which we meet in archaic Greek art, for the inference to be drawn is that this custom was borrowed from Asia by the Greeks. On most Panathenaic vases the figure of Athena is framed, on either side, by a Doric column bearing on its summit the figure of an owl, a cock, a panther, *etc.*, symbols of the goddess.[11] On a number of archaic Greek vases a prominent place is given to an Ionic column on whose capital a figure, or rather an *agalma*, stands, generally of Hera.[12] These free-standing shafts were often votive, and upheld not only figures but even vases, tripods, sphinxes, harpies, sirens, *etc.* A small class of Doric columns, attached to fountains, found on early vases, are of especial interest in this instance, as they generally support figures of birds, as in our cylinder.[13] In one archaic vase published by Gerhard (pl. XI) the subject is Ismene at the Dircaean fountain of Apollon, drawing water which runs from a lion-head fixed in a Doric column on whose capital rests a bird, of which Dr. Gerhard says that it is "vermutlich ein Rabe,[14] und als solcher zugleich ein Wahrzeichen von Apollo, des Ismenischen Gottes." If this bird be a symbol of Apollon, what divinity does our Oriental bird represent? This question, apparently, cannot yet be answered.[15]

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[11] *Monum. dell' Inst.*, t. X, pl. XLVII, *sqq.*

[12] OVERBECK, *Griechische Kunstmythologie*, II, fig. 2, pp. 19 *sqq.*; DAREMBERG et SAGLIO, *Dictionnaire des Antiquités grecques et romaines*, p. 1353, *s. v. Columna*, and pp. 347 (fig. 407), 348 (fig. 410); *Monum. dell' Inst.*, t. X, pl. XL. *Cf.* BENNDORF, *Griech. u. sicil. Vasenbilder*, pl. XIV, *sqq.*

[13] GERHARD, *Etruskische und kampanische Vasenbilder d. kön. Mus. zu Berlin*, pl. XI, and pl. E, Nos. 9, 12, 16.

[14] Might it not be a hawk, which is well known to be a symbol of Apollon, from the *Iliad*, Aristophanes, *etc.*: *cf.* MÜLLER, *Dorians*, I, 314.

[15] I give here a note on the subject from LAYARD, *Nineveh*, p. 350: "The Iynges, or sacred birds, belonged to the Babylonian and probably to the Assyrian religion . . . Their images made of gold were in the palace of the king of Babylon according to Philostratos (*lib.* I, *c.* 25, and *lib.* VI, *c.* 2). They were connected with magic (SELDEN, *De Dis Syris*, p. 39). It is possible that the bird borne by warriors in a bas-relief from the ruins of the centre palace may represent the Iynges. This figure may, however, resemble the golden eagle carried before the Persian monarchs," *etc.*

UNPUBLISHED OR IMPERFECTLY PUBLISHED HITTITE MONUMENTS.

II.

SCULPTURES NEAR SINDJIRLI.

[PLATES VII–3 and 4, VIII, IX, X, XI, XII.]

About a year ago, during the early spring of 1886, Prof. J. H. Haynes, then a teacher in the American College at Aïn-tab, spent a vacation in exploring the valley to the north of Antioch, especially in search of Hittite monuments. As one of the results obtained, he sent home to the Archæological Institute of America some photographs which he had taken of Hittite sculptures recently uncovered by native workmen at *Sindjirli* in North Syria, between the Amanus and Kurd-dagh Mountains. We had already arranged to publish these Hittite slabs in the *Journal of Archæology* when M. Perrot announced, in the newly published vol. IV of his *Histoire de l'Art* (p. 529 *sqq.*) that Dr. O. Puchstein was about to issue a work entitled *Reisen in Klein-Asien und Nord-Syrien*, in which these monuments were also to be illustrated. If we have, notwithstanding, carried out our intention, it is with the hope of finding many interesting points for study in these strange sculptures. Furthermore, one of the reliefs (PL. XII-2) was discovered long after Dr. Puchstein's departure. For a general study of Hittite art the masterly chapters in Perrot should be consulted, in which nearly all the sculptures hitherto found are illustrated, although but a slight general sketch is given of these reliefs from *Sindjirli* (fig. 269); also the two interesting monographs by Hirschfeld.[1]

For the number and importance of its Hittite remains the narrow

[1] *Paphlagonische Felsengräber. Ein Beitrag zur Kunstgeschichte Kleinasiens*, von GUSTAV HIRSCHFELD: Berlin, 1885.—*Die Felsenreliefs in Kleinasien und das Volk der Hittiter. Zweiter Beitrag zur Kunstgeschichte Kleinasiens*, von GUSTAV HIRSCHFELD: Berlin, 1887. Both are issued in the *Abhandlungen d. kön. preus. Akademie der Wissenschaften zu Berlin.*

plain which extends from Marash south-westward to Antioch will compete with the ruins of Jerablûs, the ancient Carchemish itself. The most important of them, the fine lion covered with Hittite hieroglyphs, which was for hundreds of years on the wall of the Turkish fortress at Marash and is now in the Tchinly-Kiosk Museum at Constantinople, has been admirably reproduced in the second edition of Dr. Wright's *Empire of the Hittites*. The companion lion, but uninscribed, still stands on the wall of the fortress. Probably they were found in the ancient mound, when the necessary digging was making for the foundations of the walls. Scores of large and small Hittite sculptures and inscriptions, whole or in fragments, are known to exist in Marash or its immediate neighborhood, built into the walls of houses, or in the yards of mosques. They are all in a black and sometimes porous trachyte which has wonderfully resisted decomposition. The two lions are the only figures in the round, yet discovered there; the other sculptures being in low relief, and the most frequent representations being of one or two persons sitting or standing by a table, as in the two votive steles published by Perrot (figs. 280, 281) from designs furnished by Dr. Puchstein: these will be mentioned later, on account of their similarity in style and subject to some of the sculptures here illustrated. The only other objects of probable Hittite origin that appear to have been found there are the bowls and the fine long obsidian knives, or flakes, which have been occasionally discovered in the rock-hewn three-chambered tombs. Dr. Puchstein also came across some interesting reliefs at *Saktchegheuksou*, five hours distant from Sindjirli (Perrot, fig. 279); three of which represented a lion-hunt, and are of a more artistic and apparently later style than our reliefs.

The plain from Marash to Antioch contains scores of ancient mounds or *tells*, probably of Hittite origin. More than one of them have been opened enough to give evidence of Hittite monuments: of these the most important is near the village of *Sindjirli* where the slabs illustrated in PLATES VIII–XII were found, apparently by the natives. The site is at the foot of the Giaour Dagh, in the west side of the long, narrow plain, at its narrowest portion, and about fifteen miles from Marash, or five hours march to the S. S. E. of Saktchegheuksou, and four hours from Baghcke, known from the pass named after it on the road from Adana to Marash. The sculptures are situated at the foot of a mound: most of them forming two sides of a large hall. The entire series evidently once formed part of the decoration of a Hittite palace, very much after the fashion

of the palaces of Assyria. A rough plan drawn by Mr. Haynes will show the relative position of the slabs:

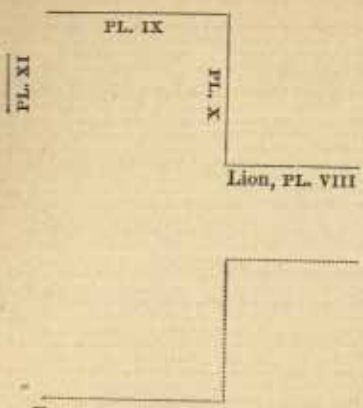

FIG. 12.—*Plan of the excavations at Sindjirli.*

In a letter[2] Mr. Haynes says: "The ancient city once occupying this site was partly built upon an artificial mound, about a half-mile in circuit and some thirty feet or more in height. The line of wall surrounding the lower city can be distinctly traced." He quite reasonably suggests that these sculptures were placed at the entrance of the palace, and one cannot but be reminded of what the Assyrian King Sargon says, in his inscriptions, about building the front of his palace in the shape of a Hittite

[2] We give here part of two letters received from Mr. Haynes, the first of which was published last May (1886) in the *Report of the Archæological Institute of America*. In the first, dated Aïntab, March 22, 1886, he remarks: "I made a short excursion of about fifty miles to the westward, a few days ago, and photographed a group of eleven fine Hittite figures. . . There are other defaced and broken sculptures scattered about, some of which are gathered into a Moslem graveyard close by. The ancient city once occupying this site was partly built upon an artificial mound, about a half-mile in circuit and some thirty feet or more in height. The line of wall surrounding the lower city can be distinctly traced. . . . I shall occupy it (vacation) in searching the upper part of the plain in which I photographed the above-mentioned sculptures. From a distance I have seen many artificial mounds. No one has ever examined them. The plain is about one hundred miles in length from Antioch to Marash." In the second letter, dated "Aïntab, April 26," we read: "According to my promise, I utilized the spring vacation by making a tour according to the proposed plan, with this exception: going westward to the plain, I examined the lower half toward Antioch, instead of the upper half toward Marash. We revisited the Hittite sculptures of which I have recently sent you photographs, and found the natives had dug a little further into the mound and disclosed a figure of great interest (see PL. XII–2). . . The diagram (*fig.* 12) on the following page will aid you in understanding the position of the sculptures in the edge of the mound in which they occur. The dotted lines represent the counterpart of what I suppose to have been the entrance to some palace. The earth lies deep enough to cover any such counterpart, if it exists. . . I now feel confident that this is the very spot in which Hamdi Bey tried, last summer, to get the Louvre interested to begin excavations. . . At another artificial mound I found two fragments of sculptures: one the body and lower extremities of a slender man; the other the hind-quarters of a lion. The plain abounds in artificial mounds; but few of them promise much in the way of excavation, as far as one can judge from external appearances, which are, of course, not a safe guide."

(Syrian) vestibule.[3] It is possible, then, that we have in this unexplored Hittite palace a prototype of those of the Kings of Assyria. At all events, the style of the sculptures points to a period antedating that when Assyrian influence became predominant in art, of which there are so many examples.

The plates will give a good idea of these reliefs, except that, in PL. XII–2, allowance must be made for the distortion which was unavoidable, as the camera had to be tipped in order to photograph the object placed in the open trench.

PLATE VIII will show the arrangement of a number of these blocks. It represents two sides of one room, and gives a glimpse of one side of another room or vestibule. The blocks appear to be about four feet high, and of the black tough stone common in the vicinity and used for artistic purposes. To the left, three slabs are seen, carved with four human figures. On the right, are five slabs, making a second side of the room, and containing four figures, of which one is human. On the last block to the right, the side in shadow appears to have on it the head of a lion. This would seem to be on the side of an entrance, or of another room.

PLATE IX gives an enlarged view of the left-hand portion of PLATE VIII. The figures give us some of the best representations thus far obtained of the features and dress of the Hittites. They are short and stout, with a large and prominent nose and retreating chin. The head is covered with a close-fitting cap, or is left uncovered. The hair is curled and hangs down behind in long tresses or braids. The second figure from the left has the turned-up toes which indicate the wearing of boots, while the third figure wears sandals. They all wear a close girdle. The first figure is beardless and wears a very short garment, as does also the beardless man to the right, who is running and shooting an arrow in the direction of the stag seen in the next plate. The second figure from the left is bareheaded, with his hair carefully dressed, wears the turned-up boots, and carries what is probably a bow in his left hand and behind his back a quiver, like that worn by the shooting figure at the right: his long simple garment is fitted with sleeves, and he wears armlets above his elbow and about his wrists. The third figure wears the close cap; a long robe with short sleeves, fringed at the bottom and fastened with an embroidered girdle from which hangs a long tassel:

[3] LYON, *Keilschrifttexte Sargon's*, pp. 38–39, 44–45, *etc.*

on his feet are sandals, and he carries a long staff in his right hand, and in the left a sceptre or a mace.

PLATE X gives us first, at the left, the stag at which the huntsman is shooting, with the doe in front: the stag occupies two slabs. Next, is seen a rampant winged lion; and finally a bearded man in a high hat, with a short garment about the loins and turned-up boots, carrying a weapon shaped like a beetle, or long-handled mallet. This stone, it will be seen in PL. VIII, bears, on the adjoining side, the figure of a lion.

PLATE XI gives a single block which appears to form part of the third side of the room. A table stands in the middle, made with legs crossed and feet like those of oxen, which rest upon the knees of two seated figures facing each other: on the table are objects not easily determined, —perhaps loaves of bread and a fish. On the left, sits a man in a chair with a high back: he probably wears a round cap, and his hair falls behind in a thick mass: he is dressed in a long garment, without folds, held by a plain girdle from which depends a band: he holds in his right hand a weapon (perhaps the curved sword so often held by Merodach in his contests with Tihamat, or, more probably, the well-known divining rod, or *lituus*, held by divine or priestly figures in so many Hittite reliefs); with his left hand he lifts a fruit to his mouth: he has a bracelet on his right wrist. On the right of the table, sits a woman in a chair the back of which rises to form a canopy over her head: she wears a low headdress, and her hair hangs long behind: she is clothed in a long close-fitting garment, bound with a five-fold girdle, and a triple bracelet is seen on each wrist: in her left hand she carries a triple branch, or flower, and with her right she lifts fruit (or bread) to her mouth. Both wear boots with turned-up toes. A comparison with the stele at Marash given in fig. 280 of Perrot's volume shows a remarkable similarity in style and subject between these two reliefs. In the stele both figures at the table are women; but table, chairs, type and attitude are almost identical. The costume only is different, there being no long veil over our female figure, as in those from Marash.

The relation of PLATE XII–1 to the others is not clear: it gives us a man, in a pointed cap, on a horse or griffin: it is probably at the entrance, next to the following. PLATE XII–2 (considerably distorted, from being taken from an unfavorable position) is a very interesting figure. It is a lion-headed human figure, like the figures of Nergal: he wears a short tunic like that of the hunter in PL. X: in his right hand he wields a club, and in the left he holds by the hind legs what

is apparently a hare (the hare's head often appears in the Hittite hieroglyphs: *cf.* Perrot, IV, figs. 254, 255):[4] in the left corner, above his right hand, appears the head of a bird; and in the right corner, above his left hand, is the entire figure of the same kind of bird, the legs of which he holds in the same grasp with those of the hare: the scabbard at his side might suggest that he wielded a sharper weapon than a club.

It is difficult to identify any of the figures on these reliefs, except, of course, the archer occupied in the deer-hunt, and the man with the mace engaged with the rampant lion, both of which subjects remind us of the Royal hunting scenes on the Assyrian reliefs, of which these were doubtless precursors. Unfortunately, the scene of PL. IX is so incomplete that the key to the subject is lost: we can only conjecture the three figures to form part of a hunting expedition just starting. For PL. XII-2 we have more certainty: it is undoubtedly the figure of a Hittite divinity, of low if not of high rank: his probable position at the entrance of the palace reminds one of the lion-headed genius placed at the entrance of Assyrian palaces to ward off all evil influences. But it is not necessary to go outside of Syria for a striking parallel: this is to be found in a beautiful cylinder which is given in PL. VII–3. It was bought by Dr. Ward in Beirût, and was said to have come from Kuddeis, between Sidon and Damascus. It is one of the most wonderful examples of Oriental gem-cutting extant. Above is a row of three vultures, almost identical (except that they lack the second head) with those on the Hittite reliefs at Boghaz-keui, Eujuk, *etc.* Below are three divinities: the first is seated, and bears the vase so often seen in Babylonian cylinders, though never so clearly drawn; next comes another male divinity who corresponds with the figure in our basrelief, for he holds in his left hand a hare, by one hind leg; he is dressed, as in the sculpture, in a short tight-fitting garment, and the main difference is in his having a human instead of a leonine head. In the third divinity, a naked female figure, it is easy to recognize Anaïtis or Ishtar, a figure like that often seen on Babylonian cylinders:[5] two adorers, whose human character is indicated by their diminutive size, are approaching, while the ground is filled up by the symbols of the sun and moon, a star and a goat. Though so superior in artistic excellence, the figures on this cylinder, with their prominent noses, large eyes, retreating

[4] It is questionable whether the hare is here a symbol of the divinity or an inimical spirit whom he is about to destroy.

[5] *Collection de Clercq*, figs. 217–220: MÉNANT, *Cylindres de la Chaldée*, figs. 111–115, *etc.*

chin, and close-fitting costume, approach very closely to those of the Sindjirli reliefs. The closest parallels to this subject, however, are to be found in the rock-cut sculptures of Iasili-Kaïa at Boghaz-keui: in a much defaced portion of the great enclosure (Perrot, fig. 311), a hare is indistinctly seen in a procession of divinities, and, at two different entrances (Perrot, figs. 315, 316), is carved the figure of a genius or demon, one lion-headed, the other dog-headed, both wearing a tight-fitting short tunic similar to that of our Sindjirli relief.

In this connection we will also cite a peculiar cylinder (PL. VII–4) assigned by Ménant (*Cylindres de la Chaldée*, fig. 66) to the early Assyrian school of Kalah, in which two figures, half-man, half-animal, are each holding a hare by the hind legs.

Considered from an artistic standpoint, the basreliefs of Sindjirli show the North-Syrian school of sculpture at a very low ebb. The rude, clumsy figures seem to show that, whatever skill native artists might have attained in the smaller arts like gem-cutting or in the industrial arts, they had no talent for monumental sculpture. The costume is plainly that of the earlier period, as we also see it in the early steles of Marash, and in many of the figures at Boghaz-keui. Notwithstanding the complete absence of any hieroglyphs, unless the bird in PL. XII–2 be accounted one, there can be no hesitation in considering them to be "Hittite" works of the pre-Assyrian period. At Marash, Carchemish, and Albistan, where works covering a considerable space of time have been found, the change in style that took place can be easily traced, as in the fragment of Assyrian style from Carchemish now in the British Museum, and in several reliefs from Jerablûs (*e. g.* Wright, *Hittites*, pl. XIII). It even seems as if the interesting lion-hunt at Saktchegheuksou (Perrot, fig. 279) had decided traces of Assyrian influence. In these later works there are differences of several kinds: the costume changes, and, instead of the early garment of equal length behind and in front, we find the Mesopotamian garment, short in front and long behind; greater attention is given to details of hair and costume; the unusual peculiarities of feature partly disappear; the relief is higher and the outlines sharper, and a better understanding of sculpture in relief is shown.

Still, notwithstanding its rudeness, the earlier art, as represented at Sindjirli, being original, is of greater interest for archæology, and the ruins at this site promise, without doubt, the most important results; for here alone there seem to lie, undisturbed since its destruction, the

ruins of a large Hittite palace. What its materials were, beyond these sculptured blocks, does not yet appear, as no certain signs of bricks have yet been found.

It is much to be desired that Mr. Haynes may be encouraged to make further explorations and regular excavations in this important Hittite region. The mounds in this vicinity, and south beyond Erfad (Arpad), ought to be carefully examined.

WILLIAM HAYES WARD;
A. L. FROTHINGHAM, JR.

THE MOUND-BUILDERS OF MANITOBA.

A few at least, if not many, of the ancient Mound-Builders of America found their way into the Canadian Northwest. On the banks of the Red River in the parish of St. Andrews, about seventeen miles northeast of Winnipeg, there is a group of four mounds, two on each side of the river. The first is on the west bank, and was originally quite large and sub-conical in shape, but one side of it was levelled down by the early settlers, in making a roadway along the fronts of their farms, and the other side has been considerably worn away by the gradual widening of the river-bed, leaving only an elliptical ridge, about 100 feet long and 10 feet high. Human bones are frequently exposed on its bared sides, especially after heavy rains, and some years ago an attempt was made to open it, which resulted in the finding of a number of skeletons and various other relics. This mound is very conspicuously situated on a high point at a sharp angle in the river, and it commands a fine view up and down stream, as well as of the surrounding country.

The second is a very small mound, and stands about a quarter of a mile back from the river-bank and nearly half a mile north of number one, in a large field of comparatively level ground. It is only three feet in height and has never been touched.

The other two mounds of this colony are situated on the opposite or east side of the river, and a little farther to the north, on a gentle slope facing the west, and perhaps forty rods from the river. They are alike in shape and size, being oval (65 feet long, 55 wide and 7 high), connected by a shallow ridge or embankment, over 300 yards in length, which was supposed to be a natural elevation, until it cracked with the drouth last summer and fell in at several points. A number of oak and poplar trees, from six to twelve inches in diameter, are still growing upon them. The most northerly one of this pair was partially opened in 1866 by the half-breed on whose land it stands, for the purpose of making a root-house, and two years ago it was further explored by members of the Historical Society of this place. Some human remains, pot-

tery, pipes and beads were taken out of it on both occasions, but nothing of any special interest has thus far been found in it.

The fourth or last one of the group, however, contained some interesting relics; such as a neck-ornament or pendant, manufactured out of a sea-shell, and with the profile of a female face engraved on one side of it—the nose is straight, the eyes are large and prominent, the mouth finely cut, and the hair made up into a long tapering cone. There is not the slightest resemblance between this and a squaw's face of the present day. The next is a small hatchet of red pipe-stone, with the outlines of a strange looking quadruped roughly cut on both sides of it, and also on one side a faint representation of some other animal like a beaver in rear and a bird in front. The third is a sort of breastplate or gorget, made of fine clay of a yellowish color. It is only about the thickness of a school slate, three inches long by eight wide, and bent almost double, with four perforated holes in each end, and the outer side marked with shallow longitudinal grooves, half an inch apart, and which are, in turn, closely though not artistically nicked crosswise, as if done while in a plastic state. The fourth is a very large stone hammer, weighing 13½ pounds.

This mound was first opened, many years ago, by the late Hon. Donald Gunn, and it has been dug into at least a dozen times since then. I made a somewhat careful examination of it last fall, and a vertical section, near the centre, exhibited: 1. Skeleton, evidently of Mound-Builder, lying on the natural surface of the ground in horizontal position, with the head to the north and the face turned to the east. 2. About 15 inches of burnt clay, mixed with scraps of birch bark, decayed wood, charcoal and ashes. 3. Two layers of limestone flags, taken from the river bank, but only extending over the skeleton. 4. Rest of tumulus to the top being the ordinary black loam of the surrounding prairie.

In other parts of this mound a great many re-burials had been made, from one to three feet below its surface. The bones of each body were piled up separately in a round heap, and capped with the skull.

The situation of these mounds, at the foot of the St. Andrew's rapids, is exceedingly fine, but would seem to have been chosen more on economic than on either esthetic or military grounds, as the fishing at that point is always better than elsewhere in the river, and the great forests immediately to the north and east abound with all kinds of game.

THE SOURIS GROUP.

In Southwestern Manitoba, about ten miles north of the American boundary line, at the confluence of the two Antler Creeks and the Souris River, there is a large colony of interesting mounds; but, as I have not yet been able to visit that district, I can only relate what a very intelligent settler there wrote me last summer about them: "There are several mounds in this vicinity with an average height of six feet—three on section 10, two on 15, two on 22, one on 16 and one on 34, in township 2 and range 27 west, besides a number of smaller ones. The three on section 10 are connected by an embankment two feet high, eight wide and probably 150 yards long, forming a right angle like the two sides of a square. The two on section 15 also have raised walks running out on one side towards each other, but not in a straight line or touching at the points, the mounds being fully 200 yards apart. Some of the bones and relics we found were eight feet down or two feet below the level of the prairie. One skeleton near the surface had a copper band around the skull, and a bunch of hair under the band was quite fresh when I took it out, and of a jet black color, but soon turned to dirty white, and each hair is flat and coarse. All the later burials were found in a sitting posture, the knees well up to the chin, the elbows down to the hip joint, and the fore-arm laid back to the breast."

The position of this group is admirably suited for defensive purposes, the river-banks being nearly 200 feet high at that point and as a rule very steep.

THE LAKE MANITOBA GROUP.

Between Lake Manitoba and the Riding Mountains, which form the western escarpment of the Red River Valley toward the north, there is an extensive system of mounds of a somewhat different character. They are generally built at leading points along the shore of the lake and on the banks of the principal streams running into it.

The largest one of this group that I have examined, is on the south side of the White Mud river, two miles above the village of Westbourne. It is 91 feet in diameter, 8½ in height, and circular in shape, with two peculiar approaches, like outstretched arms, on the north and south sides of it, each 300 feet long, 50 wide and 3 high. These embankments are of a uniform height till within a few yards of the mound, to the top of which they then lead by rather steep ascents.

The owner of the farm on which it stands has dug a cellar in it for storing his vegetables, and therefore did not wish me to disturb it. Some relics were found in it, but they have all been lost or given away.

The purpose of this mound is quite obvious. It is situated close beside a very important trail or highway from the lake to a large plain of pasture-land that was noted at one time for its vast herds of buffalo; and the north arm of the mound terminates on the bank of the old river-bed, thus forming a sort of permanent corral in which to catch the buffaloes: their bones are still to be seen on every side.

On the north side of the same river, and near Arden Station, there is another large mound, on the summit of a long gravel-slope. It has a regularly graded ascent on one side, and commands a wide and beautiful view of the surrounding country. To the south, as far as the eye can reach, the prairie undulates in long graceful sweeps, with numerous clumps of oak, poplar and willow, giving it the appearance of a mammoth park; and to the north, as a fitting background to such a fine landscape, the Riding Mountains loom up at a distance of ten to fifteen miles, heavily covered with spruce and tamarac in sombre hues.

OTHER MOUNDS.

A large number of mounds are to be met with around the smaller lakes, and especially in Southern Manitoba; as well as many individual mounds at various points on the open prairie. The finest mound in the whole province belongs to the latter class, and is known as Calf Mountain. It is built on a natural hillock, and in the shape of a beehive. The artificial part of it is 285 feet in circumference at the base, 14 feet high and 21 across the top, its total elevation being 23 feet above the prairie level. It has a graded approach on the west side leading to a transverse ridge, which gives it the appearance of an effigy mound. It is located on section 6, township 3 and range 7 west, about two miles to the south of Darlingford station, and stands 1536 feet above the sea, near the middle of a wide but shallow trough in the Pembina Mountains, with a regular succession of terraced hills rising from 30 to 60 feet on all sides of it. Some parties from the neighboring town of Manitou, last fall, ran a trench, six feet deep, right through the centre of it, but found only a number of buffalo-heads and a few skeletons of recent burials close to the surface.

On the banks of the Rainy River, a little beyond the eastern limits of the province, there is what may be called an international group of

mounds, some of them being on each side of the river, which there forms the boundary line between Canada and the United States. Copper relics have been found in these mounds, but not in any of the others here, except the copper bands that encircled the skulls of modern Indians buried in the Souris mounds, as we have seen.

So far, I regret to say, our limited investigation of the mounds in the Canadian Northwest has thrown very little if any new light on the unsolved problems connected with their builders. But it would appear, from the foregoing facts, and from other observations I have made here:—1. That these Mound-builders did not come in by the north, but were probably outlying colonies from the more populous settlements in the valleys of the Mississippi and Ohio: especially as tropical shells have often been found in their tombs, but no relics from a region more northerly than that in which the mounds are built. 2. That, with the exception of Calf Mountain, no one of the mounds in Manitoba, that I have seen, is very large or remarkable in any way, which may possibly indicate that they were built by a simple people, who were fewer and poorer than their more fortunate kindred farther south.

The field for archæological research in the Canadian Northwest is very extensive, and as yet is practically untouched.

A. McCHARLES.

Winnepeg, Canada,
January 31, 1887.

REVIEW OF GREEK AND ROMAN NUMISMATICS.

II.—RECENTLY PUBLISHED BOOKS.

In my first *Review of Greek and Roman Numismatics*[1] I limited myself to noticing the most important works published in reviews and other periodical publications. I now enter on the second part of my task, by passing rapidly in review the most recent and remarkable books on ancient numismatics. As they are numerous, I shall be forced to be brief, so as not to exceed the limits of a bibliographical notice.

First of all is to be noticed the series of Catalogues of Greek Coins in the British Museum. When this great repertory, the publication of which is being pursued rapidly, is completed, it will be for scholars, if not a *Corpus* of Greek numismatics, at least an indispensable collection, in which are described and illustrated many coins that do not figure in the antiquated book of Mionnet, and others, not less numerous, which are wrongly attributed or badly described in it. This is at present the status of the collection, whose general title is *A Catalogue of the Greek Coins in the British Museum*, and whose general editor is Mr. REGINALD STUART POOLE.

1. The first volume, *Italy*, dates from 1873. It was edited by Mr. Poole himself, and the coins are arranged according to the system adopted by Eckhel, Mionnet and Carelli.

2. The second volume, of which Mr. POOLE and Messrs. BARCLAY V. HEAD and PERCY GARDNER are joint authors, was issued in 1876, and includes the coins of *Sicily*. To be especially remarked is the attempt at a chronological classification of the coins of *Syracuse*.

3. The third, published in 1877, comprises the coins of the *Tauric Chersonesos*, of *Sarmatia*, *Dacia*, *Upper* and *Lower Moesia*, by Mr. PERCY GARDNER; those of *Thrace*, the *Chersonesos of Thrace*, the islands of *Imbros*, *Lemnos*, *Samothrace* and *Thasos*, by Mr. BARCLAY V. HEAD.

4. The fourth volume, published in 1878, by Mr. PERCY GARDNER, is entitled *The Seleucid Kings of Syria*. Twenty-eight helioengraved plates reproduce all the important coins of this royal series, whose classification is so difficult. The *Introduction* of Mr. Percy Gardner is a dissertation in which he comments on and justifies his iconographic attributions. He examines successively the silver coins of Antiochos I, II and III, the silver

[1] *American Journal of Archæology*, vol. I, pp. 387–400.

coins of Seleukos I, II, III, IV; the bronzes of Antiochos I, II, III; the coins struck by Antiochos III in Greece; the bronzes of Demetrios I, II; those of Alexandros I, II; finally those which may have been struck by other princes of the name of Antiochos. The system proposed by Mr. Gardner for the classification of these different series is doubtless exposed to grave criticism; but none better has been offered, and in adopting it one is at least sure to put an end, in a certain measure, to the complete confusion which had until then reigned in the series of Seleukid coins.

5. The fifth volume, *Macedonia, etc.*, written entirely by Mr. BARCLAY V. HEAD, appeared in 1879. It includes the coins of the Kings of Paionia, those of the cities of Makedonia, of the Thrako-Makedonian tribes; finally those of the Kings of Makedonia, only as far as Philip II. The introduction on the *Pangean district* and the coins that may be attributed to the cities of this region is remarkable: it shows the propagation and extension of the Babylonian system by the side of the Greco-Asiatic system, in the valley of the Strymon, in Chalkis, and finally in Makedonia proper.

6. The sixth volume on *The Ptolemies, Kings of Egypt*, by Mr. POOLE, published in 1883, is accompanied by twenty helioengraved plates as precious for iconography as are the plates of the volume devoted to the Seleukidai. Here, also, the author was obliged to attack, in a long introduction, the enormously difficult classification and attribution of the coins of the Lagidai, a question already competently treated by Fr. Lenormant and by F. Feuardent, and in which there still remains, even after Mr. Poole, much uncertainty. Will a definite solution of the question ever be reached? In any case, M. Feuardent is to treat again of this knotty problem in a new edition of his book, which is soon to appear.

7. With the seventh volume, which appeared in 1883, Mr. PERCY GARDNER takes us from *Thessaly* to *Aetolia*. It includes the description of the coins of Thessalia, Illyria, Epeiros, Korkyra, Akarnania and Aitolia. An excellent introduction on the monetary systems of Northern Greece, and on the chronological classification of the coinage of the cities enumerated in the volume, makes it possible to give with greater precision the monetary history of Rome itself, which, as is well known, copied the Illyrian drachma.

8. Mr. BARCLAY V. HEAD edited in 1884 an eighth volume on *Central Greece* (*Locris, Phocis, Boeotia* and *Euboea*). I will dwell more particularly on it, as well as on the following volumes, as, being nearer in date, they come more within the scope of this paper. The general introduction treats especially of questions regarding the chronological classification of the coins. As to the coinage of *Lokroi Opountioi*, it is known that the first pieces have simply an Λ; Mr. Head dates them before 387, the year of the peace of Antalkidas. After 387 came the coins with ΟΠΟΝ; then, during the period between 369 and 338, are to be placed the magnificent Lokrian didrachmas,

with ΟΓΟΝΤΙΟΝ, having as a type the head of Persephone, and Aias armed and fighting. The style of these beautiful coins is very similar to that of the coins of Syracuse signed by Evenetes. After the battle of Chaironeia in 338, the art falls utterly into decay; the legend on the coins is ΛΟΚΡΩΝ, then, a little later, ΟΠΟΥΝΤΙΩΝ.

Among the most remarkable coins of Phokis is to be mentioned the archaic tetradrachma of Delphi with the two affronted ram-heads and the legend ΔΑΛΦΙΚΟΝ. The British Museum does not possess this important coin, but it has, on the other hand, a magnificent copy of the Delphian tetradrachma with the legend ΑΜΦΙΚΤΙΟΝΩΝ, which bears, on the obverse, the veiled head of Apollon, and, on the reverse, Apollon seated on the omphalos and bending over his lyre. It also possesses an interesting bronze piece with the effigy of the Empress Faustina the Elder, on the reverse of which is the image of the temple of Delphi: it is quite possible to distinguish on it the columns, which are in the form of gigantic caryatids.

The very ancient coins of Boiotia are of Aiginetan weight: they are to be placed between about 600 and 550. In the second period appear the pieces bearing, in the *échancrures* of the buckler, the initials of the various Boiotian cities, Akraiphion, Koroneia, Haliartos, Mykalessos, Pharai, Tanagra, Thebai, *etc.* After the battle of Koroneia in 446, Thebai acquired, over the other cities of Boiotia, such a preponderance that their coinage was suppressed: the name of Thebai alone appears on coins. Then also appear as mint types, besides the shield and amphora, the beautiful front faces of Dionysos and Herakles, the gods especially venerated by the Thebans. There are also coins with the type of the infant Herakles strangling the serpents, and Herakles bending his bow and fighting: it may be said that these types are the reflection of the art of Pheidias, then at its height. With the peace of Antalkidas in 387, the political situation of Boiotia changes: Thebes no longer holds her despotic supremacy, and we see reappear the coinage of the different Boiotian cities with their names. Still, a little later, Epaminondas reëstablished the coinage of the Boiotians *in genere*, which brings us down to the Makedonian period: thus it is that the numismatics of a country feel directly, and step by step, the shock of its political vicissitudes.

The coinage of the island of Euboia, where Chalkis, Karystos and Eretria were the principal centres of manufacture, begins with archaic silver pieces that are certainly as early as 700 B. C.: at least it is to Eretria that Mr. Head attributes the inscriptionless archaic pieces with the type of the Gorgon's head. To the best period of Greek art should be attributed the coins of Eretria that have on the obverse the head of Artemis as huntress, and, on the reverse, the cow lying down: these coins are certainly among the most remarkable products of the coinage of antiquity.

9. The volume that has just appeared (1886), on *The Greek Coins of Crete and the Islands of the Aegean Sea*, is drawn up by Mr. WARWICK WROTH, and is not inferior to the preceding. The coinage of Krete is, on account of the great number of pieces and the character of the types of coinage, one of the most interesting of the entire ancient series: it is of a nature to throw the greatest light on the history of that famous island, and on the mythological legends to which it gave birth. But has the moment yet come for writing the history of this coinage? The elements of it are dispersed in so many different and little-known or inaccessible collections, that there is risk of being singularly incomplete in undertaking this general monograph. However that may be, the catalogue of the Kretan series of the British Museum may be considered as a publication preparatory to the general description I have referred to. The book of Mr. Wroth begins with the coins struck with the name KOINON KPHTΩN and with the effigy of the Roman emperors from Caligula to Antoninus Pius. The head of Britannicus, always rare in numismatics, figures on a drachma of this series; on beautiful coins of Trajanus we see Diktynna seated on a rock and holding the infant Zeus, in the presence of the Kouretes.

On the large silver coins of Aptera is to be noticed the hero Pteras, armed with helmet, shield and spear, extending his hand towards the sacred tree which is before him. Some of these coins are signed by the artist Pythodoros. The coins of Axos are very interesting on account of the question of knowing whether Axos should be distinguished from Naxos: some coins bear the legend ϜΑΚΜΣΟΝ (*Fαξιων*), with a digamma whose form is peculiar and has given rise to recent discussions.

I will here remark that the cities of Biennos, Kamara and Keraitai, whose coins have been discovered during the last few years, are not represented at the British Museum. At Chersonesos, besides the ordinary type of Apollon Kitharaoidos seated on the omphalos, we must mention Herakles fighting with his club, which he holds behind his back with a movement full of vigor. The ordinary types of Knossos; the Minotaur, the labyrinth, the head of Demeter, are represented by fine specimens: I seek in vain for the rarer type of the head of Ariadne placed in the midst of the windings of the labyrinth. Kydonia has coins with an artist's signature: NEYANTOΣ ETTOIEI, but the British Museum has none: to be noted, however, in the plates attached to this volume, is a fine tetradrachma with the type of young Kydon suckled by a bitch. The series of Eleutherna includes interesting pieces, especially that which has for obverse type Apollon standing, holding a stone and a bow, and whose legend is ΕΛΕΥΘΕ-ΡΝΑΙΟΝ, in reversed letters.

The coinage of Gortyn opens with an important coin: it is a globular piece which has for type a reclining bull, like the coins of Euboia; on the

reverse is a front-view of a lion's muzzle, with the archaic inscription ΛOPTVN. Coins with the common type of Europa seated on a tree have this singular inscription ƧOϘVMƧT (*ταυροι*), which Mr. Wroth does not try to explain; finally the piece with the legend ΓOPTYNIΩN ΘIBOƩ is not less interesting.

Coins with the type of Zeus Diktaios Aitophoros seated, and with the half-figure of a he-goat, are attributed by Mr. Wroth to Praisos, for there are some with the inscription ΓPAIƩI. These coins were long attributed to Hyrtakos or Hyrtakina. It will not be necessary to recur to the Gortynian pieces whose interest was demonstrated by Mr. Wroth in a special publication which I have already noticed.[1] In this same work he also called attention to coins of Polyrrhenia and Priansos of which I need not speak. For Phaistos, however, it is necessary to cite the piece with the archaic inscription ƧOИAXΛƎƆ, and the type of Zeus Velchanos as a youth, seated on a rock and holding a bird (cock) on his knees; the piece with the inscription TAΛΩN, and the type of the winged giant Talos who traversed the island of Krete periodically to expel all strangers.

At Rhankos we notice a piece with the reversed legend ИOIKVAϘ and the type of Poseidon standing, holding his horse by the bridle. At Sybrita, a coin with the legend ƩYBPITIΩN and the types of Dionysos on a panther and of Hermes putting on his andromydes. At Tylissos a coin with the head of Hera, and, on the reverse, the legend ИΩIƧIΛYT, and Apollon standing, holding his bow and the head of a he-goat.

This simple survey is sufficient to show how important the numismatics of the island of Krete are from an archæological point of view. The rest of Mr. Wroth's volume is occupied with the description of the coins of the islands of the Aegean sea: Amorgos, Anaphe, Andros, Keos, Kythnos, Delos, Gyaros, Ios, Melos, Mykonos, Naxos, Paros, Pholegandros, Seriphos, Siphnos, Syros, Tenos and Thera. For Paros, I will call attention to the magnificent silver pieces which have a female head in a peculiar kekryphalos, and a tetradrachma with the head of youthful Dionysos on the obverse, and with the seated figure of Demeter Thesmophoros on the reverse.

Such is the present status of the *Catalogue of Greek Coins*. But, beside this series, the British Museum publishes, under the title *Catalogue of Oriental Coins*, the description of all its coins with Arabic inscriptions. The first volume dates from 1875, and the eighth and most recent from 1883. Of this series I shall not treat here, as it requires the competence of a specialist, and, besides, addresses itself to orientalists rather than to archæologists. This is also the case with a third series of catalogues, entitled *Catalogue of Indian coins in the British Museum*. This new collection, commenced in 1884, already comprises three volumes: 1. *The coins of the Sul-*

[1] *American Journal of Archæology*, vol. I, No. 4, pp. 388–90.

tans of Delhi; 2. *The coins of the Muhammedan States of India*; 3. *The coins of the Greek and Scythic kings of Bactria and India*. Still it will be necessary to refer here to the last of these volumes, due to Mr. PERCY GARDNER, as it is related quite as much to Greek as to Indian numismatics. It is well known how, in our times, numismatic series of Bactria and India were arranged in the medal-boxes of collectors. Before 1830, only a few coins of a small number of Bactrian kings were known: then the French generals Allard and Court, in the service of Rungt-Sing king of the Saïks, while digging in tumuli of the Pentapotamis, found there an enormous quantity of coins with Greek and Indian inscriptions. It is mainly by means of these pieces that the Bactrian series of Paris and London have been formed. Taken as a whole, they constitute a real historical revolution, making known, as they do, the names of a large number of Greek princes, unknown to writers, who reigned over these lands after the dismemberment of the empire of Alexander, and allowing us to put our finger, so to speak, on the continuance of Hellenic influence in the Far-East. Since that time other coins have come from the same countries to enrich European collections, and among the most important should be mentioned the famous Eukratidion in the Cabinet de France, a gold piece weighing twenty staters. At the same time various monographs were being published on the classification of these coins, and in 1878 A. VON SALLET wrote an excellent memoir entitled *Die Nachfolger Alexanders des grossen in Baktrien und Indien*. From a chronological point of view these series present the most serious difficulties, and our uncertainty comes from the silence of Greek authors regarding these kings of Bactria: of at least thirty kings, at present known by coins, there are not more than five or six who are mentioned by writers. Among the most important coins of the British Museum are an aureus and a tetradrachma of Andragoras with the legend ΑΝΔΡΑΓΟΡΟΥ: these are in the Syrian style. Besides, Andragoras was perhaps merely a satrap, as also Sophytes whose coins bear the legend ϹΟΦΥΤΟΥ. It is a peculiar circumstance that the word ΒΑϹΙΛΕΩϹ does not accompany the names of these two princes who, for this reason, may be considered as vassals of the kings of Syria. It is well known that only towards 248 did Diodotes, satrap of Bactria, revolt against Antiochos II. The coins of King Agathokles are also of especial interest. Some fine tetradrachmas of this prince are also commemoration pieces, that is to say, coins struck in memory and in the name of more ancient and already deceased kings. Thus, while we read on the reverse: ΒΑϹΙΛΕΥΟΝΤΟϹ ΑΓΑΘΟΚΛΕΟΥϹ ΔΙΚΑΙΟΥ, the obverse bears the following different legends: ΑΛΕΞΑΝΔΡΟΥ ΤΟΥ ΦΙΛΙΠΠΟΥ;—ΑΝΤΙΟΧΟΥ ΝΙΚΑΤΟΡΟϹ;—ΔΙΟΔΟΤΟΥ ϹΩΤΗΡΟϹ;—ΕΥΘΥΔΗΜΟΥ ΘΕΟΥ. These curious legends are, it may easily be imagined, of the greatest importance for chronology. Also to be noticed, among other remarkable pieces in the British Museum, are: the coins

of Eukradites with the name and effigy of his father and of his mother, Heliokles and Laodikeia; the tetradrachma of Platon; the silver piece of Heliokles with the type of Zeus, and on the reverse an Indian legend; a tetradrachma of Antialkidas; the bilingual coins of Archebios, of queen Agathokleia, of Menandros, Epandros, Zoilos, Philoxenos, Hippostrates, Hermaios and Queen Kalliope. The barbarous legends of the coins of the Indo-Scythic kings, like Kanerkes and his successors, are still, for the greater part, unexplained, and the types of these pieces are of the greatest value for Indo-Bactrian archæology. In Mr. Percy Gardner's catalogue there will be found new elements for the resolution of these difficult problems until now hardly studied at all.

The numismatics of ancient Italy, which on account of its numerous types and its artistic character has given rise to so many works during the last three centuries, has just been enriched by a new general collection: *Le monete dell' Italia antica, raccolta generale del P. Raffaele Garrucci* (Roma, Salviucci, 1885, in fol.). It is the scientific testament of the learned Jesuit, Father Garrucci, who died while correcting its last proof-sheets. Although the book is not very original, as the ancient collection of Carelli, edited by Cavedoni, was already conceived on about the same plan, still, Father Garrucci has the good fortune to come after others and to profit by their labors. In the first part, *Monete fuse*, figure the rough ingots of the *aes rude* found at Ariccia, Cervetri, Palestrina, Vicarello, Tarquinia, *etc.*; the ingots with fish-fins as their type found at Montefiascone, Cervetri and Fiesole; the inscriptionless quincussis and quadrussis, with the types of the club, the dolphins, the tripod, anchor, Pegasos, trident, caduceus, pig and elephant, connected, evidently, with the conquests of Pyrrhos in Southern Italy. After these square pieces, come those of ovoid shape, then, those that are round and entirely like coins in shape. The great As of Latium, including those of Rome, the As of Etruria, of Umbria, Picenum, Apulia, Lucania and Campania, are exactly described; but Father Garrucci proposes no new attribution, and makes known no inedited monuments.

The second part of his book, *Monete coniate*, gives the *corpus* of the coins of Etruria, of Rome, except those which bear the names of monetary magistrates; finally those of all the other cities of Italy. A criticism of this part of Garrucci's work would lead me too far, for, though none of the parts of ancient numismatics has been so often treated as the coinage of Italy, few also still raise so many questions of art, history, mythology and attribution. Might not curious observations be made on that archaic coin of the de Luynes collection which bears the legend NEHΓOLIS instead of NEOΓOLIS? The coins with the head of Herakles, and a Chimera on the reverse, which bear the legend RVB, lead also to inquiries, and cannot be attached to the Roman series, although Father Garrucci has so classified

them. There are also a considerable number of inexactitudes and errors in this collection, and I have noticed several legends engraved on the plates which are not exactly reproduced in the text. Some forged pieces may be cited, as that which is reproduced on pl. LXXXIII, No. 19, and is attributed to Cumae; and others which Garrucci attributes to Metapontum and Arpi, for example, belong to Pheres in Thessaly and Kleitor in Arkadia.

Dr. IMHOOF-BLUMER, whose great collection entitled *Monnaies grecques* appeared in 1883, published in 1884 a truly scientific classification of the the numismatic portraits of the Kings of Pergamon; and, in 1885, a general volume entitled *Porträtköpfe auf antiken Münzen hellenischer und hellenisierter Völker, mit Zeittafeln der Dynastien des Alterthums, nach ihren Münzen* (Leipzig, Teubner, 1885, 4to). This work includes the portraits of all the Kings and the dynasts of the Hellenic or Hellenized world who have struck coins: to these were added the portraits of poets or philosophers, which are sometimes found on coins, such as Herodotos, Sappho, Hippokrates, *etc.* The text of the book contains simply the nomenclature of the princes with the date of their reign, and the description, without any commentary, of the coins figured on the plates. It is an atlas of ancient iconography: but it is necessary to call attention to the fact that the iconographic attributions are very conjectural in certain dynasties, such as those of the Seleukidai, the Lagidai and the Kings of Kappadokia. Future special works will doubtless succeed in making more precise the classification and attribution of the coins of these princes: already the studies of M. Th. Reinach on the Kappadokian series, and those of M. Imhoof-Blumer himself on the dynasty of Pergamon,[3] are models of criticism, the principles of which it would be well to apply to other series of royal portraits that have until now remained uncertain.

A simple mention will be sufficient for the thesis of JANUS SIX, *De Gorgone* (in 4to, Amsterdam, 1885), as it is no longer a recent book. From the double point of view of archæology and numismatics, this work is of the highest order: it is well known how frequent are the Gorgon-heads in the primitive numismatics of Greek lands, as well as in the representations on painted vases. M. Six establishes the filiation of these types of the Gorgon, and the results of his classification are of a nature to upset many preconceived notions regarding both numismatic attribution and chronology.

Messrs. F. IMHOOF-BLUMER and PERCY GARDNER have undertaken a work most important from an archæological standpoint. I will only mention it now, as it is not finished, but will return to it at a later date. It is their *Numismatic Commentary on Pausanias*, of which only two numbers have yet appeared, including the numismatic illustration of books I to VIII of the *Description of Greece*.[4] All know how many buildings, statues and

[3] *Die Münzen der Dynastie von Pergamon*, 4to, Berlin, 1884.

[4] Reprinted from the *Journal of Hellenic Studies*, 1885 and 1886.

monuments of different kinds Pausanias describes, in the course of his work; Imhoof-Blumer and Percy Gardner find on coins of the countries visited by Pausanias the greater part of these buildings, of these statues and monuments; and the coin-types complete, explain, and often throw quite a new light on, the text of the Greek author. As early as 1883, Mr. PERCY GARDNER had published a book of the same kind, *Types of Greek Coins* (fol., Cambridge, 1883), on Greek Numismatics in general. This book is too old to be reviewed here, but it should at least be mentioned on account of its exceptional archæological interest: in it the author compares a large number of monetary types both with monuments described by ancient authors, and with statues preserved in our museums, and their history is in this way singularly elucidated.

During the last few years, several Russian savants have sought, with praiseworthy emulation, to collect and publish the ancient coins of the Kings and Cities of the Kimmerian Bosporos, so much so that the researches of MM. A. von Sallet, Waddington and Köhne have become very incomplete. Among these late studies of Russian numismatists, the following may be cited:—1. G. D'ALEXEIEFF, *Dissertation sur une monnaie inédite d'un roi inconnu du Bosphore Cimmérien* (Paris, Leroux, 8vo, 1876). This King is Inncus.—2. L. STEPHANI, dissertations inserted in the *Comptes-rendus de la commission archéologique de Saint Petersbourg*, in 1880.—3. A. W. ORESCHNIKOW, *Zur Münzkunde des Cimmerischen Bosphoros* (Moscow, 1883, 8vo); 4, *Der Cimmerische Bosphorus zur Zeit der Spartokiden dynastie* (Moscow, 1884, 8vo); and 5, *Sur une monnaie de la reine Pythodoris* (Moscow, 1885, 8vo,—in Russian).—6. P. O. BOURATCHKOW, *Recueil de matériaux pour l'étude de l'art et de la numismatique des peuples qui vivaient dans l'antiquité au Sud de la Russie, au temps des Hellènes* (Odessa, 1884, 4to—in Russian). This book, unhappily written in Russian and not put in circulation, is most important, and includes large series of inedited pieces.—7. PODSCHIWALOW, *Beschreibung unedirter Münzen seiner Sammlung* (Moscow, 1882); and 8, *Katalog der bosphorischen Münzen der Rumianzowochen Museums* (Moscow, 1884).—9. GIEL, *Kleine Beiträge zur antiken Numismatik Südrusslands* (Moscow, 1886, 4to). M. GIEL's publication, which completes this list, considerably increases the number of known coins of Olbia, Tyra, of the Tauric Chersonesos, of Nymphaion, Pantikapaion and Sindika. As for Royal coins, the author describes coins of Mithridates Eupator, Pharnakes II, Asandros, Pythodoris, Polemon II, Sauromates I and II, and Ininthimeus. Then follow dissertations on the coins of the Bosporos that have for type the front lion-head, with an empty square on the reverse; on the monograms found on coins of the Kings of the Kimmerian Bosporos; finally on potter's marks with royal names found in the tombs of Kertsch and Taman.

Turning from Greek numismatics to works of a general interest, there are two, of very different scientific value. The first, *Repertorium zur an-*

tiken Numismatik is due to the regretted Dr. JULIUS FRIEDLÄNDER and to RUDOLF WEIL (Berlin, Reimer, 1885, 8vo). It is a bibliography of Greek numismatics. The idea that directed the composition of this repertory is excellent in principle. To follow the order of the *Description des médailles antiques* by Mionnet, and to give for each city the nomenclature of all works, books, review articles, or notices of any sort, published on the coins of these cities, is, most certainly, a very useful enterprise, destined to spare numismatists great loss of time, omissions, or errors. Unhappily, the execution is far from equalling the ideal conception. Friedländer left numerous notes which M. Weil, in publishing this posthumous work, claims to have completed. It must, however, be confessed that he fulfilled this task in a very insufficient way, that this repertory is defective, and that essential works are omitted in every section of numismatics.

The other book referred to is by a scholar whose competence in numismatics has long been known, Mr. BARCLAY V. HEAD: it is entitled, *Historia Numorum. A Manual of Greek Numismatics* (Oxford, Clarendon press, 1887, 8vo). For a long time, amateurs, artists, and even scholars have been calling for a manual that should be a résumé of the *Doctrina numorum veterum* of Eckhel, placed on the footing of modern science: this résumé Mr. Barclay V. Head has given us for the department of Greek numismatics, and has acquitted himself so admirably of his task, difficult from more than one point of view, that I do not hesitate to declare his book indispensable to all devotees of numismatics and archæology. I must insist on this capital point, that this is not a book of teaching and dissertations, but a descriptive résumé, giving the numismatic history of every city, a bibliography, a description of the principal types, their mythological or archæological explanation; it also contains the weights of gold and silver coins, a clear and precise account of the different monetary systems, and, finally, the reproduction of a great number of coins: at the end are some excellent indexes which make consultation of the book rapid and easy.

After giving to this book the praise that is its due, I shall not stop to criticise the author on points of detail, on contested or contestable attributions, on the insertion of certain types in preference to others. Still, it may be remarked that certain sections of numismatics appear somewhat sacrificed. Only six pages are given to Spain, and these do not contain the least reference to Keltiberian coinage, an omission that seems inexplicable. On the other hand, it was hardly necessary to take account of Zobel de Zangroniz's opinion which attributes to Spain the coins of several Numidian kings with Punic legends. Two pages only for Gaul, a half-page for Britain, seem quite insufficient in a work that covers eight hundred pages. But all the other Greek series are well summarized and brought up to date; there are some, especially, such as Italy, Sicily and in general Greece proper, which are fully

developed and constitute repertories that advantageously replace even Eckhel's *Doctrina*.

M. MICHEL SOUTZO published, in 1884, a study on the *Systèmes monétaires primitifs de l'Asie Mineure et de la Grèce*,[5] which he completed by a dissertation on the *Etalons pondéraux primitifs et lingots monétaires*, which appeared in 1885. In the latter work the author proposed to establish the true normal weights of the principal units of weight of antiquity, as well as the primitive relations which these units of weight may have had to each other and to the first coins: thorny questions on which scholars have hitherto rarely agreed.

It does not belong to me to speak of my work on the coins of the Roman Republic, of which the second and last volume has just appeared.[6] It will be sufficient to say, for the reader's information, that my task has been to place the general classification of this monetary series *au courant* with recent scholarly work, by fixing approximately, if not exactly, the period of the manufacture of the coins, by seeking to give the historical and mythological explanation of the types, and finally by giving an exact biography of the monetary magistrate. Numerous improvements will doubtless in the future be made on this work, and no one knows its imperfections and faults better than myself: still, I think it a not useless labor, and that it may have contributed to bring out from a chaotic condition the classification of the official coins of the Roman Republic.

The publication of the second edition of the *Description des monnaies frappées sous l'empire Romain (monnaies impériales)*, by the deceased scholar HENRY COHEN, is advancing rapidly, and will probably be finished within the year: the VI and penultimate volume has been placed on sale. The first edition of this vast *corpus* of imperial coins is in the hands of all collectors and archæologists, and it is unnecessary to speak of the importance of such a collection. All that it is necessary to state is how the second edition, continued by F. FEUARDENT with the care and ability that Cohen himself would have shown, differs from the first, and in what it completes and improves it. In the first place, it contains numerous new pieces that were not known at the time of the first publication, made twenty-five years ago: the former comprised about twenty-five thousand coins, the new edition will contain at least thirty-five thousand. On the score of learning, it will doubtless be regretted that the author and his continuator did not adopt the strictly chronological order for the classification of the coins, as it is the only one that is truly scientific; but this chronological order would have made consultation difficult, and this feeling caused the alphabetical

[5] Bucharest, 1884, 8vo. Extract from the *Revue Roumaine d'Archéologie*.

[6] *Description historique et chronologique des monnaies de la République romaine, vulgairement appelées monnaies consulaires, par* ERNEST BABELON. Two vols. 8vo, Paris, *Rollin et Feuardent*.

order of legends within each reign to be adopted. In the first edition, Cohen established four series of coins by distinguishing (1) gold and silver medallions; (2) gold and silver coins; (3) bronze medallions; (4) bronze coins. These divisions were so far inconvenient that they complicated investigations, and placed far from each other pieces bearing the same types and the same legends, but differing only in metal. In the new publication, all the metals are united: there is now but a single series for each reign, so that we find, side by side, all the coins bearing the same legend, whether in gold, silver, or bronze, or of different modules. The mention of the metal and size follows, of course, the description of each piece, together with its commercial value. But the happiest innovation is that, after each reign, the description of all the colonial coins of the empire is given. As for the coins that go by the name of *Imperial Greek*, that is, those struck in the cities of Greece or of the East that were not colonies, their great number did not allow of their being described. It was found possible to publish only, at the close of each reign, the alphabetical list of the cities that struck this kind of coin. Finally, instead of the few plates annexed to the volumes of the first edition, M. Feuardent has not hesitated to defray the expense of numerous illustrations: drawings inserted in the text reproduce the more important coins of each emperor.

Al. Boutkowski continues the printing of his *Dictionnaire Numismatique* (Leipzig, Weigel, 8vo) of imperial Roman and colonial Greek coins, in which the author has piled up his materials in an order, unfortunately, quite irrational. M. G. Schlumberger, who published in 1884 his great collection entitled *Sigillographie de l'empire byzantin*, and collected at about the same time the *Œuvres de A. de Longpérier*, has just completed the latter publication by a general alphabetical index on a large scale, which, by the way it facilitates research, cannot fail to be of the greatest service to students. It is the worthy crown of a collection of archæological and numismatic dissertations which are the most interesting and varied ever formed with the scattered works of a single scholar. Finally, the *Edit de Maximum et la situation monétaire de l'empire sous Dioclétien*, by M. Émile Lépaule (Paris, 1886, Rollin et Feuardent, 8vo), is a conscientious work on a difficult question, already treated in a masterly manner by M. Waddington. M. Lépaule has sought to reconstitute the real value of the coins at the moment the edict was rendered; he also wished to determine the monetary unit employed as sole type in the designation of the tariffs. It is from this point of view that his work is useful for the history of Roman coinage.

Ernest Babelon.

Cabinet des Médailles,
Bibliothèque Nationale,
Paris.

CORRESPONDENCE.

THE FRENCH EXPEDITION TO SUSIANA.

[PLATE XIII–XIV.[1]]

The JOURNAL published in one of its former numbers (1886, pp. 53–60) an article by our learned friend, M. Ernest Babelon, which announced the discoveries made by the French Expedition to Susiana.[2] As the antiquities had not then arrived in Europe, it was not possible to give a complete idea of the success of the explorers. We will now notice the most important of the discoveries, but without attempting to comment upon each one of them, as, if complete, this would require too much space, and if partial would lack interest and precision.

Since the excavations of Loftus,[3] Susa had never been visited with a scientific end in view. M. Dieulafoy, in returning from his first exploration in Persia, had noticed the mounds, had studied them, and on his return to Paris called attention to the interest which an expedition for the archæological study of the site would have. His complete acquaintance with Persepolitan architecture rendered him more competent than any one else to superintend the unearthing of an Akhæmenid palace. The Government responded to M. Dieulafoy's desire by placing him at the head of an expedition the *personnel* of which was composed of Madame Dieulafoy, MM. Babin, engineer of bridges and roads, and Houssay, former pupil of the *École Normale*. The first campaign of excavation extended from March 15 to May 12, 1885: deducting the rainy days, they worked fifty-three days. The second campaign began December 12, 1885, and ended in June 1886. The latter included the transport of the antiquities, which was not the least perilous part of the Expedition. It consisted in conveying from Susa to Bassora, a distance of 400 kilometres, a weight of 2,000 to 3,000 kilos, under a burning sun and in the midst of a hostile people.

A few words on the geographical position of the ruins are necessary, in

[1] The Direction of the JOURNAL expresses its thanks to M. Ernest Leroux, Publisher of the *Revue Archéologique*, for his courtesy in furnishing to the JOURNAL an edition of the beautiful colored plate of the Persian Royal Guard, originally published in the *Revue Arch.* of Jan.–Feb., 1887.

[2] See the *Reports* of M. DIEULAFOY, published in the *Revue Archéologique*, July–August, 1885; Sept.–Oct., Nov.–Dec., 1886; Jan.–Feb., 1887. *Cf.* JOURNAL, Vol. I, pp. 427–28; *Gazette des Beaux-Arts* (Nov. 1886); Mme. DIEULAFOY, in *Harper's Magazine*, June, 1887.

[3] *Chaldæa and Susiana* (1849–52): London, 1857.

order to follow the work of the Expedition. Let us go back to the time when Loftus took possession of the tumuli of Susa, and ascertained their situation.[4] On referring to the map of this region, it will be seen that, after having crossed the neighboring mountains and reached the plain, the two large rivers, the Kerkhah and the river of Dizful, approach each other at right angles: they soon separate, however, the Kerkhah to continue its course to the Schatt-el-Arab, near Korna, and the second to reach Karoun, at Bender-Ghil. It is at the point where these rivers approach each other most closely that the mounds of Susa rise, at a distance of three-quarters of a mile from the Kerkhah and a mile and a half from the river of Dizful. The ruins consist of four separate spacious platforms.[5] *The western mound*, the smallest in extent, is much the highest and most important (No. 1 of the *Plan* of Loftus): the northern point rises to 119 feet above the level of the Schaour, near the dyke. Its summit was rounded, and in the centre there was a circular depression, probably a large court surrounded by masses of edifices, the fall of which had given to the mound its present aspect. This mound is called Kala'at, or Castle, by the country-people; Loftus considered it to be the site of the citadel of Susa (see ARR., *Exp. Alex.* III. 16). Close by, separated by a canal, is *the large central platform*, covering about sixty acres (No. 3, *Plan* of Loftus). *The northern mound* (No. 2, *Plan* of Loftus), an enormous square mass, contains the Palace. *The eastern platform* (No. 4, *Plan* of Loftus) is very extensive, and represents the site of the city, but it is not easy to define its limits, because they decrease insensibly and end by becoming confounded with the undulations of the plain.

Having arrived at Susa (Feb. 28, 1885) M. Dieulafoy abandoned, without hesitation, the secondary *tells* and decided to devote his first efforts to the ruins of the Palace[6] and those of the citadel. He opened in the Akhæmenid tumulus an oblique trench at the façade of the Palace: contrary to the opinion of Loftus, he was convinced that the entrance of the palace faced south, and he concentrated his means of attack, in order to accomplish the freeing of this entrance, and made an excavation in the axis of the edifice, which would bring to light, in case it existed, the staircase of the palace, or, at least, the pavement of the court. At the same time, the trenches begun by Loftus between the columns of the Apadâna were com-

[4] For full description, see LOFTUS, *Chaldæa and Susiana:* London, 1857, pp. 342–47.

[5] See the *Plan* of LOFTUS.

[6] The large hall at Susa was composed of magnificent groups of columns; the façade was 343 ft. 9 ins. long and 244 ft. deep. The groups were arranged in a central phalanx of 36 columns (6 rows of 6 each) flanked on the west, north, and east by an equal number of columns arranged in double rows of 6 each, 64 ft. 2 ins. apart. Loftus had determined the position of 22 columns of the interior phalanx, and stopped there for want of evidence. It is this hall which bears the name of the "Apadâna."

pleted.[7] As the work advanced, it soon became evident that there was no staircase before the Apadâna: the ground level was hardly 15 centimetres below the flooring of the palace. Another trench being finished, the square form of the court was ascertained. A third of the excavation remained to be done, and the workmen had, in this part, great difficulty in cutting into a soil which was as hard as rock; but, at the moment when M. and Mme. Dieulafoy had almost begun to despair, the workmen encountered a brick wall which had fallen, in one block, face downward, being protected in its fall by the crude bricks forming the main wall, a fact which explains the resisting mass which it was necessary to penetrate before reaching the enamelled bricks. A new trench disengaged the entire construction, first, for a length of nine, then, of 36 metres, beyond which it appeared not to extend. All the enamelled concrete blocks were .362 m. in length, .181 m. in height, and .242 thick. Here let me cite textually M. Dieulafoy: "The joinings of each layer cut into two equal parts the blocks immediately above and below. Assisted by observing this as well as the position of the angles, the beds of the joinings, together with the notes and sketches made on the spot before the removal of the blocks (when that was possible), and with my exact acquaintance with Akhæmenid sculpture and decoration, I placed in a framework, divided into compartments of the same dimensions as the bricks, all the fragments which were brought to me, and I reconstructed in this way, with some trouble but by a perfectly sure method, the greater part of a superb lion in basrelief, 1.75 m. high, 3.50 m. long; and the two flowered friezes between which the animal was placed. Some fragments of a second, and a third lion prove that the animal was not alone: in fact, it was at the head of a procession composed of nine, and formed part of the exterior decoration of the portico."

These lines were written in June 1885: this discovery is now entirely confirmed. These fragments are indeed parts of a frieze which extended across two large pylons: it was the long-sought-for entrance. The lions formed the decoration of the revetment of the two sides of the doorway.

[7] Loftus had sought for the entrance gate of the palace on the side of the north portico, between the palace and the ravine which separates it from the plain. One of the most interesting discoveries made by the English explorer was that of pedestals covered with trilingual cuneiform inscriptions. Each inscription was repeated four times: the Scythian version occupied the west side, the Persian the south, the Babylonian the east; the fourth side was free. Each version was deeply cut in five lines, and was 6 ft. 4 ins. in length by 7 ft. in width. These inscriptions commemorate the finishing of the edifice, begun by Darius son of Hystaspes, by Artaxerxes Mnemon, the victor of Cunaxa (PLINY, *lib.* VI. c. 27). M. Dieulafoy, basing himself on the judicious observation that the Persian version must have been placed so as to be most easily visible to those entering the palace, concluded that the principal entrance must be on the south side.

Below ran a long Persian inscription: 46 bricks were occupied by the text, but the equivalent of seven bricks is all that has been preserved.

The second campaign began December 12, 1885: M. Dieulafoy continued the excavation of the Akhæmenid tumulus. Behind the portico of the lions he uncovered a monumental staircase leading up to it, composed of flights of steps rising on opposite sides, with landing-places and returning flights. Once in the portico, the Palace was almost on a level. At the right and left of the central construction, two other monumental doorways were discovered: that on the left, must have given access to a staircase leading to the city, or by a subterranean passage to the citadel. That on the right, of far greater importance, must have been the royal entrance: at this point was made the most beautiful discovery of the whole expedition. The workmen, in digging, disengaged a strip of masonry composed of enamelled bricks closely joined together. From these was first withdrawn a fragment representing a piece of drapery of great fineness of execution, then, the figure of a dark-skinned warrior; finally, one after another, this whole row of Persian guards which are at present the admiration of all archæologists. The plate which accompanies this article makes it unnecessary to give a description of them. Decorative art is here carried to its highest point: it is, according to the explorer, the long procession of the Immortals (Herodotos, VII, 41; VII, 83) among whom were recruited the guards of the King of Kings: a worthy pendant of the rows of warriors which ornament the staircase of the palace of Persepolis. A bilingual inscription, with the names of Darius and Otanes, found among the ruins, makes it certain that these remains come from the Palace of Darius, and that they served as foundations to that built by Artaxerxes.[8] The shafts sunk at other points, down to the same level, in the attempt to follow the traces of this palace, ended in nothing: they met a bed of gravel. According to M. Dieulafoy, Artaxerxes, in reconstructing this royal dwelling, did not take the trouble to remove the ruins of the former palace, but made use of the solid material as foundations, filling up the spaces with a uniform layer of gravel. In case one wished to find the first palace, it would be necessary to go to a depth of ten metres. M. Dieulafoy is certainly correct in his opinion that, in this mass of ruins of different epochs, the specimens of the purest art are those of the epoch of Darius. To this epoch belongs the capital which ornaments the museum of the Louvre. Loftus, basing himself on the broken

[8] PLINY (*lib.* VI. *c.* 27) had registered the tradition of the foundation of the palace of Susa by Darius. Sir HENRY RAWLINSON, relying upon this, rejected the attribution made to Xerxes, on account of a votive tablet of this king found on this spot (*cf. Journal of the Royal Asiatic Society*, vol. X, p. 271). LOFTUS arrived at the same conclusions, basing himself on the study of the details of the plan and of the architecture (*Chaldæa and Susiana*, p. 271).

shafts and the overturned capitals, had concluded that the art of Persepolis and that of Susa were identical. The columns of Persepolis are found again in Susiana, with their elegant construction, channelled shaft, capital ornamented with adossed bulls, and bell-shaped base, but with still more beautiful forms and with graceful details around the swelling of the base, garlanded with the buds and the flowers of the lotus.

The large hall of Artaxerxes answered to the same requirements as that of Xerxes at Persepolis: but, where was its entrance? how was it reached? this difficult question M. Dieulafoy endeavored to elucidate. By extending the outer line of the two side-entrances, he succeeded in disengaging a square wall which surrounded the palace on three sides. Between this wall and the ramparts, properly so-called, was a wide ditch of unequal depth. The wall began at the gate of the left wing of the palace, which looked toward the city on the level of the plain, and extended, rising by a gentle inclination, as far as the royal gate, where it terminated in a platform on the same level as the palace. It was a sort of winding road for the use of the vehicles passing from the city to the palace gate: the platform at its upper end made it possible not to have the chariots or vehicles stand before the façade of the palace.

One of the most curious parts of M. Dieulafoy's work is the study which he makes of the means of defence of this sumptuous city. M. Babin applied himself especially to this subject, and he expects to publish the detailed plan of these fortifications, which reveal a very advanced strategical science.

Persepolis, with its marbles, did not permit one to suspect the decorations in enamelled earth which realize, up to a certain point, the idea we have a right to form of the palaces of Babylon and Chaldæa.[9] At Persepolis, the marbles have remained; at Susa, they have disappeared: but, from under this mass of rubbish, in a heap of bricks covered over with earth, have been exhumed these great panels of enamelled pottery in such a wonderful state of preservation! Polychrome painting has left few traces on the walls of the palaces of Assyria and Babylonia: at Susa, the protecting enamel has preserved to these works a brilliancy of coloring which promises the most interesting results to whoever makes a technical study of the process.

In the articles which were published immediately after the first appearance of the friezes of the lions and the procession of the *Immortals*, a little too much haste was shown to make comparisons with other products of Oriental keramics. As far as Assyria and Babylonia are concerned, it is certain that the examples we possess are very few and poor, as compared

[9] M. Dieulafoy has always thought, nevertheless, that at Persepolis polychrome decoration held a large place.

with the friezes from the palaces of Susa, but, on the other hand, the texts are sufficiently positive to authorize us to say that polychrome enamelled decorations held a large place in the ornamentation of the Assyro-Babylonian palaces. Compare, they say, the frieze of the lions to the basrelief of the same kind of the palace of Sargon at Khorsabad, and the superiority which the enamellers of Persia had acquired may readily be seen. This superiority we neither dispute nor assert, because it would be necessary first to have the basrelief of Sargon, in order to make the comparison. Now, this basrelief exists as a specimen only in the interesting résumé of M. Perrot: the pieces themselves are lost. It is to Place, in Thomas' restorations, that we must appeal. The texts, however, are very explicit: Sargon speaks of *enamelled bricks with which he has inclosed the beams of oak and pistacio.* At Babylon there are *friezes and basreliefs executed in glazed earth above the doorways.* The artist therefore had a broad field in which to display his talents; and it is not the miserable fragments preserved in the Louvre that we would seriously place in comparison with the friezes of Susa.

By the side of the enamelled bricks of all epochs which M. Dieulafoy has collected, there are some inscribed ones that go back to the first Kingdom of Susiana, where epigraphic documents are so rare and so precious: their value is inestimable. It is well known that the Susian idiom[10] is one of the most difficult to interpret. It is all that remains of a dominion which had its seat at Susa during more than fifteen centuries. Assur-bani-pal put an end to it (658 B. C.), sacking the city and carrying away into slavery the entire population, from princes to workmen. *During a month and a day,* says the conqueror (c. VII. l. 1), *I swept the country of Elam throughout its entire length. The march of men, the passage of cattle and sheep have destroyed the budding of the trees and the grass of the field. I have allowed to come in wild animals, serpents, the beasts of the desert and the gazelles.* After this description what hope can we entertain of collecting numerous documents going back of the conquest of Assur-bani-pal?

During the campaign of 1886, M. Dieulafoy devoted himself to the transportation of the antiquities. The difficulties which Botta had encountered in bringing the marbles of Khorsabad to the river, were as nothing compared to those met in carrying across the desert, a distance of nearly 400 kilometres, 275 cases containing the results of two years' work. Finally, after surmounting indescribable obstacles and dangers, the cases were embarked on board the Sané (June 1886) and brought to Europe.

Then came the question of the immediate installation of the antiquities

[10] OPPERT, *Inscriptions en langue Susienne;* Extr. No. 13 of the *Mémoires du Congrès international des orientalistes,* t. II. 1st Session, Paris, 1873; also, *La Langue des Elamites,* in the *Revue d'Assyr. et d'arch. orient.,* 1885, No. 2: SAYCE, *Trans. of the Soc. of Bib. Arch.,* 1885, p. 465: DELITZSCH, *Die Sprache der Kossaer.*

in the Louvre. It was on the ground-floor of the Colonnade building, under the stairway of the Assyrian collections, in the "Salle des Dépôts," that M. Dieulafoy proceeded to make a provisionary arrangement of the frieze of the Immortals. The hall where they will finally be installed is on the first floor of the Louvre, on the façade of the "Colonnade de Perrault." The height of the ceiling admits of an easy arrangement of the large pieces, like the bicephalic capital (five metres high); the frieze of enamelled faïence with the lions, from the pylons of Artaxerxes Mnemon, which measures four metres in height; and the frieze of the Immortals, three metres and a half high and twelve metres long. Twelve glass cases will contain the large collections of coins, statuettes, arms and engraved seals.

In view of the magnitude of the results, it is interesting to recapitulate. In 1885, the works were opened March 15, and closed May 12; and M. Dieulafoy announces that he had spent by June 15 only 22,237 francs: the expenses of the next campaign brought the sum to 54,500; a moderate expenditure, showing that courage and tenacity are the main causes of success, and that money alone does not make fruitful expeditions.

The French Government showed both justice and impartiality in according to Madame Dieulafoy, as one of the most active members of the expedition, an exceptional reward[11] which her courage and merit fully justified.

J. D. MÉNANT.

Rouen, France.

LETTER FROM TRIPOLI.

A shallow bay, the low reefs of which, not to speak of torpedoes, afford more encumbrance than protection to navigation, as three wrecks rotting in the sand attest, the red Ottoman standard waving from a white citadel, a few minarets rising above a little walled town framed between palm groves, and behind all, if the day be cloudy, a sky reflecting the peculiarly vicious red of the desert, are the features that present themselves to the view of the passenger landing at Tripoli. A French steamer brought Mr. Clarke and myself, in twenty-eight hours, from Malta, where the resident correspondents of the JOURNAL would fain have detained us. Africa must be seen in its own sunlight, but one soon learns to appreciate narrow streets and long shady archways. Before the French Consulate is one, washed with bright cobalt, while its shadows are of a color with the patches of sky overhead. Passing through it, one reaches a Roman triumphal arch, in a tolerable state of preservation, but for the mutilation of its ornamental sculptures by over-devout

[11] The Minister of Public Instruction handed to Madame Dieulafoy, on a recent visit to the Louvre (Oct. 20), the cross of the Legion of Honor, a distinction which women very rarely obtain in France.

Arabs. Its cross-vault must have spanned the crossing of two important streets of ancient Tripolis: at present its four openings are built up, and the bases of the jambs buried. A small lane gives access to the rear, where the sculptural decoration is relatively perfect; a couple of charioted Victories drive spans of salient lionesses into the spandrels; below them, subjected Orientals sit figured in the customary attitude of prisoners of war; part of a superscription, emerging from an abutting house-wall, proclaims that somebody, being *duumvir* and *flamen perpetuus*, erected this arch "in solid fashion." The white marble blocks are indeed exceedingly large and well-jointed. There are some medallion portraits of togate personages in addition to the symbolical imageries, but all sadly battered.

Tripoli boasts few other antiquities; the possessors of engraved gems from Lebida (Leptis Magna) hold them at fanciful prices; the Spanish vice-consul showed us a few vases from the Cyrenaica. A Maltese barber put me on the track of some statues unearthed about a year ago. After much hunting I found them in the Turkish military camp, and obtained both permission to photograph, and ready furtherance in taking the views, from His Excellency, General Hassan Redip Pasha, who commands the garrison of 18,000 men. All five marbles have been mutilated, and it was not possible to discover whether they are from the environs of Tripoli, or were brought from Lebida, which is more likely. We took cabinet negatives of a large headless figure wrapped in a Greek cloak (h. 1.50 m.); of a beardless satyr's head (h. 0.33 m.), rather absurdly placed on the same headless trunk; of a superb nude Aphrodite, headless, but life-size (h. from l. knee to throat 1 metre); and of a large corselet, originally belonging to the colossal statue of a Roman emperor. The rilievo-decoration of this piece figures two Victories mounting a trophy. A torso of rather inferior Roman workmanship was so screened by bushes as not to repay the trouble of photographing. The draping of its toga is flat behind, showing that it originally stood with its back to a wall. The Aphrodite, on the other hand, is well worth minute consideration. Her attitude is very nearly the familiar one of the Venus de' Medici, differing chiefly in this, that the fingers of either hand actually touched the surface of the thigh and thorax, as remaining stumps plainly show. The breaks are all recent and intentional, a circumstance which is made more evident by the rare preservation of the epidermis, which has remained almost unscarred.

We now go to Bengasi, ancient Berenike, availing ourselves of the "Mahsousse" steamship, and bearing a letter of introduction to the governor of that vilayet from Ahmed Rassim Pasha, the present vali of Tripoli itself. Whether the gates of the Cyrenaica will be thrown open to us by his colleague remains to be seen.

ALFRED EMERSON.

Tripoli, Barbary,
February 7, 1887.

LETTER FROM OLYMPIA.

It is exactly ten years since your correspondent arrived at the confluence of Alpheios and Kladeos, on foot, and saw the eagle's head, just found, fitted to the famous Nike of Paionios. Olympia has not yet lost the character it then presented of a great archæological laboratory. The liberality of the Prussian Government allows the final collocation of the antiques in the new Museum to be conducted by a staff of German experts, through whose courtesy Altis and museums serve as seminaries of classical architecture and sculpture to frequent visitors. Incidentally, something of moment is discovered even at this late date. I may cite as examples the inscription by which the hitherto nameless "Southwestern Structure" reveals itself to be the true and only *Leonidaion*, and a fragment, observed only to-day, by which the accepted identification of one of the treasuries receives a not superfluous corroboration (ΣΥΡΑΚΟΣΙΟΙ).

The site of Olympia is commonly approached by way of the Gulf of Corinth and the carriage-road from Pyrgos. A vastly more picturesque route is the bridlepath from Tripolis over the Arkadian passes. No other gives the traveller a notion of the peculiar features of the Eleian landscape. He will, indeed, have to duck himself often in the saddle while passing under the dense aisles of myrtle between the ford of the Ladon and the foot of Kronion.

The scattered drums of the temple of Zeus and the harmonic proportions of the Zingros Museum strike the eye simultaneously. The latter occupies a natural terrace on the slope of the hill of Druva, across the Kladeos, where its red roof has an advantageous green background. Its generous size (l. 45 m.) admits of a spacious entrance with staircases to a clerestory gallery, of two long lateral halls, four corner-rooms, and of a grand central hall (l. 26 m., w. 13 m.), two stories high. Behind it there is still room for what may be called the cella of the sanctuary, the Hermes Room. The axis of the building, and of the large hall, is north and south. The dimensions of the latter were determined by those of the gable groups from the temple of Zeus, which are already disposed along the two side-walls, opposite each other, and facing in their original directions, *i. e.*, the chariot race of Pelops and Oinomaos east, and the Centaurs and Lapithai west. Nearly all the figures are in place, fastened to the wall by means of large iron dowels, the number of which is necessarily increased by the broken condition of most of the statues. Innumerable fragments wait, on floor and tables, to be cemented in their respective places when all the larger pieces are securely attached. A big marble horse now swinging from a crane will presently complete the second quadriga of the eastern pediment, and with it the whole composition. The group of Alkamenes, similarly, lacks but one large piece, but is further from completion owing to the greater

number of the small fragments. Mr. Grüttner, the Berlin sculptor whose Olympian restorations in plaster have become widely known, has charge of the work. He tells me that he has recently assigned their proper places to over thirty new fragments in the western group. His method generally requires the modelling in clay of missing parts, but only in rare and unavoidable instances does he make these fillings permanent by substituting plaster. As is known, opinions can diverge but little on the placing of the western figures. For the eastern, Grüttner has adhered to the arrangement proposed by Ernst Curtius, perhaps unwisely. The visitor, however, will have the opportunity of comparing with it an illustrative model of Professor Treu's stricter construction. More to be deplored is the decision not to give the full height of her preserved columnar pedestal to the flying Nike of Paionios. The preservation of all the eleven triangular blocks and the amply sufficient altitude of the clerestory ceiling would have seemed to impose this. The gallery which was to allow a closer inspection of the statue, as it is, serves no purpose at all. The destruction of the recently constructed bridge over the Kladeos by a freshet of that turbulent river affords a pretext for leaving the larger part of the pedestal to lie in the Altis, despite the readiness of the Greek Government to meet all expenses necessary for the worthy mounting of all the Olympian treasures.

The twelve metopes, representing the labors of Herakles, are to be distributed at a suitable height on the walls of the main hall. At present they are filed in one of the lateral galleries. The marbles, and plaster-casts of the pieces and fragments removed to the Louvre by the "Expédition de Morée," make a curious patchwork. Greece could bring about a re-union of the *disjecta membra*, possibly, by the offer, to France, of a fair equivalent in other statuary of a more separable character. The news of the ratification of the treaty for the unearthing of Delphoi by the united efforts of the two nations has just reached Olympia.

In the shed at the foot of Kronion, which still contains most of the terracottas and bronzes, may be seen the rude tree against which the Hermes of Praxiteles was imprisoned during many years. Even now, he lies on his back on the stone floor of the room he is to occupy in the new Museum. It is not yet decided whether he is to stand on a new pedestal, or whether the old one is to be mended for the purpose. If an iron stanchion were not indispensable, one would wish him to be placed on a turntable; but with a north light falling on the marble from the left side, so as to illuminate the figure of the little Dionysos on his arm, there will hardly be occasion to regret the impossibility of this. In view of certain reports circulated by previous visitors, it may be useful to add that the marble has not suffered in its unworthy temporary situation: on the contrary, the red color of the hair, never very pronounced, is still distinctly perceptible.

In short, Greece may now take pride in the possession of three great collections of ancient sculpture, each of which possesses features in which it can account itself second to none. When the German archæological corps takes its final leave of Olympia, the Greek direction will remain: it is only to be hoped the Ministry of Public Instruction will provide what the German direction, amid many difficulties, has still supplied, to wit, the means by which special research can alone become possible on a site remote from the facilities of large centres of population, and to which it is practically impossible to bring even the most necessary handbooks, plans, *etc.* *Noblesse oblige*, and the well-planned general reorganization of the Greek archæological administration and service leads us to expect much.

ALFRED EMERSON.

Olympia, Greece,
March 20, 1887.

LETTER FROM SIDON, PHŒNICIA.

It has long been well known that the plain and the hills about ancient Sidon are full of interesting antiquities. The pots filled with 8,000 coins of Philip and Alexander, the sarcophagus of Ashmunazer with its Phœnician inscription, and other finds, have aroused general interest in the subject of hid treasure. At present all excavations are conducted by laborers who quarry for stones. The building-stones that they sell nearly repay them for their work, while any antiquities found in the rubbish of ruined buildings or in unopened tombs make the work remunerative. No systematic exploration has been conducted since the French occupation of 1860, when the necropolis south of the city was excavated. Two years ago hundreds of tombs were discovered and opened at the foot of the hills east of the city. These were all of the Roman period and yielded a harvest of trinkets, but nothing of historical value.

Lately, some workmen, while they were digging in an open field about a mile to the north-east of Sidon, came upon a shaft, about twenty feet square, sunk in the sandstone. When this was cleared of earth to the depth of 30 feet, a doorway was found in each of the four perpendicular walls. These openings had been built up with stonework; and, by the removal of a few of these stones, access was obtained to the rooms. The floor, walls, and roofs of these rooms were of the natural rock without any traces of plaster. This is in contrast with the Roman tombs referred to, most of which were plastered and some richly frescoed. Entering first the *south room*, two large sarcophagi meet the eye: the one on the right, of black marble highly polished, but without any ornamentation; the other, of pure

white marble and of large proportions, the cover of which is of one piece of marble in the form of a grand arch with closed ends. From the four corners project lion-heads. On the front end of the lid stand two symbolic figures, facing each other, with uplifted wings, having the body of a beast and the head of an eagle. At the rear are two similar figures, differing in having the body of a bird and a human head: the aspect of these figures is majestic. Below the ornamented cornice which encircles the sarcophagus, are figures in relief: on the front end, two centaurs facing each other attack a fallen warrior who tries to protect himself by a shield; on the other end also are two centaurs, carrying a captured stag between them; one of the centaurs bears on his shoulder a tree like a gigantic arrow; from the body of each hangs a cloak, the corners of which are ornamented with lion-heads. The two sides are alike: first, two men together, with four rampant horses ahead of them; these horses trample upon a lion in the one case and a wild boar in the other; the steeds are not abreast, and their heads are turned outwards and backwards. In front of this group are two more human figures with four horses. Below, is a border about 6 inches wide, filled with representations of hunting scenes. The whole sarcophagus is about 10 ft. long, 8 ft. to top of the arch of lid, and 5½ wide. These measurements are only estimates made under difficulties. As the chamber is small, it was only with the greatest difficulty that I could squeeze between the sarcophagus and the walls. The opening was so small that there could be no good ventilation, and the two lighted candles which I had with me, if held near the ground, went out. My companion became dizzy and faint, so my stay was short. To add to the discomfort, water was dripping from the roof, making a thick mud upon the floor. This and the other chambers had all been entered some time in the past by treasure-hunters who moved the covers to one side, where that was possible, or broke a hole in the front of the sarcophagus. In these tombs were found three human skeletons and five dogs' skulls, probably greyhounds.

After waiting a few hours for the workmen to clear the entrance to the *east room*, I descended again and found in it two sarcophagi, a large sculptured one on the right, and a plain one on the left: both of the finest white marble. The large sarcophagus is in the form of a Greek temple: the lid representing the roof and the tomb the body of the temple. The ridge has at each end carved ornamentation [akroteria], while the slopes of the roof are cut to represent flat rectangular tiles; strips of metal cover the joints of the tiles and are surmounted by carved knobs where they cross the ridge. Above the eaves there rises and extends along the length of the sarcophagus an entablature, about a foot in height, on which is sculptured the funeral procession: two female mourners lead the procession, then come two horses with men walking beside them, the steeds having neither saddles

nor bridles; then four horses abreast drawing a chariot in which stands a warrior, followed by four more horses drawing the covered funeral car; this is followed by two figures on foot. The ends are richly ornamented with cornices and carved work, and in the tympanum are three figures, all expressive of grief: a male figure reclining with face buried in his hands, a standing figure, and a female in the other angle: at regular distances from the edges of the eaves are projecting dog-heads. The body of the sarcophagus is carved to represent a cella surrounded by a portico, with eighteen small statues, about three feet high, between the columns: three of these stand at either end, and six upon each side. The capitals of the columns are Ionic, with the exception of those at the four corners which are Doric. The statues are of beautiful workmanship and finish: all are female figures expressive of grief in various ways, and are entirely draped, though the forms of the muscles and the shape of the limbs can be easily followed. The temple rests upon a low *podium*, the four sides of which are covered with representations of hunting scenes. Débris about the base prevented me from studying the details carefully, but I remember a stag pursued by hunters with a dog leaping upon its back. The whole effect of this finely proportioned and richly ornamented temple with the impressive row of statues was one not easily forgotten. Unfortunately, a hole had been broken in the front, and at the same time part of the right entablature of the lid was broken off. With these exceptions, the whole is in a perfect state of preservation: it looks as clear in color and as perfect in detail as if just from the sculptor's hand: I did not notice a nose or finger gone, nor a scratch upon the highly polished surface. The eyeballs of the marble figures had been painted; also, there were traces of coloring upon the robes of the smaller figures; most of this, however, had been washed off by the dripping moisture, and wherever touched by the finger the paint came off. The *north room* contained only a plain sarcophagus.

I next entered the *west room*, which was empty; but since then a fine sarcophagus has been found beneath the floor. From this I passed into another and larger chamber where stood four sarcophagi, all of white marble: three of these were comparatively plain: ridge-roofed covers with tiles, and cornices and borders of vines the only ornamentation. The chief sarcophagus, however, far exceeded any of the former ones in the fulness and variety of the scenes, in the graphic expression of the various passions, in minuteness of detail, and in the fine preservation of the colors of the painted portions. I was permitted only a hurried view of this remarkable work of art. The tiles of the sloping roof are not flat and rectangular, but more like pointed leaves with edges slightly upturned; at each end of the ridge stand headless rampant figures supporting a carved shell ornament [anthemion akroteria]; on each of the four corners is a crouching lion; and above the

eaves on each side a row of human heads looking out from beneath an arch of leaves; while below is a row of stag-heads with curved horns. In the tympana at the ends are battle-scenes: a warrior lies dead, in one corner, while opposite him is another, evidently wounded; his helmet has fallen behind him, and he is crouching behind a large oval shield to protect himself from his assailants. The warriors upon this sarcophagus were of two kinds: one kind, mostly equestrian, are represented with blue eyes, scarlet cloaks, blue tunics, crested helmets, with long straight swords, greaves, and a few wearing sandals; the shields are of various shapes, and some richly adorned, one is painted on the inside to represent the circle of the heavens with stars, while other shields have upon them figures of animals. Among these, the mounted warriors have under them flat padded saddle-cloths richly worked and painted with bright colors. The other class of combatants represent barbarians, but of what nation I could not tell. They wear peaked caps whose long point is toward the back of the head, and have a cloth wrapped about the head covering both cheeks, and also drawn across the face below the nostrils covering mouth and chin. These are more scantily dressed than their opponents, and seem to be the vanquished. The battle-scenes are numerous and vividly represented. In one case, a warrior seizes by the hair of the head his enemy,[1] who has fallen upon his knees, and plunges a sword into his shoulder, while the blood trickles to the ground. Both the ends and one side are thus crowded with fighting figures, some of whom are mounted, while others are on foot. The other side is devoted to the representation of a chase in which all the hunters are barbarians. One man has his hands extended as if he had just discharged an arrow; another, on horseback, is thrusting with a spear; while an attendant carries a bow. The main interest centers in a horseman attacked by a lion: the horse is rearing while the lion has fastened his teeth in the horse's shoulder. The terror and agony of the animal are evident; his nostrils are dilated with fear, and the skin above them is wrinkled; the rider can hardly keep his seat; the other horsemen and hunters are rushing to the rescue, and a dog has seized the lion by the leg. Beside these scenes with figures, the sarcophagus is adorned with much fine ornamental work: below elaborate cornices are two bands of ornamentation, one composed of two parallel lines worked into rectangular figures [meander fret ?], the other a vine curving in the "line of beauty:" the background to this vine was painted.

As I walked about this sarcophagus, the surprises which met my eye rendered it difficult to make mental notes. That I was fortunate in seeing what I did, is evident, for from that hour no European has been allowed to enter the excavations. Anything like measurements, notes, or photographs,

[1] In the account of this scene given by an Arab newspaper, this figure is said to be a woman: see *News*, under PHŒNICIA.

was wholly out of the question. If this jealous care were in the interest of preserving these treasures, there would be no objection: but a Moslem visitor has since brought away an arm which he had broken off one of the figures. Since my visit, seven other sarcophagi have been found: one sculptured on all sides, another with the lid in the shape of the human figure: the face and head-dress are described as of the Egyptian type, resembling the figure on the tomb of Ashmunazer. Only one tomb has been found as yet unrifled, and that contained decayed wood or decayed mummy-remains, a vase of alabaster 10 inches high, a gold ring with stone, and a gold chain[2] weighing over 100 grammes; also a gold frontlet of small size.

It is very singular that, up to the present time, no inscription of any sort has been found on either walls or sarcophagi. About 300 coins were picked up at the foot of the shaft, but they were immediately taken to the governor, and I have not seen any of them. Either the material, or the finished work, of all these tombs must have been brought from some other country, as there is no such marble in Syria.

At present, the place is guarded by soldiers day and night, the doors to these chambers are fastened and sealed, and the local authorities are awaiting instructions from Constantinople.[3]

W. K. EDDY.

Sidon,
March, 1887.

[2] Mr. Eddy succeeded in obtaining this beautiful chain.

[3] If the Government decide to transport these precious monuments to Constantinople, let us hope that their fate will differ from that described by Mr. F. E. Hoskins, who writes us, May 4, 1887: "Two years ago I saw them unearth a handsome sarcophagus in the Orange gardens at Sidon: a guard sat on it for a week, and then the authorities decided to move it into the city. So, they sent out men who deliberately smashed the marble with sledge-hammers, and carried it into the city on the backs of donkeys: it was deposited in the yard of the French Khan—a government building—and there it still lies in the mud."

It is said (London *Times*, April 7) that Beshara Effendi is excavating a tunnel for the removal of the sculptures to the sea-shore, with a view to their shipment to Constantinople.

REVIEWS AND NOTICES OF BOOKS.

Η ΠΟΛΙΣ Η ΝΑΥΚΡΑΤΙΤΩΝ. NAUKRATIS. Part I, 1884–5. By W. M. Flinders Petrie. With chapters by Cecil Smith; Ernest Gardner, B. A.; and Barclay V. Head. Third Memoir of the Egypt Exploration Fund. 4to, pp. viii, 100; plates xliv. London, 1886, Trübner & Co.

The discovery of Naukratis is one of the most brilliant of recent achievements in archæology. Until the latter part of 1884, when the work of excavation was begun on the mound Nebireh which lies to the west of the Kanobic branch of the Nile, it was supposed that the ancient Greek emporium, of which Herodotos, Athenaios and other writers have left us interesting accounts, lay to the east of this stream, nearer Saïs and the sea. The discovery of the actual city and its identification with the mound Nebireh is due to the genius and industry of Mr. Petrie, who with the aid of specialists has given us, in this volume, the results of the first campaign's work. The book opens with a chapter by Mr. Petrie on the site of Naukratis and on the history of the city; this is followed by chapters by the same author on the temenê of Apollo and other deities, on the archaic pottery and its classifications, on the great temenos or Hellenion, and on the houses and their contents. Mr. Cecil H. Smith treats of the painted pottery, Mr. Ernest A. Gardner of the inscriptions, and Mr. Barclay V. Head of the coins found there. Chapters by Mr. Petrie follow, on the weights discovered, on levels and measurements, on the *Geographia* of Ptolemy with reference to the identification of sites in the Delta, and on the neighboring mound Kom el-Ahrin. There are forty-four plates fully illustrating architectural fragments, statuary, pottery, terracottas, weights, fac-similes of all inscriptions with a table of alphabets, scarabs, *etc.*, together with admirable maps and plans, both of the Delta after Ptolemy and after the map of Peutinger, and of Naukratis and of its principal buildings, diagrams of the strata in the temenos of Apollo, *etc.* The second and probably the last campaign (Nov., 1885–March, 1886) was conducted by Mr. Gardner, and an account of it will be given in a second volume now in preparation.

In the first season, the ground-plan of the city was ascertained; of the five sacred precincts and temples named by Herodotos and Athenaios two

were clearly identified—that dedicated to Apollo by Milesian colonists and the great Hellenion, besides the temenos of the Dioskouroi not previously mentioned, together with an immense quantity of antiquities of great variety and significance. In the second season, the leading discoveries were of the temenê of Samian Hera and Aphrodite previously known, with almost countless fragments of pottery of the highest importance in the study of archaic Greek vase-painting. From the point of view of epigraphy the inscribed potsherds of the second season are not so important as those of the previous year, though one inscription contains the Lesbian alphabet of the sixth century, B. C., which has hitherto been quite unknown.[1] The work of the first season was so far-reaching, and the numerous objects brought to light have been studied with such skill and wise caution, that subsequent discoveries have in the main only supplemented and illustrated, and have done little of the nature of correction. The first volume will therefore have a permanent value, and many of the results reached in it must be regarded as final.

A passage in Strabo (xvii. 1. 23), partly incorrect and partly misunderstood, had long thrown archæologists off the true scent in the search for Naukratis. Mr. Petrie shows that the most important authorities in a question of this kind, Ptolemy's Geography and Peutinger's map, have been overlooked, and, by the use of evidence furnished by them and by a careful exegesis of familiar passages in Herodotos and Pliny, makes it clear that the ancient site was to be looked for west of the Kanobic branch and in the neighborhood of, if not actually in, the mound Nebireh. The subsequent discovery in this mound of the only known decree of Naukratis (plate XXX. 3), and of the only known autonomous coins of the city; the discovery also of precisely the Greek temples that are mentioned by Herodotos and Athenaios; and the history of this settlement as recovered from its monuments so perfectly agreeing with the recorded history of Naukratis—make the identification of this site with that of the ancient Greek colony absolutely certain.

Before 570 B. C. is the literary date for the foundation of Naukratis; and a passage in Athenaios makes the inference probable that Naukratis was a flourishing city in 688 B. C. Now the earliest pottery found here is such as is, at the lowest date, placed at about the middle of the seventh century B. C. A scarab-factory existed here with cartouches from the reign of Psamtik I up to but not including that of Amasis (570 B. C.). Below the stratum in which the scarabs were found is a black stratum of charcoal and ashes two feet in diameter, which indicates, according to the rate of accumulation

[1] *Academy*, Nov. 13, 1886. The various steps in the work of the first and second seasons may be followed in the reports printed in this JOURNAL, and in the literature there referred to (Vol. I, pp. 79, 80, 221, 422; II, p. 81).

in Greek times, half a century: and fifty years before the beginning of the scarab-factory carries us to the middle of the seventh century B. C. It is probable that the settlement was made during the disruptions caused by the Assyrian invasion, when the Egyptians were unable to keep out foreigners (not long before 670 B. C.); the buildings were doubtless at first of wood and wattle and daub, and therefore were early burned down. More permanent houses with thick walls of mud and brick may have begun under the reign of Psamtik I, who favored the foreigners. Then the Greeks erect their solid temples, and dedicate the valuable vases and bowls which were found: the temple period thus began between 650 B. C. and 630 B. C. The great temenos, the Hellenion, is probably as early as 620 B. C.: it was in a damaged state about 275 B. C. when Ptolemy Philadelphos repaired it. At the beginning of the reign of Amasis (570 B. C.) the prosperity of Naukratis suffered reverse: the people had been on the side of Apries, whom the usurper Amasis defeated. But this reverse was of short duration. Amasis after destroying the ancient Greek settlement east of the Delta permitted by Psamtik I (Her. ii. 154), recognizing the importance of retaining at least one Greek emporium, granted to Naukratis, which lay west of the Delta near Saïs his capital, exclusive privileges and a monopoly of the Greek trade.

During the reign of Amasis the city flourished, but the Persian invasions told seriously on its prosperity. The falling off is shown by the fact that there is from fifty to one hundred times as much pottery belonging to the century and half preceding the Persian invasion as to the same period under Persian rule. The archaic temples were still standing when Herodotos visited the city in 454 B. C.: the second temple of Apollo seems to have been erected about 440 B. C. Though the founding of Alexandria ultimately sapped the vitality of the older settlement, it shows an independence not heard of previously, in issuing toward the close of the fourth century B. C. an autonomous coinage, two specimens of which were found in May, 1885. Under Ptolemy II, as we have seen, the city received royal patronage. Leisure and study found a home in Naukratis for a time, as is shown by the long list of literary men who lived there in the Ptolemaïc age, and subsequently in the Roman period (Athenaios, Julius Pollux and others). Under the Empire the city decayed: even in the first century A. D. part of the old town was used for building-material. Its old schools were abandoned and Proklos, the last teacher, removed to Athens about 190 A. D. From a remark in Stephanos of Byzantion, it seems to have been in existence as late as the fifth century A. D., but there are no datable remains of the city later that the middle of the third century A. D.

The mound Nebireh has long been the site of an Arab village, and the inhabitants have turned over and excavated a large part of it in getting earth for their fields. The earliest foundations are now ten feet below the

level of the country: hence, as soon as the Arab diggings reach out to the cultivated land, the excavated site will be flooded by the inundation and a permanent lake will be formed, covering forever the Greek settlement. The ancient city was not on the river-bank but was reached by a ship-canal, as Herodotos informs us, and as we may infer from the present canal which, however, does not lie in its early bed.

In the temenos of Apollo are traces of two temples. Of the earlier, built about 620 B. C., only a few architectural bits have been found, with fragments of dedicated vases and statuettes, all earlier than 500 B. C. The second temple was probably of stucco and painted brick with marble decoration: no pottery was found, the Arabs having cleared out the débris at this higher level. The unique architectural ornamentation of this temple, which was built about 440 B. C., so strikingly resembles that of the Erechtheion (lotos band on necking of columns; rosettes on door-jambs, *etc.*) as to give rise to the conjecture by Mr. Petrie, that the Athenian temple was a later work of the architects of the Egyptian temple. The temenos of the Dioskouroi is also traceable, and fragments of dedicated pottery were here found also. As we have remarked above, the second season brought to light the sites of the temples of Hera (what Mr. Petrie had called the Palaistra) and Aphrodite. The temple of Athena, the priest of which is mentioned in the decree, and that of Zeus dedicated by the Aeginetans, remain to be discovered.

The pottery discovered in the first temple of Apollo is not only earlier than the bulk of ordinary Greek pottery, but is of great importance in that its classes can be relatively and in part absolutely dated. Mr. Petrie has furnished an elaborate and instructive classification of it, and has established dates for the several varieties. While his chapter on the archaic pottery is extremely suggestive, and doubtless lays down the main lines, the second season has brought to light a great quantity of new material (especially from the temenos of Aphrodite), which may demand a recasting of some of Mr. Petrie's statements. It is well for the present therefore to refrain from further comment upon them.

One of the most interesting and unique of the discoveries at Naukratis was that of the Great Temenos, the ancient Hellenion, equal in area to one third of the city. It was the heart of the Greek race in Egypt, a great establishment founded and maintained by Ionians (from Chios, Teos, Phokaia, Klazomenai), by Dorians (from Rhodes, Knidos, Halikarnassos), and by Aeolians (from Mytilene). It was a place of assembly for deliberation, capable of holding fifty or sixty thousand men; a fortress about 850 by 745 ft. square, with solid brick walls 50 ft. in thickness rising to a height of 50 ft.; it was a great sanctuary, the civic centre of authority, sacredly and jealously guarded by its founder-cities. Within this vast enclosure was a large building, about seventy feet in height, with perhaps four stories of chambers

or cells, doubtless used for a granary and magazine, and built for defence. A fragment of a small limestone model of this building was found at Naukratis (plate XVIII. 1, not XVII. 1, as Mr. Petrie has it). The gateway of the outer structure having fallen into decay, Ptolemy II replaced it by a magnificent edifice the features of which are fully described. The most important result, however, obtained from the site of this work of Ptolemy was the discovery of the ceremonial deposits (masonic symbols) placed here at the time of its founding, principally under the four corners: these deposits were ceremonial utensils, as libation-vases, sacrificial knives, *etc.*; models of tools, as hoes, mortar-rakes, chisels, trowels, measuring pegs, *etc.*; samples of materials, as models of bricks, plaques of precious stones, five metals in sample ingots, and a double cartouche of Ptolemy Philadelphos. In this building were found many interesting antiquities, mostly of Ptolemaïc and Roman eras.

Among the miscellaneous objects obtained at Naukratis the earliest are pieces of engraved shell (*tridacna squamosa*), found also in widely separated localities: it seems probable they were wrought here on crude material brought from the Red Sea. The scarab-factory has already been mentioned. Naukratis seems also to have been a centre for the iron trade, if not indeed the principal seat for the manufacture of iron for the Greeks of the sixth century B. C. The objects here found give us more than was known before about the forms and uses of Greek iron-tools in archaic times, and indicates the source of much that was found elsewhere; in this collection are chisels, celts, axes, knives, sickles, gouges, picks, bodkins, a poker, a pig of iron, fish-hooks, nails. Many rude stone figurines of the sixth, fifth and fourth centuries B. C. were found: straddling figures, perhaps representing Baubo; reclining female figures, never draped but always without improper emblems or suggestions such as are frequent in Phœnician art; *etc.*, *etc.* Terracotta heads covering the same period and extending down to Roman times are common. A cartouche bearing Phœnician letters and modelled by the *cire perdue* method was also found: this cartouche, a cylinder of hematite, and another of ivory, were the only Phœnician or Assyrian objects found in the first season. Of Egyptian bronzes, statuettes and animal figures, of handles of amphoræ, of stone tools, of jewellery in gold and silver of the Roman period, of other objects of Roman times, pottery, terracottas, *etc.*, our space forbids even the mention.

Mr. Cecil Smith's chapter on the painted pottery shows a wise conservatism. The writer cautions us against hasty inferences from the designs found on the Naukratis pottery as to the place it held in the early history of Greek design: he reminds us that fictile vases found together in temple débris might belong to very different epochs, and suggests that in establishing series, distinction should be made between vases formally dedicated with inscriptions

(ἀνέθηκε) where the inscription is doubtless nearly contemporaneous with the manufacture, and such as have only the mark of ownership upon them (Ἀπόλλωνος, *etc.*), hastily scratched, often by some official, long after their manufacture, when they were about to be buried with the dead or even discarded for better ware. The pottery discovered at Naukratis furnishes representatives of almost all known, and of a few hitherto unknown, fabrics that existed in the Greek world. There is no original instance at Naukratis of the so-called "Geometric," or of the "Island" type of decorated ware. These types then must have ceased to be manufactured at 650 B. C. The earliest pottery found at Naukratis is the so-called "Polledrara" ware, probably here first manufactured, examples of which have been recovered at Rhodes (*Journal of Hellenic Studies*, VI, p. 188, note 2). Specimens of the "Oriental" style—horizontal friezes of animals in black or brown on yellowish clay, with rosettes and geometric patterns—were found in great quantities. These specimens, however, clearly belong to a sub-class, probably local to Naukratis, which may be named "Egyptian"—as contrasted with the "Assyrian" sub-class, where the decoration of Assyrian textile fabrics is closely and conventionally imitated, with incised lines—and is later than the "Assyrian." The use of white pigment on vases, which is classical on the white lekythoi of Athens, is found at Naukratis from the earliest times, with a more profuse use of color in general than prevailed elsewhere. A fabric distinctively "Naukratian" was discovered, of a peculiar technique and decoration—white-faced, decorated in black, brown, and orange with accessories in purple, and with human figures of an Ethiopian type. To this class must now be assigned a number of white alabastra found in Rhodes. It has already been noted that the earliest master's signature found on vases with a white ground is that of Nikosthenes: here at Naukratis are several specimens after the style of this prolific artist, and an inscription with his name was actually found: the stem of a kylix marked ΝΙΚΟϚΘ [ἐνηϛ ἐποίησ] ΕΝ.[2] The use of large eyes as a decorative feature, so frequent in red-figured kylix-painters, may have been imitated from the Naukratian ware, and here the idea may have been borrowed from the sacred eyes of Osiris manufactured in great quantities by the scarab-factors of Naukratis. The style of painting on a white ground disappeared at Naukratis after the Persian invasion: the only specimens of it after this date are clearly of Athenian origin. The vases hitherto designated as "Cyrenian" (Arkesilas kylix in the *Cabinet des Médailles*, Paris; *cf.* Puchstein, *Arch. Zeit.*, 1881, p. 215) have many analogues in pottery found here,

[2] Perhaps the name of the well-known artist Pamphaios may be read (ΓΑΝΦΑ) on the base of a bowl in unglazed reddish ware dedicated to Apollo. I do not find this fragment in Mr. Gardner's cursive transcriptions.

and it is not improbable, though not certain, that Naukratis and not Kyrene, was the *locale* of this fabric.

Mr. Gardner's chapter on the inscriptions is full of information and suggestion alike to the epigraphist and to the student of language. Over 700 inscriptions were found, chiefly scratched on pottery: many of these are unintelligible, but the remainder, mostly containing some mention of Apollo, form a connected series which fully illustrates the history of the Ionic alphabet between about 650 and 520 B. C. The inscription usually records either a dedication to Apollo (*ἀνέθηκε τὼπόλλωνι* or *τἀπόλλωνι*), or merely the sacredness of the object (*Ἀπόλλωνος*, *etc.*). As varieties of this second class may be regarded the following three forms: *Ἀπόλλω* (or *Ὦ ᾽πόλλω*) *σόν εἰμι*, *Ἀπόλλω σοῦ εἰμι*, and *Ἀπόλλω σός εἰμι*.[3] The only inscription that can be brought into relation with an historical character is that of Phanes,[4] son of Glaukos: it is found on the fragments of a very costly bowl, which seems to belong to the later half of the sixth century B. C. Now one Phanes, a Greek, deserted Amasis for Cambyses about 526 B. C.: he was probably the dedicator of this bowl, the fragments of which are widely scattered.[5] The inscriptions in the temenos of Apollo, dedicated by the Milesians, are mainly in the alphabet of Miletos, and show the gradual changes in 130 years of development (650–520 B. C.). The earlier forms of this alphabet are earlier than the Abu Simbel inscriptions (which must therefore belong to the time of Psamtik II, or between 594 B. C. and 589 B. C.). The earliest forms of these Milesian inscriptions bear so striking a resemblance to the originals from which they were derived that they must be regarded as the oldest specimens, in character if not in date, of Greek writing. This proves that the so-called Cadmean and Ionian branches of the most primitive Greek alphabet existed side by side from the beginning, and that the problem of their mutual relation is further from a solution than ever. It is not improbable that they both borrowed directly and independently of each other from the parent Phœnician alphabet. Mr. Gardner establishes eleven classes of the Milesian alphabet, arranged in chronological order (Classes I–XI). Classes XII–XVI contain specimens of the Ionic

[3] Here the object addresses the god in the second person, an unusual form expressing ownership. This vocative *Ἀπόλλω*, if correct, is of extreme importance: it involves a nom. *Ἀπόλλως*, acc. *Ἀπόλλω*, and may throw light on the obscure origin of this name.

[4] In the second season's excavations, was found a vase dedicated to Aphrodite by Rhoikos; this may be the famous Samian statuary and architect who, as we know from other sources, must have studied Egyptian models.

[5] If this identification be correct, the early coin from Halikarnassos—the earliest inscribed Greek coin known, the inscription of which has been read *Φάνους εἰμὶ σῆμα*—must be much earlier than this vase, and most probably is to be ascribed to an ancestor of this Phanes; for the forms of the letters, the closed *η* and the three-stroke *σ*, appear to be at least two generations earlier than those on the vase.

alphabet with essential points of difference from the regular Milesian series; XVIII and XIX represent portions of two well-known local alphabets, the Melian and the Korinthian, and, for purposes of comparison, in Class *A* is given the alphabet of Amorgos, in *B* that of the Abu Simbel inscriptions, and in *C* that of Miletos proper (Branchidae inscriptions). Some of the noteworthy features of these classes are the following: Classes I and II have a three-stroke μ, and a σ (four-stroke) always lying on its back, like the Phœnician *shin* from which it is derived; III and IV show a form of ν, resembling the three-stroke σ, which is new for Greek but identical with the Phœnician; in Class IV σ assumes the upright pose of the four-stroke form, which henceforth becomes the rule; in Classes X, XI, however, which are much later, the three-stroke σ appears. In XII and XIII the unusual combination of the three-stroke σ with ω is found. Probably these classes represent a local alphabet different from the Milesian—perhaps that of Teos, Mr. Gardner cautiously suggests.[6] Class XIV is practically identical with the Abu Simbel inscriptions, and with them may be regarded as local Rhodian. It is interesting to note that the pinax on which the inscription of Class XIV is scratched strongly resembles ware undoubtedly manufactured at Kameiros. In the Melian alphabet of Class XVIII the forms for η and for ρ are peculiar.[7]

The coins found at Naukratis offer little that is new: they are of interest principally as reflecting the material prosperity of the city, and as indicating the localities with which trade was carried on. Fifteen archaic Greek silver coins were found together with ingots of the same metal: these were doubtless the horde of a silversmith, which for some unknown reason was buried toward 439 B. C. Nearly one thousand coins were obtained, more than half of which are imperial bronze of Alexandria: there are at least 97 Greek coins of the period before 350 B. C. Of the two autonomous coins of the city we have already spoken: Mr. Head and Mr. Petrie do not seem

[6] It may be remarked that inscription No. 209 (ΤΗΙΟΣ), found on an eye-bowl (about 530 B. C.), shows the four-stroke σ: still the inscription may not be Teian in origin, or it is possible that, at this date, local differences had become effaced. The three-stroke σ is also found on other eye-bowls.

[7] The dedications and the inscriptions on the pottery designating ownership furnish an interesting list of proper names, some of which are rather unfamiliar. We can easily make out, in inscriptions none of which are probably later than 500 B. C., the following: names of divinities, Aphrodite, Apollo, Here, Zeus, Dioskouroi; ethnic names, Milesian, Phokaian, Teian, perhaps Rhodian; names of private persons, Aischylos (or perhaps Aischrion), *Alexi*deios, Apollonios, Araus, Artale (or perhaps Aptale), Charidion, Charophnes, *Glauko*s, Hermagoras, Klepsias, Lampyris, [Myses], Na(upli)os, Paramenon, Phanes, Polemarchos, *Poly*arkides, *Poly*kestos, Protarchos, Saph*pho* (? this spelling, for Sappho, is found on coins), Sleues, Teos, Theodoros, *Theo*themis, Xenophanes. This list does not include many names that might be only conjecturally restored from fragmentary inscriptions.

to have come to an agreement as to the identification of the heads used for devices.

It is to Naukratis, which was for many years the principal seat of trade between Egypt and the West, that we should look for a large collection of ancient weights, and our expectations are more than fulfilled. The season's work quadrupled all the Egyptian weights previously known, and provided us with over 500 in all. They were mostly of bronze or hard stone, and were graded according the Egyptian *kat* standard (158 examples), the Assyrian shekel (114), the Attic drachma (87), the Phœnician shekel (55), the Aeginetan drachma (37), *etc.* The error of the mint that can be detected in the Athenian tetradrachms averages only 1 in 410, which compares very well with the English "remedy of the mint" for silver, 1 in 240.[8] This would show that the Athenians had greater accuracy in their hand-mintage than prevails now-a-days even in machine-made coinage. But this chapter on weights and the subsequent chapters are too technical to be further commented upon here.

The result of the first year's work at Naukratis is in itself more than enough to justify the existence of the Egypt Exploration Fund. The labors of Mr. Petrie in 1884–85, and of Mr. Gardner in 1885–86, have already made notable additions to our knowledge on many obscure points in the archæology and history of the Greeks during the interesting period of their growth preceding their highest achievements. It is not unlikely that a minute study of the material obtained will solve several interesting problems relating to the beginnings and early history of Greek art and design. It is a matter of national congratulation that Americans have had a hand in the good work of keeping up the Fund, and that, in consequence, important parts of the finds have already found a new resting place in museums of our country, notably in the Boston Museum of Fine Arts, where they may be studied to advantage by Americans.

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HISTORY OF MEDIÆVAL ART, by Dr. FRANZ VON REBER. Translated by *Joseph Thacher Clarke*, with 422 illustrations and a glossary of technical terms. 8vo, pp. XXXI–743. New York, 1887, Harper & Brothers.

Just such a book as this has long been needed by English and American students of the history of Christian Art, and its appearance has been eagerly

[8] The "allowed deviation" for the U.S. silver dollar is 1 in 275: it is proportionally greater for the smaller coins ("in the dollar, the half and quarter dollar, and in the dime, one and one-half grains").

hailed, both by those who wish for a general acquaintance with the subject, and by those who need in the class-room a book they can put into the hands of their students. But another class also cannot fail to carefully scan such a book. In it there are so many opportunities for new views on important developments in the history of art, for a fresh insight into the relation of different periods and peoples, for just historical considerations, that it addresses itself to a very wide circle of readers, with very divergent wants and ideas. It is not necessary to criticise other works of a similar scope that have preceded this one by Dr. Reber. They have either been inaccessible to the English reader, or, when written in or translated into English, have been decidedly inferior in quality. This history of Mediæval Art includes *multum in parvo:* it is so concise as to be able to cover an extensive field quite thoroughly in a single octavo volume of seven hundred pages. In the Introduction, the author develops his historical view of Mediæval art, and he adds: "the scope and arrangement of the present volume have been adapted to this view of the historical advance of Mediæval art." The substance of this view may be thus stated. In studying the development of ancient art we find that each country had its own, and that, although Greek art spread over Asia under the Diadochi, it was only "after the establishment of the Roman power, that Hellenism became truly international. Mediæval art was the direct outgrowth of this Roman Hellenism." Although, on the decay of art in the West, the artistic supremacy of the Eastern Empire was acknowledged, "the art of Byzantium was unable to attain a position corresponding to that occupied before it by the Græco-Roman styles, and after it by the French Gothic." The degenerate classic style of Rome was the first to influence the converted northern nations which were not affected perceptibly by Byzantine art. No new development was initiated by Charlemagne, and a far greater degree of artistic independence was shown by the Moslems. At the time of the revival, in the Romanesque period (1000 A. D.), Germany was the leader in all the arts, but, "after the middle of the twelfth century, Mediæval art found its most brilliant and important expression in the heart of Northern France." "The centre of European culture was removed from Germany to France, becoming of a higher perfection and exercising a wider influence in the Gothic than in the Romanic period." There was far less uniformity in the sister arts of sculpture and painting than in architecture, and here national peculiarities were more apparent. The Renaissance did not make itself felt in Germany before the sixteenth century, and "the preëminence of Italy, after the first decades of the fifteenth century, may be compared to that of France in the middle of the twelfth." At the close of this introductory statement Dr. Reber remarks: "It has been the great desire of the author to present a history of artistic evolution more logical and more consequential than those with which he is acquainted."

In the first chapter, on *Early Christian and Byzantine Architecture*, after a sketch of the development of the catacombs, there follows an interesting discussion on the origin of the primitive Christian basilicas, and a careful study of the two great types of early ecclesiastical buildings, the oblong and the circular. A sketch on the sculpture and painting of this early period naturally follows. Breaking the sequence of Christian art, we are to glance at the monuments of Persia under the Sassanids, of India up to the Moslem invasion, and finally at Mohammedan art in all its phases, in Egypt, Spain and India. Returning to the art of Europe, a chapter is devoted to *The Christian art of the North until the close of the Carlovingian epoch*. This period is, more than any other, enveloped in obscurity: in this transition state it is almost impossible to discover how much belongs to the new races—how much to Goths, how much to Lombards, Franks, or Germans. Of all these elements, that which appears to have taken the lead in artistic matters during the Carlovingian period was the German, while the Franks were most prominent during the preceding centuries. The author's review of the Romanesque development is entirely based on the standpoint taken in the introduction, that Germany, from 950 to 1150, was far ahead of other European countries in her art, and showed to them the way of progress. So all general advances made during this period, especially in architecture, are illustrated by German examples. The illustrations giving the systems of construction of different representative churches in chronological and logical order are quite an innovation, and are very useful for comparative study, as they show at a glance the progress made. The writer is especially successful in his treatment of the Gothic period, in which he very rightly takes as a basis the artistic supremacy of France. The relation of one building to and its dependence upon another, in the general development; the characteristics by which each sub-period of the style is distinguished; the interrelation of the styles of various provinces and countries—these are peculiar qualities of the chapters on Gothic art. On the one hand verbosity and on the other a dry catalogue of facts are equally avoided; the result is a text consecutive and interesting.

But has not this very systematic arrangement led to the adoption of prejudiced historical views, with which facts have been forced to agree? Without wishing to be hypercritical, this seems to me to be the case. In such an attempt it is all-important to work from the right principles, and from an insight into the true character of the ideal of the art in question. A thorough sympathy with the ideals and themes of Christian art could alone bring with it the power to understand them: if they are despised or misunderstood, the edifice "pêche par la base." I shall begin with the first steps in Dr. Reber's view of the historical advance. His statement that "early Christian art in the western provinces of the Empire . . may *in all*

respects be considered as a debasement of the Roman" seems, even from an external standpoint, altogether too sweeping, when we look at the interior of a building like Santa Maria Maggiore with its colonnades and its rich wall-decoration in mosaic, whose prototype in classic art certainly cannot be pointed out; or when we study the cycle of Christian symbolism of the third and fourth centuries, or the stern realistic figures in the apse of SS. Cosma and Damiano. We are surprised to read of "the senility and decrepitude of early Christian architecture," which accomplished results to which classic architecture had not attained either in Greece or Rome. A failure to appreciate the internal conscious beauty of Christian art as distinguished from the external beauty of Paganism cannot but influence Dr. Reber's conclusions. The second point is that Byzantine architecture was largely dependent on that of the Romans. Here again it seems as if Dr. Reber might have recognized at least the probability of the conclusion towards which recent studies have been leading (*e. g.* those of Choisy in *L'Art de bâtir chez les Byzantins*), that Byzantine architecture was developed mainly from methods employed in Asia Minor for several centuries before Justinian, and that the principles underlying the domical constructions of the Romans, with their masses of concrete, were just opposite to those governing the architects of Santa Sophia, in which every stone played a part. In speaking of the arts in the West during the early Middle Ages, Dr. Reber minimizes the share of Byzantine art, and asserts that, "in painting, the style of the frescos of the Catacombs" was long retained; and yet anyone who visits some of the Roman catacombs, even, that were restored by the Popes of the VIII and IX centuries cannot but see that the frescos added at the latter dates, far from being a modification of the early classic frescos by their side, are but a degraded form of Byzantine art, which in Rome itself took a peculiarly vicious form—witness the mosaics of San Marco (close of IX cent.).

Passing now to the North of Europe, Dr. Reber very naturally gives precedence to Germany during the Carlovingian period, lasting to the middle of the XI century; but we cannot agree with him in assigning her the lead during the strictly Romanesque period which covered the succeeding hundred years. Dr. Reber says: "from the horizontally ceiled basilicas of the Ottos to the vaulted cathedrals of Mainz and Speyer, the advance is so constant, so rational, and so organic that, in Germany, at least, it is to be regarded as constituting in itself a new style: . . Western France, Northern Italy, and some districts of Eastern and Northern Europe adopted the principles of German architecture; but in the main the French and Italians followed an independent course of development." Let us examine, (1) what were the principles of Romanesque architecture; (2) whether they were in reality first established in Germany; and (3) whether the development in Germany was as organic as that in France,—for on these questions that of German precedence depends.

First and foremost is the change from wooden roof to vault: this influenced both the proportions of the architectural members and the form of the ground-plan; second come changes in the ground-plan; and third, in the supports and openings of the building. It does not bear at all upon the question to discuss the early Romanesque constructions with flat roofs, as they did not differ radically from the Latin basilica. The question of the vault should be first attacked, as the key-note of Romanesque architecture. According to Dr. Reber himself, the first buildings vaulted in Germany were the cathedrals of Mainz, Speyer and Worms, and the abbey church of Laach, all in the Rhenish provinces, none of these vaults being executed until the XII century (p. 281): the fact that wooden ceilings were retained throughout the greater part of Germany until the close of the century shows how foreign vaults were to any "organic development." On the other hand, if we turn to France, we find that already by the middle of the XI century, fully fifty years before their appearance in Germany, vaults of various kinds were universally employed in several of the French schools: the tunnel-vault in Auvergne; the cross-vault in Burgundy and the central provinces; the dome in Perigord. Even Italy probably preceded Germany in the construction of cross-vaults (p. 317), which soon became the universal method of Romanesque and Gothic vaulting.

The second point regards changes in the ground-plan. The Latin basilica was composed of a central and side aisles, with semicircular end, between which a transverse arm was often interposed in the larger churches, thus giving to the whole the form of a *tau*. In Romanesque architecture the main changes from this plan were, (1) the lengthening of the transverse arm, (2) the prolongation of the church beyond this arm, and (3) the changing of the simple semicircular apse into an elaborate choir with chapels and side-aisles, thus making the whole plan cruciform. To describe the change in a word, the whole upper part of the church was developed at the expense of the nave, thus changing the entire architectural effect of the interior. In Germany the rich development of the choir was very exceptional, as Dr. Reber himself remarks in speaking of the church of St. Godehard at Hildesheim (p. 257), whereas in France it appeared much earlier as a systematic arrangement, and is probably seen in greatest perfection in the XI-century churches of Auvergne (p. 348). As for the lengthening of the transverse arms of the cross, it was no novelty, having been a common characteristic of Byzantine architecture.

The third important feature to be examined is the change in the architectural features of the interior. We all know what a contrast there is between the bare flat walls of the Latin basilica and the rich interior of a typical Romanesque church, with its high arcades, its broad gallery, its rich system of ribbings to support and strengthen the vaults, and its clus-

tered piers and engaged colonnettes connected with arcades and windows. If the question be asked, what national development most contributed to all this, that of Germany or France, I think the consensus would, in this case also, be in favor of France. Without going beyond the limits of this book, a comparison of the systems of the great German Cathedrals as exhibited in figs. 163–166 with those of some French churches given in figs. 220–224 would be sufficient to show the differences. The German architecture uses bald square piers, and is plain and rough: not only has it none of the rich architectural detail of the French, but it is lacking in artistic feeling and in proportion, as, for example, any appreciation of the beauty of the arch. The narrow arches are generally but insignificant connections between piers, the capitals mere cubes, the walls above unbroken by the fine open galleries that give half their beauty to French, Lombard and Norman interiors. Beside all this, the examples of German architecture we are criticising are the very finest; for, as Dr. Reber remarks (pp. 279–80, *passim*) in all Germany, only Saxony and the Rhenish provinces could boast of fine architecture until the second half of the XII century, when France was already laying the foundations of the Gothic style. The architecture of most German provinces was quite barbarous. I append some of Dr. Reber's own remarks,[1] which express better than I can "the great variety and the whimsical character of the architectural forms employed by the Alemannic race." How far we are from the constant rational and organic advance with its excellent constructive system and the artistic perfection of its forms which is spoken of in the Introduction! It is true that in France there was no architectural unity during this period: but there was a far greater and more scientific activity, each school striving, by independent exertions, to attain one practical end, the perfecting of the system of vaulting, and one æsthetic end, the perfection of architectural form. It is safe to say that a careful study of the French schools and their relations will make their superiority evident, though here it can only be alluded to.

In the sphere of painting, also, Dr. Reber seems to exaggerate the superiority of Germany over Italy. He invokes (p. 424; *cf.* p. 465) the testimony of Leo of Ostia, who says that Desiderius called (1066 A.D.) *mosaicists*

[1] *Westphalia:* "Vaulted constructions early appear on the right bank of the Rhine in Westphalia, but their execution is clumsy and inartistic" (p. 294). *Saxony:* "In the Saxon provinces, even after systems of vaulting were engrafted upon the basilical plan, the corresponding development of the supports was long delayed" (*ibid.*). "In *Hesse*, *Franconia*, *Bavaria*, and the *Austrian* territories the introduction of vaulting exercised no important influence upon the formation of the plan and the exterior until the period of transition to the Gothic style" (p. 295). Of the *Rhenish* style, even, before 1130, he says "the greater number of the horizontally ceiled Rhenish basilicas" are "extremely rude, and entirely devoid of ornamentation." In Southern Germany most churches were built of wood.

from Constantinople because the art of mosaic painting had been lost for over five hundred years in Italy. Reber erroneously makes Leo say this of Italian art in general, a statement for which the text gives no excuse. Furthermore, it is known—that Leo is incorrect even within the limits of mosaic-painting, for the time which elapsed between the last of the numerous mosaics of the IX and those of his own time amounted only to about 170 years, and within this period, even, a number of mosaics were executed (Sergius IV; tomb of Otho; Grottaferrata). The frescos of this period are very numerous, and those of the XI century at Nepi are not surpassed by any single work of Romanesque art.

In sculpture, there is no doubt of Germany's superiority in certain branches, like metal-work; but in monumental marble sculpture Dr. Reber has purchased it by what seems a rather unjust shift. He compares the fine sculptures at Wechselburg and Freiberg, which were executed in about 1250, not with the sculpture in France of the same period (Gothic Cathedrals) or even a quarter of a century *earlier* (Notre Dame), but with works that are a hundred years older! Certainly the result would be different if a chronological equilibrium were observed. In this connection I wish to call attention to the following remark about metal-sculpture in France (p. 477; *cf.* p. 603): "Metal-work was but little in demand" and "it appears that the few requirements in monumental bronze casting were at first supplied, as in Italy, by importations from Constantinople . . in later times by the productions of the Belgian school of Dinant." As a matter of fact, the art of casting metal statues, even, was preserved in France through the Carlovingian and Romanesque periods, and any one can know of the many and important works executed, by reading Emeric-David's *Histoire de la Sculpture Française* (pp. 10, 13, 17 and *passim*). Unfortunately, none of these works remain, but their existence should not be overlooked.

Although Dr. Reber does not follow the earliest stage of the transition to the Gothic in central France, but takes it up where it is most apparent and where it was considered by the archæologists of twenty years ago to commence, his account of the beginnings of the Gothic are well written and interesting. There is a judicious admixture of technical phraseology and scientific explanation with the element of æsthetic appreciation. As remarked above, there is a well-considered attempt to give a reasonable and systematic explanation of all architectural changes and characteristics. This is also quite evident in the pages devoted to an explanation of the various phases through which Gothic architecture passed after attaining its perfection.

Dr. Reber does not do justice to Gothic sculpture. He declares that the subjects available for representation were not extended, that the symbolical cycles and Biblical subjects were of less importance, and that sculpture limited itself "to an exposition of the Passion and the Last Judgment, and in

single figures to the Virgin and certain saints." This statement seems singular in view of the rich variety of Gothic sculpture—especially in the French cathedrals—a variety unknown to Christian sculpture, before or after.

The chapter on *Painting of the Gothic Epoch* is remarkably good and full, though excessive prominence is given to painting in Germany and the Netherlands, to the detriment of Italy; and the beauties of French glass-painting are not appreciated, nor its monuments described.

Thus far, the general plan of Dr. Reber's book has been described and discussed. It would be out of place to enter into minute criticism,[2] but I cannot close without calling attention to some points of importance. In speaking of the early Christian Basilica, Reber asserts that in Rome at least the addition of an atrium in front was exceptional: it would be easy to show, from ecclesiastical writers, that such was not the case, and, though he cites but a single example—San Clemente—he can hardly be ignorant of others before the churches of SS. Quattro Coronati and Santa Cecilia.[3] These examples point to the conclusion that the small as well as the large basilicas had atria; in fact, the early liturgical customs made them almost indispensable.

While the account of Latin architecture in Italy is quite clear, that of the styles developed in the rest of the Christian world up to the VI century is very confused. When he asserts that "the basilical system was retained for centuries, with but slight alterations, in Algiers, in the Cyrenaica, in Egypt, and in Asia Minor," it shows a lack of recognition of the architectural originality shown, especially by the architects of Egypt and Asia Minor where the pointed arch and the cross-vault were successfully employed. It is useless to assert that "representations of sacred subjects were condemned altogether by Tertullian and Clement of Alexandria," and that the Council of Elvira in 305 forbade paintings of holy subjects. To use these arguments

[2] On p. 255, the introduction of Crypts is attributed to the German architects of the Carlovingian period, whereas it is a well-known fact that they are found in Italian churches—and even in the East—at an earlier period.

On p. 335, a great antiquity is attributed to the churches of Provence on account of the classic style of their architectural details: French archæologists are now quite unanimous in rejecting these early dates and in referring all these churches to the latter half of the XI and to the XII century. Dr. Reber also opposes himself to the universal concensus which attributes the vaults of Norman churches to the XII century, when on pp. 364–66, he attributes them to the XI century.

On p. 659, he confuses the two sets of mosaics in the Baptistery of Florence, referring them all to 1225 and to Andrea Tafi and Fra Jacopo, whereas the apse only belongs to that date and is by Fra Jacopo. Andrea Tafi lived nearly three-quarters of a century later, and contributed to execute the numerous mosaics of the dome which belong to the years before and after 1300.

[3] For other examples, see MOTHES, *Die Baukunst des Mittelalters in Italien*, p. 152.

as proofs of the hostility of Christianity to art, is to deny the evidence of the senses. To the statement that, "in the time of Constantine, pictorial mosaics must have been rare," it would be easy to reply by giving a list of many churches then adorned with mosaics, and by referring to his edict in favor of mosaicists.

Remarking on the little use of sculpture during the early period, the author remarks: "from the outset sculpture was almost restricted to profane work, being but rarely extended to tombs, sarcophagi, *etc.*, and to liturgic utensils, in which application the art was degraded to mere decoration." Dr. Reber cannot mean what these words imply, for a simple look into Garrucci's *Storia dell' Arte Cristiana*, in which several hundred early-Christian sarcophagi covered with reliefs are reproduced, or a glance in the *Liber Pontificalis* at the mere enumeration of works in metal-sculpture with which the churches of Rome alone were enriched, show how extensively sculpture in marble and metal was employed. A curious phrase would seem to deprive Christian art of all credit to its best works, for we read (p. 103): "the images of Christ, of St. Peter, and of St. Hippolytus, whether known by descriptions or by the statues themselves, were neither iconic nor indeed in any way peculiarly Christian, but belonged to general classes universal in antiquity, namely, when standing, to the ideal statues of philosophers and poets, and when sitting, to those of rhetoricians." The aim here is to deprive Christian art of its finest early productions—the statue of Christ as the Good Shepherd, that of St. Peter in his basilica, and that of St. Hyppolytus at the Lateran. If the work of Christian artists, treating Christian themes, is not Christian art, what is it? The type of Christ as the Good Shepherd in the statuette referred to does not differ from that on a number of sarcophagi in which he is performing miracles, and the head of Peter in the statue is just the same as that on a bronze dish. Does Dr. Reber expect Mediævalism in the IV century?

I have omitted all criticism of the chapters on the non-Christian arts of the East; and will only make a single exception, in regard to the origin of Mohammedan art. Dr. Reber speaks as if the whole of Arabia had been always given over to the nomad tribes, and does not recognize the probable artistic developments attained by the highly-civilized kingdoms of Yemen and of North Arabia, with their settled and industrious population and large cities: hints of their artistic productions are found scattered throughout the pre-Islamic and early Mohammedan poetry and legends of the nomads. In view of these facts it is incorrect to say that "the indigenous arts seem to have been limited to weaving and tapestry." Again, in saying that the "textile industry was transferred (from Arabia) in later times to the provinces of Shusistan and Fars in Southern Persia," he just reverses the true order. The influence of Persia on early Mohammedan

art is simply incalculable. It also sounds rather far-fetched to consider the inclosure of the court in the Mosques to have been derived from Egyptian models, when it was so much simpler to think it of Christian origin. Through the early part of Mohammedan conquests we know that all the architects they employed were Christians, and it is natural that, where we find characteristics in common, we should attribute their presence in the mosques to Christian influence. This practical view does not seem to have struck Dr. Reber, and perhaps on this account he fails to recognize correctly the origin of the pointed arch. In his opinion it originated in Mesopotamia and was "brought by the Moslems to Egypt from their Arabian home." Were that the case we should expect to find it in Moslem early buildings outside of Egypt, but we do not. It does appear, on the other hand, in the Christian buildings of Egypt dating several centuries before the coming of the Moslems,[1] and the earliest example of it in a Mosque is in that of Tulun (879 A. D.) built by Christian architects.

A. L. FROTHINGHAM, JR.

DORISCHE POLYCHROMIE, von L. FENGER, Arch. Prof. Untersuchungen über die Anwendung der Farbe auf dem Dorischen Tempel. Mit einem Atlas von 8 Tafeln in Farbendruck. Small folio, pp. 46. Berlin, 1886, A. Asher & Co.

In the following remarks I desire to call attention to a work which is of the greatest interest alike to all artists, amateurs, and professional students of art who may desire to obtain, from a special treatise, a clear conception of the system of ancient polychromy,—if we may retain this designation, unfortunate and inexpressive though it be. The number of persons interested in the subject is certainly great, but, unfortunately, the confusion that prevails in this field is also great; and it has lately been even increased by hasty and superficial publications. The book of our author, who is a professor of architecture in Copenhagen, must consequently be greeted with pleasure. In spite of its brevity, it contains much more than its title seems to promise, not only by reason of the general law that every truly scientific investigation, even if it limits itself to but one definite point, cannot help throwing light upon surrounding fields; but also because, at its close, the work is made to include the painting of sculpture. Every discussion, every word, even, betrays a masterly command of the material; a command without which the terse presentation would have been absolutely impossible. Under these circumstances, though the reading of the book requires the closest attention, it certainly deserves it.

[1] See my review of BUTLER'S *Coptic Churches*, in the last number of the JOURNAL, vol. II, p. 448.

During the last generation, the system of polychromy as applied to Doric temples has not received any systematic investigation. How much the richer must be the harvest from a field which for a long time has lain fallow; in the same way as, in the field of science, the investigations which have been suspended for some time and are undertaken anew, without preconceptions, yield specially rich results. The author was the right person to gather the harvest. One of the most important factors which he makes use of, is the historical development of polychromy, a factor in this department that has been too long neglected; in reality, it is only by this method that the knowledge of the subject is made possible. No one can, at present, any longer deny that coloring was used in Doric architecture: the only question is, how far the use of color extended.

In the first part of his work, entitled *Farbenfunde und Ergänzungversuche*, the author treats of matters of fact, giving an historical survey of the discovery of colors and of the systems proposed up to the present, which is full of excellent remarks and sound judgments. At the very outset, so to speak, we find those unwearied and accurate investigators, Stuart and Revett. Hittorff was the first who attempted a complete restoration of a Doric temple, with colors. He represented the ornaments as dark upon a light ground; he claims, furthermore, that the greater part of the Doric temple, in Sicily at least, was either white or yellow. As opposed to him, however, Semper, the extremest advocate of polychromy, maintained, as is well known, that the coloring was extended over all parts of the temple. It was unfortunate that he expressed himself so positively at so early a date, for, though in his great work, *Der Stil*, he seems, to be sure, to cling to his extreme views, yet, in fact, he partially retracts them. C. Bötticher, although in many respects an opponent of Semper, constructed his system of polychromy on Semper's modified views. I think, however, that the author generally does well to take a position in opposition to the purely theoretical methods of Bötticher. Justly, also, is a high place given, in reference to polychromy, to the keen and accurate observations of Penrose. B. Kügler has shown himself to be the most notable opponent of Semper in this field: with him and his views the author begins the second part of his work: viz.,—*System der Polychromie*. Kügler wished, at first, to distinguish between the architectonic framework and the surfaces that only fill up, and to allow color only to the latter: but he was subsequently obliged to admit that the triglyphs, which he treated as supports between the epistyle and the cornice, were blue in Athenian temples; whereas, on the other hand, it was most probable that the metopes were uncolored. What the author, at this point, says against the hypothesis of the origin of the metopes from window-like openings, seems to us well-grounded in fact; as well as his explanation of the Greek word *μετοπή*, as "das Stück zwischen den

Balkenlöchern." Already had Reber (*Gesch. der Baukunst*, p. 267) expressed the conjecture that, as a rule, only the parts of the temple that originally were wooden were colored; and the condition on which this hypothesis rests, to wit, the derivation of the Doric epistyle from a wooden construction, hitherto much opposed, has been proved beyond a doubt; chiefly through the discovery of numerous terracotta covering pieces (*cf.* especially the 45th Winckelmann's *Program der archäol. Gesellsch.* of Berlin, 1881). After an acute analysis of Vitruvius (*lib.* IV, 2. 1) and a searching examination of the monumental materials, the author adopts Reber's view in the following words (p. 20): "Reber's hypothesis, that the coloring was principally restricted to the parts originally wooden, seems to be entirely valid for the decoration of the beams of the epistyle, which we are able still to perceive; but it becomes questionable where the architrave, as in the case of Tuscan temples, was made of wood; and especially as regards the roofs of the temples, when these were made of stone. If the metopes were, as I conjecture, originally white, this would very well accord with Reber's view; and it certainly does not at all contradict it, if we assume a rich use of coloring in figures and ornaments united with the painting of the beam-decoration (*Bohlendecoration*)."

The third division of the work treats of *Decorative Einzelheiten*. Here the historical method of treatment is, very rightly, employed, the Egyptian and Assyrian customs being the point of departure: the comparative survey of terracottas is also of importance. It seems that the progress was gradually made from light ornaments on a dark ground to the reverse. The Doric kymation is developed by the author from the color-ornamentation of the Egyptian chamfer. The egg-ornament (*eierstab*) exhibits, according to the author, the progress from merely painted representation to sculptured decoration, with an entire omission of colors.

The last division treats of a subject which at the present time seems to many the most important: *The painting of sculpture*. The author starts from the proof that the metopes were originally either perfectly white or had an ornamentation painted in colors on a white ground; and he inquires, whether uncolored sculptures could have been introduced into this earlier decoration without disturbing its harmony: he gives a negative answer to this question, and rightly. At the same time, it is his opinion, that there might as well have been colored figures on a white ground, as white figures on a colored ground, as also in the rest of the decoration; and that here, likewise, one method in the course of time possibly supplanted the other. According to tradition and to discoveries, which have been carefully observed, especially of late, there can be no doubt whatever that, from the earliest down to the latest periods of antiquity, color was applied to sculpture. But, how was it applied, especially in the best period? Before these questions can be

definitively answered, several preliminary questions must be settled: that of the beginnings of Greek art, and that of its dependence upon Egypt and Assyria: in other words, "did this abstraction from the realistic picture, which the colorless relief as well as the colorless sculpture in the main includes in itself, exist before the beginning of Greek art? did the Greeks unconsciously adopt this abstraction? did they originate it, or did they gradually rediscover what the earlier civilized races had discovered before them?" The first of these questions, which appears to me at the same time the fundamental one, must certainly receive a negative answer. Admirable is what the author says upon the original connection between painting and sculpture in Egypt, and also in Assur: that Conze had expressed the same opinion in reference to Greek art (*Sitzungsber. der preuss. Akad. d. Wissensch.* 1882, p. 563) the author himself remarks. The Egyptian system preferred a dark coloring on a light ground, the Assyrian the reverse. "We shall have to accept it as something traditional," continues the author, "that also in Greek art the relief stood in the closest connection with the surface-painting or the colored design. Both kinds of art were cotemporaneously developed and preceded painting in the strict sense; that is, painting in light and shade." The author here takes occasion to discuss the statement of Pliny concerning the former exclusive use of the four *colores austeri;* and, in presence of the monuments (for instance the Etruscan tomb-paintings), arrives at the conjecture that that limitation had reference only to carnation. If this is the case, we are, in my opinion, required to ascribe to Pliny a grave error.

The author next meets the objection that they could not have painted a material so splendid and semi-transparent as marble. Very correctly does he remind us that marble only gradually supplanted other materials for statues of divinities, to whose gorgeous coloring people had become accustomed: furthermore, he reminds us that, according to the vase-paintings, men and women in all circumstances received different coloring. In reference to the painting of marble reliefs, the author refers also to the tomb-monuments, where white sculptures alongside of representations merely in color, would unquestionably have been unendurable, and are absolutely inconceivable (compare the stele of Lyseas with that of Aristion). On the other hand, we must accept the fact, that in bronze-work illusion was obtained in mere forms with but slight use of color (eyes, lips, and perhaps hair). At all events, the use of color became more and more sparing: the reliefs of the Mausoleum have traces of color, but those of Pergamon have none, even in the eyes. The colors in many marble statues, especially of the last periods of Greek art, had no greater significance, in respect of decoration, than the toreutic ornamentation on bronze figures. "When, at the time of the Antonines, a return was made to color or else the garments were executed in colored marbles, while nude parts were made in white or dark marble, we

must here recognize only one of those swingings of the pendulum, according to which the human mind moves." The painting of sculpture, perhaps leaving earliest antiquity out of view, seems to me to have had something conventional, and nothing realistic. The author himself has called attention to the Tanagra figurines, the nude part of which is mainly white, in spite of the complete coloration of the other portions. As to the origin of painted sculpture, besides the points of view emphasized by the author, I desire to bring forward an additional one, which at the same time calls to mind the covering of wooden architectonic members with terracotta: this is the point of view of preservation. As a very common material for sculpture in the earliest periods, we must regard wood; this, however, requires for its protection a covering; and, to retain such an ancient custom even under changed circumstances, lies deeply grounded in the Greek nature. Out of the growth of Greek sculpture is its coloring to be explained: and there is a complete failure to recognize this fact, when, in modern times, we fancy we can settle the matter by the question, Shall we paint our statues? A tradition, which is not our own, should have no decisive force here; only our own eye. For this the author has prepared his beautiful plates, only the red and blue color on them seems a little too brilliant: much more harmonious is the effect produced by the view of the Aigenetan temple furnished by the author, than the attempt, lately made in Berlin, to exhibit the east pediment of the temple of Zeus at Olympia. The main parts of the construction—columns, cella, walls, epistyle—are of one color, namely, yellow. For this color, or else for a subdued white, the author takes occasion to make a plea; and that on Greek soil no purely-white marble temple ever stood, is admitted by every one who has seen with painful eyes the gleaming columns of the new Academy beneath the Athenian sun. The pediment is, to be sure, in various colors, but is not unharmonious, on account of their symmetrical distribution; to which the author rightly refers as a new point of view in attempts at reconstruction. That the graphical representation on the surface is not of binding force for the plastic effect goes, of course, without saying; and yet it has been frequently forgotten: and this unavoidable defect must, in conclusion, be emphasized, even in the presence of this work, which, however, by text and plates has contributed much to the solution of the question of polychromy in general, and seems to have brought, on the whole, to its final conclusion that of the polychromy of the Doric temple.

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Königsberg, Prussia,
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La Renaissance en Italie et en France à l'époque de Charles VIII. Ouvrage publié sous la direction et avec le concours de *M. Paul d'Albert de Luynes et de Chevreuse, Duc de Chaulnes*, par M. Eugène Müntz, et illustré de 300 gravures dans le texte et de 38 planches tirées à part. 4to, pp. xi–560. Paris, 1885, Firmin–Didot.

The literary and artistic developments of the early Renaissance have never been treated more charmingly than in this beautiful volume, which delights the eye and mind both of the general reader and of the specialist. Its publication is due to the initiative of a princely patron of art and learning, the Duc de Chaulnes, whose premature death prevented the completion of his section of the work. The central idea of the joint publication was to be the expedition of Charles VIII to Italy. In order to show to what extent France, at the close of the xv century, was indebted to Italy in the Arts and in Literature; and in order to appreciate the political relations of the two countries at that time; it was necessary to go back in the course of events to the historical epoch in Italy when the first steps of that great movement we call the Renaissance were taken. In carrying out this plan of coöperation it soon became necessary to divide the work, the Duc de Chaulnes taking charge of the diplomatic and military history of the expedition, and M. Müntz of the literary and artistic: the latter part of the work is before us: "The expedition of Charles VIII to Italy," says M. Müntz, "is, with the discovery of America, the capital event of the second half of the fifteenth century, the point of departure, for our country, of a new era, and, for Italy, of a decay whose effects are still felt even to-day." M. Müntz is no blind admirer of the Renaissance, but appreciates the higher qualities displayed in Italy during the preceding centuries. In the xv century "individualism, as Burckhart has demonstrated, everywhere took the place of the great national or religious efforts, of the community of aspirations, of the spirit of discipline" which were characteristics of the Middle Ages. Naturalism and Classicism are the two leading currents which M. Müntz sees in the Renaissance, though he does not recognize so complete a change, so great a birth throughout the human consciousness, as would seem warranted for a period when the Humanistic principle, supreme for the time, created a new universe of thought: he thinks of it more as a gradual and peaceful propaganda, a progressive transformation.

At the start M. Müntz, in studying the governing spirit of the Renaissance, opposes himself to the usual idea that the Paganizing mania which invaded every branch of thought—even the sacred field of religion—indicated Pagan religious aspirations, or any hostility to Christianity. According to him, the Catholic Church, understanding the advantages of an alliance

with the new movement, led it by the hand. That it did so is, of course, a fact; but it is also a fact that, up to the reform movement of the Council of Trent, the spirit of the Church was far from being a saintly one: had there not been a Reformation within as well as without the Catholic Church, the social result would have been quite different. Still, M. Müntz brings forward, in support of his opinion, a goodly array of proof which his intimate acquaintance with the period makes formidable. For him Lorenzo de' Medici is the type of a reconciliation of Christianity and Antiquity. That complete "eclipse of the moral sense," that abandoned revelling in crime which revolts us in so many leading men of the Renaissance in Italy, he seeks to identify as well with the mediæval period. In the political order M. Müntz recognizes the complete disappearance in the XV century of all feeling of patriotism. The luxury which invaded all upper classes at this time made it possible for private patronage to be generously given to artists. A good picture is given of the entire social condition of Italy, the occupations and fêtes; of the state of letters and sciences; of the humanists, their immense popularity and final insipid imitation of antique models; of the advance in pedagogics,—the love of books and the foundation of libraries.

But I cannot dwell long on this portion of the volume, however attractive, and must pass to the pages devoted to the Fine Arts. In a couple of chapters the general spirit of the early Renaissance is defined; "for a certain number of general principles presided over the development of Italian civilization of the XV century and gave it that unity which characterizes it." The elements which entered into the education of the artist; the duration and stages of his apprenticeship; his opportunities for studying from nature, from the antique (especially through plaster casts), and from the great masters of his own and preceding generations: then the life he led after entering on his career; his position in society; the conditions that governed his patronage, and the competition with rival artists—all this is treated in chapter VI: in the following chapter, the aspirations, teachings, technical processes, choice of subjects, style and inspiration of the new school of artists. M. Müntz remarks that, in general, "the Scriptures and Lives of Saints continue to inspire the immense majority of works of art: the proportion of profane compositions is very small compared with the imposing array of religious compositions. . . . If the subjects, however, have not varied, the manner of conceiving them has become deeply modified. The triumph of realism brought with it the disappearance of the allegoric and symbolical element as the Middle Ages had conceived it. The great biblical cycles, elaborated by Ghiberti in his second gate, by Benozzo Gozzoli in the Campo Santo at Pisa, and by the painters of the Sistine Chapel, are no longer anything but more or less animated or attractive narrations."

Even though this is a time when the study of man is brought into honor, it is a peculiar fact that contemporary events are almost never represented in art: were it not for the numerous portraits and the realistic treatment of religious subjects we should be at a loss to know much about the peculiar physiognomy of the time.

The most singular feature about the revolution in architecture is the sudden casting away of the Gothic and all previous forms, and the immediate substitution, without transition, of a complete architectural system modelled on the antique. In speaking of the new style in sculpture headed by Donatello, M. Müntz writes some eloquent lines on this great artist who is, and deservedly so, his great favorite. Many interesting pages are given to the fascinating subject of miniature painting, a subject which writers on art are too apt to overlook in treating of this period. Keramics; wood and ivory carving; mosaics, nielli and wood-engraving are all spoken of in turn, at the close of the first half of the volume.

We cannot follow M. Müntz in the chapters, where, in a style full of charm, he takes up successively and in topographical order the different art-schools of Italy, when, after the first flush of the revival "distinct schools came into being . . and the same idea appears varied in a thousand ways." Milan, with its artistic sterility and imported artists, and finally with its Bramante and Leonardo: Padua with Petrarch and Mantegna: Verona with Pisanello: Venice with the Bellini, Antonello, and the Lombardi: Ferrara, Mantua, Bologna, Urbino with Piero della Francesca—are all rapidly enumerated. But the centre is of course Tuscany, and Florence, next to which comes Rome.

The third book treats of the Renaissance in France. The latter half of the fifteenth century was for France a time of great decline in all the arts. In architecture the Gothic style had reached the lowest stage of bad taste, and sculpture had in general become weak and affected, while painting hardly existed at all as an art, except in tapestries. What a contrast to the thirteenth century when France stood at the head of the artistic advance! The only exceptions were, in sculpture the school of Dijon and Michel Colombe, and in painting Jehan Foucquet; who may be termed the precursors of the Renaissance in France, and were certainly great artists. But, although we must confess that, up to the time of the expedition of Charles VIII in 1494, France had not undergone any revolution in the Fine Arts, it is a great mistake to diminish the originality of the art which arose there after this date, and flourished during the sixteenth century. In both architecture and sculpture France merits a foremost place, next to Italy, for she realized a far more classic and pure form of the Renaissance than Germany. The student of the great French châteaux and of the sculptures of Jean Goujon cannot fail to see how much indivi-

duality and national character art retained, though its inspiration did come from beyond the Alps.

As a thoughtful study of Renaissance art in all its phases and in its broadest relations to literature and to general culture, this book is of the highest interest, and a model in its field. A notice of it would be incomplete without warm praise of the illustrations, which are chosen with the greatest care and discrimination, and are admirably executed. There is a decided advance on the usual range of selection, and importance is given to original drawings and to miniature-painting.

A. L. Frothingham, Jr.

Syrian Stone-Lore; or, The Monumental History of Palestine. By Claude Reignier Conder, R. E., Author of *Tent Work in Palestine, Heth and Moab, etc.* Published for the Committee of the Palestine Exploration Fund. Pp. xiv, 472. London, 1886, Richard Bentley and Son.

Captain Conder has taken an attractive subject, and written a book which will no doubt find a good many readers. It contains ten chapters, and treats, in succession, of Canaanites, Phenicians, Hebrews, Jews and Samaritans, The Greek Age, The Herodian Age, The Roman Age, The Byzantine Age, The Arab Conquest, and The Crusaders. It is furnished with three maps, twenty-nine illustrations, and an index. The dedication is to Prince Albert Victor of Wales. It is plainly intended, not merely by the author, but by the Committee of the Palestine Exploration Fund, to be a standard manual, for popular use. Apart, then, from the fact that the author courteously invites criticism and correction, it is proper that the book should be examined with great freedom.

No depreciation of Captain Conder's services is involved in the statement that those writings, and parts of writings, in which he has dealt with his own travels and immediate observations are of greater value than those in which he has entered upon more general discussions. The sagacity, endurance and executive power without which there can be no valuable explorations, do not necessarily imply the accurate, detailed and patient scholarship, the familiarity with scientific discussions and the trained judgment which must be brought to bear on the tentative results of the explorer. Rarely are these two sets of qualities combined in one man. They were, in Dr. Edward Robinson. They are not, in Captain Conder.

This makes it all the more unfortunate that he should have undertaken a work of so wide a scope as the present. The field is too large for any one archæologist; it is too large even for most compilers; and far too large

for a compiler of limited resources. In the "List of Authorities" some of the most authoritative are conspicuous by their absence. This applies especially to German books, and to French in a less degree. For Assyriology, the dependence is on the little coterie of English students of the wedge-inscriptions, with some aid from Lenormant. The names of even Schrader, Delitzsch and Haupt are wanting. The chapter on Phenicia seems to have been prepared without reference to the *Corpus Inscriptionum Semiticarum*, and indeed with no endeavor to master late investigations and discussions. In Egyptology, we have English names in abundance—although the publications of the Egypt Exploration Fund are lacking—a few French (notably not Maspero), and of German, Brugsch (in translation), but not Wiedemann, nor even Ebers. For Palestine topography and geography, we have the English, again, Robinson and Socin (in translation) but not Guthe, nor Schick, nor any reference to the periodical issued by the German Palestine Exploration Society. And so one might go on. This does not arouse bright anticipations for the trustworthiness of the book.

Nor does a perusal of it succeed in establishing one's confidence. The fact that the proposed plan is not consistently carried out, and that we have a good deal of matter which is related to the monumental discoveries either remotely, or not at all, while much is omitted that ought to be discussed, is not the matter of chief consequence. Apart from this, there is a grave defect in method, and a grave defect in the results, both closely related to each other, and to the limitations already referred to. The defect in method is substantially this, that, while there is much assertion, there is little care to substantiate assertion. On questions of fact the name of an author is sometimes a guarantee of precision. Unfortunately, this cannot be affirmed in the present case. Nor is the lack supplied by adequate proofs. For sound argument is substituted the authority of popular names, or the convenient "probably." This method does not become harmless when it is employed by so honest and earnest a man as Captain Conder. It is essentially a vicious method, and is one of the greatest hindrances of our day to the spread of real knowledge. Popular books cannot be filled with the niceties of specialists, but when they are designed for instruction they can and should embody recognized scholarship, or offer rational grounds for the acceptance of their statements. It would be no loss, in the present case, if the necessity of giving reasons should have the effect of considerably diminishing the number of assertions. One manifestation of the defect referred to appears in the foot-notes, and the mode of reference, there and elsewhere, to the authorities on whom dependence is placed. The cases are legion where the authority for fact and for opinion is not given, or given merely by name, without mention of the treatise or book. The earnest reader is baffled and cut off from the intelligent pursuit of the subject. It

may be a question how far foot-notes are called for, in a popular work. If they are used, they should justify themselves by being useful. As a result, partly of this superficial method, partly of other matters previously touched upon, there is a great confusion in the book between established scientific facts, plausible conjectures, exploded hypotheses, and the capricious vagaries of the riders of archæological hobbies. What is an intelligent lay reader to do, when he finds, on the first page, that if "Syria" "be of Semitic origin, it is not of the same root as Assyria, being spelled with *Samech* instead of *Shin*," or that the Egyptian name for Syria (Luden = Ruten) "is probably connected with that of Lydia," or (p. 2), that the Biblical Hor ha *Har* (*Nu.* XXXIV, 7) is "perhaps" to be connected with "the Semitic Akharn, 'the back' or 'west,'" *etc., etc.*? Perhaps the pages on the Hittites will be modified by the author's discovery, so oracularly announced not long ago, of the decipherment of the inscriptions of Hamath. Until the public are permitted to share this knowledge any opinion would be venturesome.

While one might thus go on browsing through the book, its characteristic features can be presented by illustrations taken from some one portion of it. The chapter on "The Hebrews" is better than some others, for the purpose, because the sources of information are so abundant. It covers some thirty pages, and begins with a wise rejection of the equation, Egyptian *Aperu* = Hebrews. On the next page we have an allusion to the "Moabite Stone," but a very inadequate one,—was not the publication of Smend and Socin issued in time? P. 116 reminds us that Hezekiah sent Sennacherib, according to the latter's account, "thirty talents (£15,000) of gold, 800 talents (£400,000) of silver," *etc.* Nothing can be more obvious than this. In the same way, doubtless, the Biblical statement (*II Kings*, XVIII, 14) might be annotated:—"300 talents (£150,000) of silver,"—even although a trifling discrepancy of £250,000 is thus invented. Of course, if a talent of gold has a value of £500, a talent of silver must have the same value. "A pound's a pound, all the world around,"—and why should we raise difficult monetary problems by distinguishing between the money equivalent of a pound,—or a talent,—of silver, and that of a pound, or a talent, of gold? Captain Conder's method introduces a pleasing simplicity into the systems of ancient weights and values for which many besides unlearned readers will be grateful. We hear (pp. 117, *sqq.*), a little more of the Siloam inscription than of that of Dibon, but the author is inexcusable for giving us a drawing from his own sadly imperfect squeeze, instead of following the painstaking and deliberate impressions and drawings of Guthe, Socin and Kautzsch. The epigraphic remarks are unimportant, though the subject is far otherwise. Many Assyriologists would be glad to know as much about the use of papyrus in Babylonia, as Captain Conder asserts (p. 118), from the interpretations of Talbot, Sayce and George Smith, and would wel-

come an equal assurance of his affirmation that "the ark-builder in Akkadian story is Tamzi, who became the Phoenician Tammuz" (p. 120). The argument for age from the archaisms of Genesis (p. 121) is antiquated. The historical coïncidences between Hebrew and Assyro-Babylonian records are summarily dismissed (pp. 123 *sq.*), and the list of cuneiform monuments in Syria (p. 124) is confused, and imperfect. It is not even clear whether the writer wishes to say that Nebuchadnezzar's inscriptions at the Dog River are included in the "six Assyrian tablets" found there, and the article cited from the *TSBA.* contains no allusion to inscriptions by Nebuchadnezzar. Our hopes are raised a little by finding the author cautious in statement with regard to the Elamitic sovereignty in Abraham's time, but they begin to fall again at his confident translation (p. 125) of Ur-uk (= Ur?) as "great city," and we wonder why (p. 126) he thinks "Istar Chemosh probably a double deity." *II Kings*, XVII, 17, to which he does not refer, has perhaps suggested his remark about human victims (p. 128), but his citation of *Hos.* XII, 11 gives color to the suspicion that he thinks it is supported by this passage also, which is not exactly the case. The trifling slip by which *Hos.* XII, 11 is made to refer to Bethel, and the mysterious date of "about 700 B. C." for sacrifices at Gilgal, may be passed by. Indeed, this examination grows wearisome, and one may as well end it by a mere allusion to the remark (p. 137) that "Sennacherib speaks especially of 'workmen and builders,' showing that artisans existed in Jerusalem,"—where the fact stated is incorrect, and the argument childishly superfluous.

Of course, one might call attention to points where the author gives—there is great temptation to say, happens upon—exact facts, and sensible conclusions, but these are so enveloped in matters which are either doubtful or positively wrong as to make the book unfit for the instruction of the people, and for any apologetic purpose worse than worthless. If the treatment here accorded to it seems excessively severe, let it be remembered that the strong language used of it is called forth by the measure in which the scholarship that has gone to its elaboration falls short of being severe enough.

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DE ORIGINE HISTORIA INDICIBUS SCRINII ET BIBLIOTHECAE SEDIS APOSTOLICAE COMMENTATIO JOANNIS BAPTISTAE DE ROSSI [Ex tomo I recensionis Codicum Palatinorum Latinorum Bibliothecae Vaticanae]. 4to, pp. CXXXIV. Romae, 1886, Ex Typographeo Vaticano.

The literary world is watching with unusual interest the publication of the catalogue of the MSS. of the Vatican Library. Many generations of scholars have been obliged to make a special journey to Rome, if they wished to ascertain whether the library contained what they were in search of, and, even when there, found it no easy task to plod through the ponderous inventories. Now, all is changed. Pope Leo XIII, as ardent a patron of letters as he is a wise politician, has thrown open the previously well-guarded papal archives, and has facilitated access to and study of the great collections of manuscripts in the library. Two volumes of the *Catalogue* are already issued. Some scholars will doubtless lament that a general catalogue has not been given, instead of special ones devoted to the different *fonds* of which the library is composed.

Few are acquainted with the history of the Vatican Library: its origin, especially, is enshrouded in darkness, and only in the XVI century does its historical period, I mean that which is known to the learned public, begin. The volume before us is an introduction to Volume I of the Catalogue of the Palatine MSS. It is a dissertation by that chief of Christian archæologists and antiquarians, Giovanni Battista de Rossi, on the origin and vicissitudes of the Vatican collections, and on the catalogues of it that were drawn up from time to time.

The Assemani had commenced in 1756 to publish catalogues, under Benedict XIV, but they proceeded no farther than the Oriental MSS. In 1880 the plan of continuing and completing this project was started, and in 1884 the announcement was made by De Rossi in a separate publication.[1] It was natural to prefix to the Catalogue a full account of the history of the library, all the more that such a work had never been attempted. Comm. De Rossi disclaims the thought of producing a final work, for which the materials are not yet available; but he makes, in this dissertation, such admirable use of the materials at hand as to produce a perfect, well-drawn, and life-like picture of the Library at the different periods of its existence. Three periods are to be distinguished: the first, extending from its origin to the close of the XIII century; the second, from 1295, the pontificate of Boniface VIII, to that of Eugenius IV (1431–47); the third, beginning with Nicholas V and extending to the present time. The first period is but little known, and to illustrate it there are no extensive documents, lists, or inventories: De Rossi has collected all that is known, and has given us interesting chapters on the *origines*. It is certain that in the pre-Constantinian period the churches had libraries, and of this fact De Rossi gives many interesting proofs, mainly regarding African churches. In early churches there was even a hall, at one side of the apse, especially for religious books.

[1] *La biblioteca della Sede apostolica ed i Catalogi dei suoi manoscritti.—I gabinetti di oggetti di scienze naturali, arti ed archeologia annessi alla biblioteca vaticana:* Roma, 1884.

In Rome the official acts of the martyrs, of which so many contemporary records were thus preserved, were consigned to the church archives: next in date, after the third century, come the letters of the pontiffs, of which official copies were kept, forming the *Regesta*. To these should be added a multitude of documents relating to the organization and property of the Church—lists of the faithful, of churches, of the clergy, of monasteries and Church property, acts of donation, correspondence, *etc.* In the sixth century there begins to be frequent mention of the *archivum Romanae Ecclesiae*, and of the works it contained, though even as early as the time of Damasus (369 A. D.) it is clear that such an archive existed in a special building. This early papal library was attached to the Lateran Basilica. It became, of course, necessary for the Popes to have such a library, divided, very probably, into the seven classes which Pope Gelasius enumerates in the fifth century: Bibles; councils; works of the Fathers; decretals; acts of the martyrs, chronicles, *etc.*; apocryphal books; heretical writings. Gregory the Great (590–604) built a library, or rather enlarged one erected by Agapetus, and we gather from his writings that this library was open to the public. So important was this collection that, when the Roman Council met in 649 A. D., it could furnish MSS. of all the works of the Fathers and of the heretics required for consultation during the discussions. To this time belongs the famous *Codex Amiatinus*, now in the Laurentian Library. De Rossi made the discovery, which has caused a great sensation especially among English scholars, that this MS. was written by order of Ceolfred, successor of Benedict Biscop in the abbey of Wiremouth, who was on his way to Rome, bearing it as a gift, when he died. Up to the present the Lateran Library had been the only one of importance, but in the eighth and ninth centuries that of the Vatican became notable. There are convincing proofs that classic learning was often patronized in making additions to the library. The noted Gerbert (Silvester II) at the close of the X century was especially diligent in searching Europe for MSS. of classic writers—the taste for which he had doubtless in part acquired by his contact with the Arabs. During the XI century all the treasure of rare manuscripts, all the contents of the papal archives, were destroyed and dispersed in some great catastrophe of which we are totally ignorant, without leaving a trace behind. Rome at this time had ceased to be a centre of learning, and was a prey to tumult and dissensions. The monasteries in the Roman province alone kept alive the love of learning. The Roman library was not reconstituted until the close of the XII century under Innocent III.

It was Boniface VIII who, in 1295, had made the first catalogue of the manuscripts of the pontifical library, thus inaugurating a custom that was regularly followed for the next six centuries, at every large addition to its contents. In the first year of the pontificate of Boniface (1295) the library

contained about 500 MSS., including books on theology, civil and canon law, medicine, and many other subjects. The documents in the archives were not included. Then came a period when the Popes were wanderers over Europe, and yet when an immense increase was made in the pontifical libraries, as is shown by the catalogues drawn up at Perugia, Assisi, Avignon, *etc.* How long it was before the books, thus dispersed to the four winds, were brought to Rome is shown by the catalogue of the books of Eugenius IV, drawn up in 1443, which includes only 340 volumes of sacred and profane literature.

The foundation of the Vatican Library is in reality attributable to Nicholas V, whose collection of MSS. was then considered to be the finest in existence. But in regard to this and the following period of its history Comm. De Rossi says but little, as it has in part been already treated in detail, and in part is soon to be fully written about by M. Eugène Müntz. The work commenced by Nicholas V was completed by Sixtus IV, at whose death in 1484 the library counted about 3,650 volumes. Sixtus V erected a magnificent and princely library building. Then commenced, beginning with Fulvio Orsini in 1600, that series of additions to the main body of the library, made by donations or bequests, many of which remained as separate *fonds*, like those of Urbino, Queen Christina, the Ottoboniana, Palatina, Capponiana.

The last chapters contain a notice of the various indexes of manuscripts drawn up from the XVII century to the present time, and the book closes with an account of the present printed catalogue.

A. L. FROTHINGHAM, Jr.

LA BIBLIOTHÈQUE DU VATICAN AU XVI^e^ SIÈCLE. Notes et documents. Par EUGÈNE MÜNTZ. 16mo, pp. iv–139. Paris, 1886, Leroux.

The important period of the first half of the sixteenth century had not been investigated by Comm. De Rossi in his interesting study on the Vatican Library, of which a notice is given on the preceding pages. In fact, no special work has been published on the condition of the papal library at this time; and the information given by Panvinio, the Assemani, and later writers, has been but scanty. M. Müntz, whose patient and fruitful studies in this line of work are so conspicuous, has given us in the present charming little volume a picture of the condition of, additions to, and changes in, the important Collections of the Vatican Library from the time of Julius II (1503–13) to that of Paul III (1534–49), not in the form of a history, but mainly by means of documents, reproduced or analyzed, which he had

collected in the libraries and archives of Rome. It is a continuation of the volume which he published lately, in connection with M. Paul Fabre, entitled *La Bibliothèque du Vatican au XV^e siècle*. Julius II was not distinguished as a book-lover, and perhaps the most conspicuous instance of his liberality in this department was his gift to King Emmanuel of Portugal: a superb Bible in seven large volumes, with De Lira's commentary, illuminated by the famous Florentine miniaturist Attavante, which is still preserved in the monastery of Belem. Under Julius II the place of librarian was evidently a sinecure. This was entirely changed under Leo X (1513–21), whose emissaries traversed all Europe seeking for precious manuscripts with which to enrich the papal collections. His love for books led him to institute several useful reforms in the management of the library. He was also a great lover of miniatures. Still, the number of volumes (mostly MSS. of course) mentioned in the inventory of Leo X is only 4070, an increase of but 400 since the death of Sixtus IV in 1484. His successor, Hadrian VI (1521–23), was, as is well known, an enemy to letters; and Clement VII (1523-34) appears not to have taken much active interest in the library, which suffered somewhat, under him, at the sack of Rome. M. Müntz shows that, contrary to the general opinion, Paul III (1534–49) rendered great service to the library, which under his pontificate was largely increased. A crowd of copyists were kept busy, transcribing or repairing MSS., drawing up new catalogues; and under him a part of the MSS. and documents left at Avignon were brought back. The three inventories drawn up by Paul III remained in use until 1620, when they began to be replaced by that in present use. This pontiff also made important innovations in the personnel, adding to the "custodes" the class of "scriptores" which has continued to the present day. Of this fact and others which make this pontificate so important for the history of the library, M. Müntz gives some very interesting documentary proof. Maitre Vincent, of French origin, and Giulio Clovio, were the most noted miniaturists employed by Paul III. As a supplement M. Müntz publishes an interesting inventory of the MSS. returned to Rome from Avignon in 1566, and also a description of the library written by Montaigne in 1580–81.

A. L. FROTHINGHAM, Jr.

G. B. DE ROSSI. LA BASILICA DI S. STEFANO ROTONDO, IL MONASTERO DI S. ERASMO E LA CASA DEI VALERII SUL CELIO (estratto dal periodico *Studi e documenti di storia e diritto*, anno VII, 1886). 4to, pp. 29. Roma, 1886, Tipografia Vaticana.

A noted scholar and student of the Christian antiquities of Rome, Gregorio Terribilini, who flourished at the beginning of the last century, had

proposed to himself the task of writing a history and description of all the urban and suburban churches of Rome. He did not live to accomplish this work; and all that he was thought to have left behind him was a miscellaneous series of notes bound in ten volumes now in the Casanatense Library (Minerva) of Rome, containing much material for his *opus magnum*. All subsequent writers on Roman churches have made copious use of this collection of documents. It was not known, however, how Terribilini proposed to coördinate his materials, and what shape he was to give to his great work. This has been solved through the discovery, recently made by Comm. De Rossi, of a complete autograph chapter of this work, treating of the church of San Stefano Rotondo and the monastery of Sant' Erasmo. It becomes evident that Terribilini intended to make use of the topographical, not the alphabetical, order, following the important plan of Nolli. Comm. De Rossi publishes this chapter with numerous notes, in which he displays his well-known sagacity, brilliancy and wealth of information: in fact, his notes are by far the most important part of the publication. In Terribilini's time, it was the universal opinion that the circular basilica of San Stefano was originally a pagan edifice, converted into a church some time in the fifth century. At present we know that the building is one of the most interesting remaining constructions of early Christian architecture, and was built by Pope Simplicius (468–82), adorned with marbles and mosaics by John I (523) and Felix VI (526–39). The primitive entrance was closed in the seventh century by the addition of the apse with its mosaic.

At the close, is a dissertation by De Rossi himself on the house of the Valerii on the Caelian hill. Near the church of S. Erasmo, at various times since 1554, inscriptions and bases of statues have been found, showing that here stood the noble house of the Valerii, descendants of the ancient Valerii Poplicoli, and united, in the fourth century, with the Aradii Rufini. The beautiful bronze lamp found here—with the inscription *Dominus legem dat Valerio Severo* and the figures of Christ and the believer, in the mystic vessel—lead De Rossi to speak of Valerius Severus, undoubtedly a Christian and a descendent of the Valerii Poplicoli, who was Prefect of Rome in 382 A. D.; and also of many other Christian members of this noble family of the Valerii. At some period, probably in the sixth century, the family mansion, by gift of some pious members, was transformed into the monastery of S. Erasmo, though the memory of it was preserved for several centuries, as we see from its being called, in the life of Stephen III (768), *xenodochium Valerii*.

A. L. Frothingham, Jr.

ARCHÆOLOGICAL NEWS.

Summary of recent Discoveries and Investigations.

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GENERAL REVIEW.

In EGYPT the winter's archæological campaign commenced in January, and its results cannot yet be determined. The limited financial support given by the Egyptian Government will, however, make it impossible for official excavations of any consequence to be carried on by M. Grébaut, the successor of Maspéro. Important discoveries have been made at Tell-el-Yahoodieh by M. Naville, acting for the Egypt Exploration Fund, to which America contributes largely.

It is much to be regretted that no systematic excavations are yet undertaken in the French possessions in Africa—TUNISIA and ALGERIA—where even existing monuments are so little cared for. The resident archæologists, and others sent out occasionally by the French Government, as were Messrs. Reinach and Babelon last year, do little else but investigate ruins above ground, and do not undertake excavations of any importance.

A great contrast to this is exhibited by the activity of the English archæologists in INDIA, under Government direction, although the great extent of territory makes it impossible to prevent many acts of vandalism. The division of the country into archæological districts, and the obligation of sending in periodical reports, are productive of the best results: this is shown by the news given in this and the preceding number of the Journal.

The almost absolute prohibition of excavations throughout the Turkish Empire has not put a stop to discoveries and investigations. Professor Ramsay and members of the French School continue their investigations

in **Asia Minor**. Chance leads to the discovery of a most remarkable monument at *Sidon*, which may prove of unique importance, and the startling announcement is made by Captain Conder that he has found the key for the decipherment of the Hittite inscriptions. **Kypros**, also, continues to prove a mine of archæological riches, and has lately yielded interesting works relating to its early history. Great hopes are awakened by the project of a permanent *School of Biblical Archæology* to be established at Beirût, which might become the centre for regular archæological investigations in Western Asia, which are so apt to be ephemeral through the lack of just such an institution. It would be greatly to the credit of American initiative if such a project were to succeed. In **Greece** an era of unusual archæological activity is commencing from which the most important results may be expected. The *Greeks* themselves, through their Archæological Society, are taking a leading share in the work, conducting excavations not only at Athens but on a half-dozen other sites, especially at Eleusis and Mykenai. The results at Mykenai will be awaited with interest. The *Germans* are at present busy mainly with topographical questions, besides completing studies at Olympia; and it is expected that important results will be reached especially regarding the early topography of Athens. The *French* are continuing work at Delos, and have closed their excavations at Perdikovrysi. They will soon be preparing for what will prove their most important undertaking—the excavation of Delphi, for which they competed successfully with our Archæological Institute of America. The *English School* has just been established, and the *American School*, though not yet in its regular quarters, has undertaken excavations at Sikyon and upon the site of the early Greek theatre at Thorikos, with the promise of excellent results. In **Italy**, also, unusual activity is being displayed, especially in three fields: in the Etruscan necropoli; in Rome; and in Magna Graecia. Important discoveries are being made in early antiquities (at Forli, Palestrina, Bologna); and the discoveries at Tarentum, Metapontum, and elsewhere in Southern Italy have necessitated the establishment of several Museums for this part of the country. The most important discovery, however, falls to American explorers: Messrs. Clarke and Emerson, sent out by our Archæological Institute, have brought to light the ruins of the great temple of *Hera Lakinia* near *Kroton*.

AFRICA.

EGYPT.

Herr **Brugsch**, of the Bûlâq Museum, has, together with M. Bouriant, prepared a book which will be most acceptable to Egyptologists and others.

Practically it is a new *Königsbuch*, and contains a list of the cartouches of the kings of Egypt from Menes to Nectanebus. About 3,500 variants, collected from the different museums of Europe and the monuments in Upper and Lower Egypt, are given, and its handy size (octavo) will make the work a most acceptable addition to the libraries of students and amateurs interested in the names and devices and titles inscribed upon royal scarabæi.

Herr BRUGSCH also intends to publish shortly photographic facsimiles of the beautiful papyrus written for Mât-ka-Râ of the XXI dynasty. It was found some years ago at Deir el-Bahari. The coloured lithographic facsimile of the tent of Hesi-em-heb from Deir el-Bahari, by the same indefatigable worker, will be published at the end of the summer.—*Athenæum*, April 9.

EGYPT EXPLORATION FUND.—This winter's operations of the *Fund* (announced in the last number of the JOURNAL; II, pp. 460–61) commenced in January, and a letter from M. Naville, dated Jan. 31, gives the results of his first week's tour in the district of Goshen. The sites visited included Phacusa, Belbeis, and Tell-el-Yahoodieh.

Belbeis is a site of considerable importance, and M. Naville found that it contained a temple built by Nectanebo I dedicated to Sekhet or Bast, thus confirming the opinion of Brugsch, who considers that Belbeis is mentioned in the Harris papyrus, under the name of Baires (Bailos), where it is said that there was a temple of Bast.—*Academy*, Feb. 19.

Near Tell-el-Yahoodieh, M. Naville discovered a Jewish cemetery of Ptolemaic times, with several interesting inscriptions: also, another cemetery reoccupied in Roman times. The city to which these cemeteries belonged is unknown to history. For particulars, see pp. 140–1.

Mr. FLINDERS PETRIE, in March, was at THEBES, where he took a series of photographs and paper-casts of the typical heads of foreigners in the great basrelief tableaux of Luxor, Karnak, the Ramesseum, and Medinet Haboo. He has also photographed and "squeezed" a variety of similar types at Silsilis, and other places. This ethnological series will comprise some 250 to 300 heads, including the finest known examples of types of the Libyans, Ethiopians, Amorites, Hittites, Sardinians, Ionians, Oscans, Siculi, *etc.* Mr. Petrie has also taken paper-casts of what may be called the oldest botanical work in the world—namely, the representations of foreign trees and plants brought to Egypt by Thothmes III, in the course of one of his Arabian campaigns, all of which are sculptured with the minutest attention to botanical details on the walls of a chamber in the great temple of Karnak. The plant, or tree, is in most instances given on a small scale, complete, with accompanying sculptures on a larger scale, showing the leaves, fruits, and seed-pods, precisely as in the botanical works of the present day.—*Academy*, March 26.

TELL-EL-YAHOODIEH (" *the Mound of the Jews* ").—At this place, 22 miles northeast of Cairo, M. Naville (accompanied and assisted by Mr. F. Ll. Griffith, the student attached to the Fund) took up his quarters early in March. Here it was that, in 1870, the fellaheen, who excavate the mounds of ancient cities for *sebakh* (brick-dust manure), came upon the remains of a magnificent building which till then had lain *perdu* in the heart of the *Tell*. Alabaster pavements and tanks, broken statues and pedestals, superb painted tiles and porcelain mosaics of birds, beasts, lotus-lilies, and royal cartouches inlaid with the names and titles of Rameses III, were turned up, broken, sold, and dispersed before any steps could be taken to preserve them. What that building was, whether temple or palace, we now can never know; but as two black basalt statues of Bast were subsequently found upon the spot by Brugsch Bey, as also two fragments of Hebrew inscriptions (the one picked up by Professor Sayce and the other discovered by Professor Lanzone, of Turin), it seemed reasonable to conclude that these ruins represented the original temple of Bast, restored and in part rebuilt by Onias, the Jewish hereditary high-priest, who is supposed to have founded here the city of Onia. Since 1870, the fellaheen of the neighborhood, stimulated by the hope of finding saleable antiquities, have gone on digging with redoubled industry. Hence the lofty mounds and far-reaching brick ruins, seen and described by Sir Gardner Wilkinson more than 40 years ago, have well-nigh disappeared. Writing to the London *Times*, on the 17th of March, M. Naville says:—

> The *Tell* is much cut away; but two very high artificial hills, which look like the two towers of a pylon, are yet standing to show the original height of the mound. Nothing remains of the beautiful temple of Rameses III, except a brick platform, fragments of tiles and mosaics, and numerous alabaster blocks. Looking down from the highest part of the *Tell*, one can distinctly trace the plan of what looks like a Roman military settlement, very regularly laid out in two large parallel streets, bounded on one side by the desert and on the other by the cultivated land. It was probably but a small place before the time of the Ptolemies, and what we now see are the remains of Greek and Roman buildings. The rest of the *Tell* has been excavated down to the ground by the fellaheen.

Thinking that the temple of Rameses III might have been erected on the foundations of some older edifice, M. Naville cut through the brick platform, but found nothing below it. He also sunk pits and dug trenches in various parts of the ground, with no other result than the discovery of a large number of little bronze images of the cat-headed goddess, and some scarabs and fragments of pottery of the very early period of the XIII dynasty. He is thus led to conclude that there must originally have been a settlement upon this spot as early as the time of the immediate successors of the great Amenemhats and Usertesens. The remains of the above-mentioned temple of Rameses III, and the subsequent discovery of statues

of Rameses II and his successor, Meneptah, showed that the place continued to flourish, though probably in a small way, during the XIX and XX dynasties. M. Naville, in the course of one day's preliminary survey in January, discovered a small granite altar inscribed with the ovals of a hitherto unknown king, called *Thoth-upet Se-Bast Mer-Amen*. Judging by his names and titles (*Se-Bast*, or "Son of Bast," showing him to be a votary of that goddess), this king would seem to have belonged to the Bubastite line (XXII dynasty); and this again is good evidence that the temple of Bast had not yet fallen to ruin in the time of the tenth century B. C.

Abandoning the *Tell*, after a week of fruitless excavations, M. Naville set to work on the cemetery, which was indicated by a single rock-cut tomb in the neighboring desert. He found a chain of cemeteries, extending for a distance of nearly a mile and a quarter to the north, east, and south of the *Tell*. Beginning with the northern nekropolis, between two Bedouin villages, he found the ground literally honeycombed with tombs excavated in the rocky floor of the desert, which at this point consists of a yellow silicious stone thinly covered with hard sand. The two villages are built among and over these sepulchres, which are all made after the same plan. Two or three steps cut in the rock lead down to a small doorway built round with baked bricks and covered with stucco or cement. This doorway, which was originally closed by means of a limestone slab, gives access to a small chamber some five or six feet square, with horizontal niches, or *loculi*, cut in the walls. These niches are spacious enough to receive a large sarcophagus, and the tomb, altogether, curiously resembles certain tombs of somewhat later date at Jerusalem. All, however, have been opened and rifled. Most of them proved to be quite empty, while some few contained human bones, without any traces of mummification, inscriptions, bandages, or amulets. Having opened a large number of these barren graves, the explorers changed their ground to the southward, and there found another vast field of similar tombs, more roughly excavated in an inferior bed of rock. Here, after working for several days with no better fortune, they at last came upon a tomb half full of fragments of limestone, among which were found two pieces of a large tablet containing part of a long inscription dedicated by a son to the memory of his father, who had died "consumed by his sufferings." The names are lost, and the last sentence, phrased in the style of the Alexandrian Jews, runs thus:—"If thou wouldst know how great his faith and grace, come hither and ask his son." This first discovery was quickly followed by others. The next tomb contained a large niche divided by a brick wall, with the name of the occupant painted in red letters over each recess—*Tryphæna, mother; Eiras, daughter*. Their bones lay undisturbed in their narrow beds, with only a brick, each, for a pillow: Tryphæna is a name characteristic of the later Ptolemaic time.

The next day's work brought quite a harvest of epitaphs. One fine tomb, decorated with sculptured ornaments, contained two tablets in form like the *façade* of a Greek temple, with beautifully-cut inscriptions, as follows:—

The tenth year, the eleventh of Payni, Glaukias, years 61. Good father. Excellent. Farewell.

Mikkos, the son of Nethaneus, dear to all. Excellent. Farewell. Years 45, the fifteenth year, the fourteenth of Paophi.

M. Naville writes:—

> Now, in these two last names there was a foreign character which particularly struck me. *Mikkos* might possibly be a form of *Micha*, and *Nethaneus* reminded me strongly of *Nathan* and *Nathaniel*. Was it possible that, after all, we were in the cemetery of a Jewish settlement? Were these the last resting-places of the followers of Onias?

His questions were soon to receive an unequivocal answer. *Mikkos* and *Nethaneus* were quickly followed by *Barchias, the son of Barchias*, a name closely akin to Barachias; by *Salamis*, which is pure Hebrew; and, most interesting and conclusive of all, by the epitaph of one Eleazar, which runs thus:—*Eleazar. Untimely. Excellent. Universally Beloved.* No historical inscription, and no mention of the name of the city, has been found; but that the cemetery is Jewish, of the Ptolemaic period, is now placed beyond doubt. That the site of the city was originally sacred to Bast is also shown by the numerous litttle bronzes of the cat-headed goddess in which the *Tell* abounds. Thus far, the circumstantial evidence of the finds and the local name of the mound confirm the narrative of Josephus to a degree which appears absolutely conclusive.

Evidences of a Roman cemetery, or rather of an early cemetery reoccupied in Roman times, have also been found, and still further out in the desert, where the silicious rock gives place to a basalt formation, a nekropolis of artificial tumuli has yielded interments of a kind hitherto unknown. Here (in isolated mounds, covered with chips of black basalt, varying from 4 ft. or 5 ft. to 10 ft. or 12 ft. in height) built round with low brick walls, and covered in overhead with a kind of rude gable roof, M. Naville and Mr. Griffith have found some 50 or 60 terracotta coffins, curiously resembling the "slipper-coffins" found at Warka ("Ur of the Chaldees") in Babylonia. These coffins are moulded and baked in one piece, with a large opening above the face, through which the corpse was slipped in. This opening is closed by a kind of a lid, rudely modelled in the likeness of a human face. Generally, the faces have been smashed, and the bones gathered and replaced near the head, after the precious objects in the coffin had been abstracted. The outside of the coffin is covered with gaudy paintings of various Egyptian gods, such as Thoth, Anubis, and the four genii; on the chest there is nearly always a kneeling female with outspread wings: there are also sprawling hieroglyphs, and stripes to represent the outer bandages of a

mummy. The corpses, however, are not mummified, and the hieroglyphs, which seem to have been daubed on at random, make no sense. They are, in fact, simulated mummies with simulated inscriptions. The faces on the lids of several of the coffins are of a strange, foreign type, somewhat like the faces of the early Chaldean statues recently discovered at Telloh, and with none of the bodies have there been found either amulets or papyri, or anything which is generally found in an Egyptian grave, save one jasper scarab and a few beads. Large food-vessels, some of which contain vegetable remains, are placed at the head and foot of each grave, as well as smaller vases of very graceful forms. In a child's grave, which was found intact, a shell was laid at the right side of the head, and over the place of the heart was a small vase with concentric patterns, of the style known as Kypriote. A bronze cup and a bronze rasp have also been found, and some arrowheads of a type not seen before. The heads of the dead are almost invariably laid to the westward. M. Naville ascribes this singular nekropolis to the Roman period, when the scribes no longer understood the hieroglyphic characters, and the art of writing the ancient language was practically lost. Mr. Griffith, judging from the archæological evidence of some of the pottery, beads, *etc.*, inclines to a much earlier date. They both agree, however, that the faces on the coffin-lids have a very un-Egyptian look, and that there is something strange and uncanny about them.

Mr. Griffith enumerates, among the remakable objects found during the course of the excavations, (1) Terracotta shell lamps, like those of Naukratis; (2) bottles of Kypriote type, with concentric patterns; (3) bottles with false mouths in the centre, on each side of which is a handle, and, on one side, the actual spout—all these being primitive Greek forms, or perhaps very early Phoenician. Glass beads, green and yellow, "eyed" and variegated, have also turned up; and two letters, "apparently Greek," have been found—one upon a coffin, the other upon a food-vessel.

Proofs of the early period of the site, Mr. Griffith finds "in porcelain beads; a scarab of Meneptah, and other scarabs of same period; some forms of pottery, and especially some fragments of blue-painted ware like that of Tell-el-Amarna; absence of everything that is certainly Saïte, or later; and difference in style of burial, there being no amulets." The absence of "Ushabti," or funerary statuettes, usually found in such numbers in Egyptian graves from the time of the XIX dynasty to the Persian period, is noteworthy, the only traces of such being "some fragments of the roughest possible specimens in terracotta." Apropos of other small statuettes, Mr. Griffith remarks that "porcelain and bronze figures are decidedly rare; and it is important, and very unusual, that Sekhet is the commonest of all."

M. Naville concludes that the place was inhabited as early as the XIII dynasty, from the facts, that the scarabs found here in great number gen-

erally bear the character of the XIII dynasty, and that the fragments of pottery which the *sebakh* diggers brought them were of black earthenware with white ornaments, exactly like that which he found at Khataaneh two years ago.

The following description of the Tell, by Mr. Griffith, puts the topography of the place very clearly before us:

"The Roman tombs lie fringing the desert for about half a mile opposite the east end of the mound and sandhill, *i. e.*, all that part of the desert which is nearest the Roman village. The basalt mounds are at the south end of this, lying a quarter of a mile back in the desert, where the rock is basalt, and rock-cut tombs are out of the question. They are more nearly opposite the early part of the *Tell*. There are a few XII or XIII and XXVI dynasty graves at the east end of the sandhill on which the town was built; but many have been cleared away by the Romans, when they built a very systematic village there, and those which remain have been almost wholly destroyed by *sebakh* diggers, as there is a layer of powdery rock which suits them. These tombs are also brick, with characteristic pottery."

—*The Times*, London, April 20; *The Academy*, April 23.

ROCK GRAFFITI IN UPPER EGYPT.—"The figures and inscriptions cut on the rocks of Upper Egypt seem to have been scarcely noticed, only the plainer of the inscriptions having attracted any attention. On examining the large number which are scattered over the rocks near SILSILEH and EL KAB, it appears, however, that some of these rude figures are perhaps the oldest things in Egypt. The habit of hammering or scratching figures of men and animals on the rocks has continued to the present day, more or less. But it is certain that such designs were made before the XVIII dynasty, as an inscription naming Amenhotep I has been turned so as to avoid the figure of a giraffe; and from the continual instances of the animal figures being browned almost as dark as the native surface, while inscriptions adjoining them, of the XVIII, XII, and even VI dynasties, are far fresher, it seems not improbable that some of them are older than any other monuments in the country.

"These figures are usually of men, giraffes, and camels; there are also several elephants and some ostriches. Though these might have been cut by passing traders, it seems not unlikely that they date from a time when such animals were still seen north of the tropic. Many drawings of boats, some of large size, also occur. Besides the figures, there are many rock-inscriptions unnoticed before. Mr. Griffith and myself copied about 150 on the sandstone rocks, including the names of the kings Mentuhotep II (3), Antef, and Sankhkara, of the XI dynasty, together with a fine line of Phœnician. At THEBES, I copied forty of Ramesside age on the limestone, and there are still more. The granitic inscriptions of ASSUAN are comparatively well known, particularly the large royal tablets. We have there copied all the private ones and unpublished royal ones that are legible,

including two fresh ones of Mentuhotep II, and some other royal ones down to Kashta and Ameniritis. These inscriptions often contain long family lists, which are of great value for showing the period of use of different names. It seems almost certain that the well-known feminine title, *neb-t pa*, means "widow," from its usage here.

"At ELEPHANTINE, a rock in the village, just above the ferry, caught my eye with the name of Rameri. On being cleared, it proved to have been a favorite register of the early kings. First Unas, then Rameri, Neferkara, Antef-aa, a defaced king, and, lastly, Amenemhat I, have all cut tablets on it. The special interests of it are that no tablets of Unas were known so far south before, and that there is here the peculiarity of Khnum being expressed by the figures of three rams; also the *hut* appears over the king with the globe and serpents—much the earliest representation of it, so far as I remember. The other tablets are also interesting; and Rameri has apparently cut his name over that of an earlier king, which I cannot identify with any in the lists.

"I may add that the opened tombs in Egypt are far from being worked out. Many we visited were so coated with plaster, mud, or dirt that it is evident that they could not have been copied before. One tomb at EL KAB, the cut inscription of which had been more than once published, yielded, on careful washing, no less than seventy-two private names on its painted sides. It is impossible to say here without references how much more of the texts we have copied may be yet unpublished."—W. M. FLINDERS PETRIE in *Academy*, March 26.

EGYPTIAN OSTRAKA.—In a letter dated Algiers, Jan. 15, 1887, Professor Sayce says: "I notice that Prof. Erman, in a recent article in *Hermes*, expresses the conviction that inscribed ostraka will be found in the mounds of many of the ancient cities of Egypt, if only proper search be made for them. My own experience shows that this conviction is fully justified by facts. The multitudinous ostraka of Karnak were rescued from destruction by Mr. Greville Chester and Prof. Wiedemann. Had they not been on the spot, it is probable that the *fellahin* would never have known that such *shukkaf* or potsherds had a marketable value in the eyes of Europeans, and would accordingly have allowed them to perish.

"Last winter I made enquiries for inscribed *shukkaf* whenever I came across a promising site. The result was the discovery of three new sites in which they are to be found. At KOM OMBOS I picked up a portion of a Koptic ostrakon, and set the natives to look for more. At GEBELÊN (to the south of Thebes) I procured two demotic ostraka—one by purchase, and the other by my own examination of the rubbish-heaps of the old city; and I learn from the villagers that they had not unfrequently come across similarly inscribed sherds, but had thrown them away from ignorance of

their value. It was, however, at KOFT, the ancient KOPTOS, that my chief discovery was made. Here the place was pointed out to me where inscribed ostraka were often met with, and I bought a basket full of them. Many of these were either mere fragments, or so illegible as not to be worth preserving; but there was besides a considerable collection of demotic, Greek, Coptic, and early Arabic ostraka, which I carried back to England. Among the Greek ostraka is one dated in the reign of Tiberius."—A. H. SAYCE, in *Academy*, Jan. 22.

GREVILLE J. CHESTER writes from Alexandria (Feb. 21, in the *Academy* of March 12) "Allow me to add to the list of places where inscribed ostraka are found in Egypt: Dendera, where finely preserved cursive Greek ostraka are found in considerable numbers, and Erment, where both Greek and Coptic inscriptions occur. At Thebes, besides at Karnak, ostraka are found at Kourneh and at Medinet-Haboo on the western bank of the Nile."

ALEXANDRIA (near).—*Early Christian Cemetery.*—There has been recently discovered by some native laborers, midway between the Alexandria and Mustapha Pasha railway stations on the Alexandria and Ramleh line, a burial-place, evidently of the early Christians. It was found accidentally in digging amongst the mounds of rubbish for limestone to burn in the lime-kilns. Following the course of the Ramleh line, at a little distance beyond the Chat Bey Station, one comes to a rising ground, on the summit of which is a Roman wall running parallel with the railway towards the east, and turning northwards at right angles towards the sea-shore. A breach in this wall, which is evidently a wall of enclosure, gives access to a place in which the natives have excavated two or three great pits, distant about 100 yards from each other, and about 50 yards or so from the shore. In the furthest of these a well was discovered, and close against the well a doorway cut in the solid rock which here underlies the mounds. Entering by this doorway, one stands in a kind of irregular subterraneous crypt, surrounded by rock-cut *loculi*. These *loculi* measure about 9ft. in length by from 4ft. to 6ft. in width, and are ranged one above another, in two and sometimes three tiers, 15 to the right and 23 to the left of the central passage. In each recess were found ten skeletons—all apparently skeletons of men, the bones being very large. One of the skulls, taken up at random, was found to measure 24ins. in circumference. In all, the teeth are sound and white, and firmly fixed in their sockets. The entrances to these *loculi* were closed by large slabs firmly cemented. They had, on some of them, inscriptions written in Greek, on a prepared plaster surface, in red paint. In another pit, a little further to the eastward, a long gallery, with a similar series of *loculi* on one side only, has also been found. At the end of this gallery was a large doorway filled up with stone slabs set in cement.

On breaking through this doorway was found a transverse gallery, with more *loculi* of the same kind, beyond. Terracotta lamps have been found with a few of the skeletons, some impressed with an eight-pointed cross, some with a priestly figure in the attitude of benediction, and some with I.H.S. Over one niche is painted a palm-branch ornament, and other half-obliterated Christian ornaments are here and there painted on the ceilings of the galleries. The only inscription found is too fragmentary for translation.

About a hundred yards to the westward of the first of these pits, another excavation has disclosed yet more of these interments, in *loculi* of two and three tiers deep. Hence it seems probable that the whole area enclosed by the Roman wall is in fact one vast cemetery. Some shattered terracotta coffins, without inscriptions and without any trace of human remains, have been found irregularly buried in parts of the super-imposed rubbish-mounds. These are evidently of later date. The Arab lime-burners are actively continuing these excavations.—*Egyptian Gazette*, March 17; London *Times*, May 4.

MEMPHIS.—*Recent Excavations at Gizeh.*—The whole of the front of the great Sphinx has been cleared, the gigantic paws are revealed once more, and from the space between them the head is seen towering up. The broad flight of steps of a later age which lead down into the court before the Sphinx are also clear, and from the top of them one looks across a space of about a hundred feet to the face of the ancient monster. These steps are about forty feet wide, and the clearing is somewhat wider at the Sphinx itself; while a second large clearance is now going on outside of the paws on the south. The celebrated stele of Thothmes IV, between the paws, is a centre of interest; but the fragment of the cartouche of Khafra, which was so important, has disappeared, flaked away from the scaling face of the stone. The visible paws of the Sphinx are of a very late date; probably entirely Roman. They are largely hollow, the top and sides formed of comparatively thin slabs; and the deeply weathered chest of the Sphinx, which seems to have at first had a megalithic casing, like that of other early works, was also covered with a re-facing of small slabs. Later still, the weathered face of these slabs had been cut out and lesser pieces inserted to renovate them. Many slightly scratched Greek graffiti are to be seen, but scarcely any can be continuously read, and they are all of late forms.

On the west face of the granite temple, sometimes called the Temple of the Sphinx, where, if anywhere, rock might be expected, the wall of the temple is entirely of immense placed blocks, down to below the level of the upper court at least. So far, there is no evidence found to show that the granite temple is not entirely built on the plain.

A little way to the west some mastabas are being cleared; and here we reach the face of the western cliff, the vaults being cut in the rock, and the

chambers of offering and serdabs being built on its front. Two serdabs still retain the figures in them. One has a large group in one block of a man and wife, a brother, and a child; the heads are lost, and some other parts, but a heap of fragments lie beside them ready to be fitted in. The name of Aseskaf occurs in the chamber of one of these tombs, or rather on a fragment of one chamber which remains. The finest thing here is a large alabaster altar, circular at the top, with a flat panel on the front, bearing the figure of a certain Ra-ur; the figure is perfect, but the inscription has suffered somewhat.

Away to the east of the most perfect of the small pyramids, adjoining the Great Pyramid, a fine tomb has been opened. It had a forecourt chamber, and a vault behind that. It belonged to a "king's son," Khufu-khaf, probably a son or grandson of Khufu; and his sons, called also "king's sons," are named Ut-ka and An-ka (written with the obelisk). A most interesting feature is the decoration of the door to the vault (or perhaps serdab). On either side is a pillar in low relief, with an everted capital (like the lotus capital, but without any rounding at the spring), a ring at the base of that, a plain cylindrical shaft expanding just at the bottom, and a slightly larger drum, with bulged outline, for a base. This is, perhaps, the earliest figure of a column known, and is especially valuable in showing all the members fully formed, capital, torus, shaft, and base, all forming a well-balanced whole, without any sign of imperfect development, or retention of either the pillar or plant forms. The sculptures of the tomb are finely executed, full and bold, of the noble style of the IV dynasty. The sloping front of the chamber within the court has been half cut away, however, and a wretched arch turned over the court to make it into a chamber in Psamtik times; while the top of the chamber of offering, which had been destroyed, was renewed, the plastering running down roughly over the fine early sculpture. The innermost vault has a double slope roof like that of early chambers in pyramids and elsewhere. —W. M. Flinders Petrie, in *Academy*, Jan. 8.

Colossus of Rameses II.—The great limestone statue of Rameses II, which has lain for centuries on its face, is being raised from its bed. It is about 38 ft. high, and in Strabo's time stood in the anterior court of the great temple of Ptah. The face, as seen partially, is strongly Semitic, and it will be interesting to compare it with the recently-unrolled mummy.—*Academy*, Feb. 19.

Thebes.—The inviolate tomb of the XX dynasty discovered at Gournet-Mourraï (mentioned on p. 460 of vol. II) contained objects of considerable interest. It was that of a guardian of the nekropolis, who was evidently an architect, for by his coffin were found the instruments of his art, a measure, a mason's level, rules, shears, *etc.* Within the chamber were two

sledges for the transportation of mummies and sarcophagi, a whole series of furniture (chests for linen, funerary statuettes and offerings), large vases, thirty in number, adorned with paintings and designs; a large ostrakon containing the beginning of a romance the text of which is complete in the Museum of Berlin. All that related to the life and occupations of the deceased was collected in the tomb.—*Gazette de France*, July 21.

ALGERIA.

CHERCHELL.—*Roman antiquities.*—Further discoveries of Roman objects have been made here by M. Victor Waille: they are interesting for the history of art and for epigraphy.—*Revue Critique*, 1887, No. 4.

Inscription of Thothmes I.—Prof. Sayce has discovered on the lower half of a beautifully worked statue in black marble, in the museum here, a hieroglyphic inscription showing it to be a royal statue made for Thothmes I of the XVIII dynasty. The inscription runs: *The king of Upper and Lower Egypt, the wealthy lord, Ra-â-kheper-ka, beloved of Ra, the life-giver, the son of the Sun, in his body, Thothmes, the everlasting, beloved by Osiris, the divine Lord of Abydos.*—*Academy*, April 16.

TUNISIA.

RECENT OFFICIAL EXPLORATION.—At a recent meeting of the *Académie des Inscriptions* (March 11) a Report was communicated by M. de la Blanchère, in which the researches lately undertaken by the *Service beylical des antiquités et des arts* are described up to December, 1886. They were mainly directed toward the exploration of the Christian antiquities of the country. At LEPTIS PARVA (modern *Lamta*) excavations were continued on the site of a Christian cemetery discovered in 1882 by MM. Cagnat and Saladin: several epitaphs were found. At SULLECTHUM (modern *Arch Zara*) an entire catacomb was brought to light, whose arrangement recalled that of the Roman catacombs. Finally, at TAPHRURA (modern *Sfax*) the discovery was made of the remains of an important Christian necropolis, including a church, a baptistery, mosaics, *etc.* The Report was accompanied by a plan of the catacomb of Arch Zara and a sketch of the buildings discovered at Sfax.—*Revue Critique*, 1887, No. 12.

SFAX (near).—*Punic nekropolis.*—Near Sfax, Dr. Vercoutre has explored a Punic nekropolis, and found a Punic graffito several lines in length.—*Revue Critique*, 1887, No. 4.

TEBESSA.—*Mosaics.*—Two ancient mosaics have been recently discovered here, one representing the cortege of Amphitrite; the smaller one is divided into several compartments containing the figures of a bull, an ostrich, an antelope, and a boar, while *Fortuna redux* is placed beside them. The art is

good. Photographs of them were presented to the *Soc. Nat. des Antiquaires*, Nov. 24.—*Revue Critique*, 1887, No. 1; *Academy*, April 16.

VAGA.—*Phoinikian nekropolis.*—Some time ago Captain Vincent was so fortunate as to discover, near Bêja (the ancient Baga, Vaga or Vacca) a Phoinikian nekropolis almost intact. His report and oral communications are made use of by M. Cagnat in a paper published in the *Revue Arch.* (Jan.–Feb. 1887). The French garrison, on occupying Bêja, established its encampment on a mound 18,000 met. N. of the town, called Bou-Hamba. Chance led to the discovery of one tomb, and regular excavations under Captain Vincent uncovered more than a hundred and fifty tombs. They are in the form of rectangular wells, dug at right angles with the surface, and varying in depth from 1.50 to 3 met. They end in a sepulchral chamber, far ruder than those of the other nekropoli of Phoinike and Carthage, and rounded instead of rectangular. The skeleton was placed on its back, with its feet toward the opening. Around it were vases, the main types of which are given in plates III and IV: they are in red or black pottery. From various signs, this necropolis seems to belong to a later date than others, like that of Byrsa: one of the vases bore a potter's mark in Greek letters; and among the Punic and Numidian coins found was one that appeared to bear the head of Jugurtha. It is singular that, in more than 150 inviolate tombs, there were found no jewels, or necklaces, rings, or ornaments of any kind, such as are met with in the greater part of the Phoinikian tombs already explored.

MALTA.

Two ancient inscriptions in a very good state of preservation, found in the neighborhood of Notabile, have been purchased for the Museum of the Public Library. The most interesting of the two, is in archaic Greek characters, stamped on a solid tile of deep red color and triangular shape, being in fact one half of a square tile of 7½ inches wide, like those commonly used to fill the corners of pavements laid diamond-wise. Many tiles of this shape and dimension have been observed by Dr. Caruana, on several occasions, in removing the foundations of old houses, especially at the Rabato of Notabile. It is, moreover, certain that extensive fabrics of tiles existed in these islands during the Phoinikian and old-Greek epoch, the remains of one of which are still visible in Sbgaret-Medeuiet, near a megalithic tank at Marsascirocco.

The forms of the letters in this inscription, especially the *sigma* and *mi*, are particularly interesting. Copies of it were sent by Dr. Caruana to the Rev. A. H. Sayce, Oxford, and to M. Renan of the French Institute.

The reading of this inscription given by Professor Sayce is ΑΘLΑΣ ΜΕΓΑΣ with a star on the left side, and the potter's mark on the right, whilst *Athlas*, which elsewhere is transliterated Atlas, may be the Phoini-

kian name of the potter. The age assigned to it is the v century B. C., and it may be even earlier. This discovery bears further evidence of the establishment of an early Greek Colony in these Islands, and to their peaceful living with the former settlers, the Phoinikians.

In a local paper, *La Voce di Malta* of January 1, it is presumed that this inscription forms a Phoinikian sepulchral title, and it is positively asserted that it was discovered in a sepulchre, together with some fragments of earthen vases and lamps, and some Punic coins. The information on which that assertion is based appears to be not reliable. Moreover, the coins, that have been exhibited, are one silver of Tarentum; one silver of Vespasian; one brass of Tauromenion, and three brass, very much worn, which may be either of Agyrion, or possibly Maltese Punic. The transliteration of Prof. Sayce leaves no doubt about the nature of this inscription, namely, it is the stamp of the potter's fabric, like those not rarely observable on many of the Maltese Phoinikian and Greek vases, and Roman tiles.

The other inscription, incised on a large slab of white marble, 25 by 14 inches, is a Roman sepulchral *titulus*. The characters of this inscription, are classical in form, and its style is laconic. Dr. Caruana conjectures it to be Christian. It reads as follows:

C. AEBVTIO. L.F. FAL
VELLIAE. M.F. RVFAE
M. BENEMERITO. RVFO

—*Malta Standard*, Jan. 6.

ASIA.

JAVA.

BÒRÒ-BOUDOUR.—These ruins, the most remarkable in Java, have been again explored by M. Yzerman, the result being the uncovering of a small section of the primitive basement, which had the same form as that of Mendout. The most interesting feature of this discovery was a band of basreliefs in a state of almost complete preservation. Each relief is 66½ cents. high and 1.93 m. long, and they are separated by a frame 29 cents. wide. Two of these reliefs have already been entirely uncovered: in the first the principal figure is the seated king, near whom is the queen, while below are five courtiers; further on is a small temple with eight worshippers. The right-hand basrelief contains three scenes, representing, the first, a tropical forest; the second, three persons seated under a tree, listening to a fourth; the third and chief scene, two long-bearded brahmans offering gifts to a king: they are represented standing, while below them four kneeling attendants are holding large vases. Over the reliefs are three inscriptions, supposed by Dr. Kern to date about 800 A. D.

The enormous pressure brought to bear on the foundation-walls had led to the erection, around the basement, of a mass of at least 11,600 cubic metres of stone, which covered up the original basement, though great care was taken not to injure the sculptures.—*Revue d'Ethnographie*, Nov.–Dec., pp. 485–91.

HINDUSTAN.

BUDDHIST REMAINS IN SOUTHERN INDIA.—An important antiquarian discovery has just been made in the Madras Presidency. When collecting materials for the preparation, under orders of Government, of his *Lists of Antiquities*, Mr. Robert Sewell received information of certain rock-cut remains in a remote and unfrequented tract of hills and jungle about 20 miles north of Ellore in the Godavery District. This information was sent in the first place by a native correspondent, and was confirmed by a slight note forwarded by Mr. W. King of the Geological Survey, the only European known to have visited the spot. The scanty particulars given appeared to point to remains of Buddhist origin, but nothing certain could be known till the monument had been inspected by a person possessed of some knowledge of Indian archæology. Mr. Robert Sewell reports that having returned to India from leave in the autumn, and being appointed to a neighboring District, he took advantage of the Christmas holidays to visit *Guntupalle*, the site of the remains. This has resulted in a discovery of much archæological interest.

The find consists of a *Series of rock-cut Sculptured Caves* in the side of a hill forming the western boundary of a small valley which runs from the cultivated country into a tract of thick forest. The principal caves are, (1) a *Chaitya*, consisting of a single circular chamber containing a dagoba, 7 ft. high; (2) a *Vihāra*, formed of a row of sculptured rooms and cells, which constituted the residence of the monks.

The façade of the *Chaitya* is very similar to that of the well-known *Lomas Rishi* cave in Behar, except that in the present instance the sculpture is simpler. The horse-shoe shaped arch over the entrance has the representation of wooden beam-ends commonly oberved in the Buddhist sculpture of the period. The door-jambs slope inwards from top to bottom. Inside this is the wall proper of the circular chamber with the curious sloping roof believed by Fergusson to be an imitation of thatch. The door of this has perpendicular jambs. Inside this is a circular cell, 15 ft. in diam., with a dagoba in the middle measuring 12 ft. in diam., and having around it a passage of 1 ft. 6 ins., for *pradakshana*. The roof is vaulted uniformly, and the ceiling is carved into a representation of the inside of the sacred umbrella, with 16 ribs and 4 concentric circular bands.

The Vihāra consists of five principal groups of cells, each group consisting of four or more rooms the doors and windows of which are decorated

with some projecting carved ornaments as at Karla, Bhaja Nassick, and so many other specimens of the western caves. The principal entrance is beautifully cut and well preserved: a few letters of an inscription help to fix the date, which Mr. Sewell estimates at about 100 or 150 A. D.

There are several large excavations in the same hill-side partially sculptured. On the hill above are the remains of a large brick *stupa*, a row of *dagobas* faced with cut stone, and in one place a quantity of pillars, many lying on the ground, but 3 or 4 standing. They are much weather-worn. The pillars are sculptured in an early style.

Mr. Sewell left the remains entirely untouched, and it is certain that, before long, Dr. Burgess will have them carefully and scientifically examined by the officers of the Archæological Survey. The great interest of this discovery lies in the fact that the monument belongs to a class of which no examples have as yet been discovered in Southern India.

MAHABALIPURAM (Madras).—In an official paper dated from this place, Dec. 19, 1886, Mr. Rea of the Archæological Survey says: "I have also the honor to report to Government that I have just discovered another excavated cave-temple, in addition to those known to exist here. It is not shown on the survey map in the portfolio of plans and sections of the remains at the Seven Pagodas, published under the auspices of the Duke of Buckingham; nor yet in the articles in the *Madras Journal of Literature and Science* for 1881. It is situate in the group of rocks about 50 yards southwest of the Rayala Gopura. The bracket tops of two piers, and lintels spanning three bays, as well as a cornice, appear partly above ground. From all appearances, the temple seems never to have been completed. I am having the soil cleared away, so as to expose the whole façade.

"*P. S.*—I have since had the floor of No. 25 cave cleared of 18 inches of mud, and discovered an interesting addition to the front—a double-moulded detached basement with sockets for wooden posts. All these caves, once on a time, had temporary verandahs in front; but this is the only case known to exist here of the original basement remaining complete. I have also discovered a hitherto unnoted short Pallava inscription at the top of a rock-cut stairway." [*Indian items communicated by Robert Sewell, Esq.*]

PALTAVARAM (near Madras).—A number of curious *earthenware coffins*, standing on four, six, eight, and sometimes ten feet, have been found here. They seem to have been covered, and to have contained numerous small earthenware vessels. Others are in the shape of large round or egg-shaped vessels, also containing smaller ones, as is the case with the similar ones in Malabar. Not far from them were found by Mr. A. Rea a number of very perfect stone circles—most of which were unfortunately destroyed by men quarrying for stone, before means were used to protect them. On a hill above were found many others, with one or two imperfect dolmens; but

there seems sufficient evidence to show that all of them, probably, originally had such erections in their centres. No bones have been noticed in any yet excavated, only some white ashes; so that cremation was probably in use among the primitive races that used this mode of sepulture, perhaps prior to the introduction of the Brahmanic ritual into South India.—J. BURGESS in *Academy*, April 9.

BENGAL.—*Recent Surveys.*—"In Bengal, the surveyor, Mr. J. D. Beglar, and his assistant, Mr. Garrick, have examined more or less completely the remains of interest in the Shahabad, Gaya, Patna, Monghyr, Bhágalpur, Húghli and Nadiya districts, and the Santhál Parganahs. The fortress of Shergarh has been visited, and sections and detailed plans and drawings of the great tombs of Sher Sháh and his father, at Sasseram, have been prepared. In Gaya, under the guidance and direction of Gen. Cunningham, Mr. Beglar opened trial trenches in a place to the north of the temple within the old *garh* or fort, with the result that the remains of a building were discovered that may reasonably be identified with one of the great monasteries mentioned by Fah Hian, the Chinese traveller in the fifth century. In Patna, an examination of the river-wall of the fort has led Mr. Beglar to the belief that its foundations contain remains of the landward walls of the fortress that existed there in Asoka's time, in the third century before Christ. Sections and plans have also been prepared of the Adina mosque, in the Malda district, the most ancient and the most important of the Muhammadan buildings in Bengal. Steps have been already taken to conserve in a measure the buildings around the site of the famous *bo*-tree, at Gaya, and selections from the scattered remains found there will find a home in the Indian Museum. The suggestion of Mr. Edwin Arnold that the present occupant of the Hindu temple at Gaya should be induced to give up his acquired right of occupancy, and that the place so sacred in the annals of Buddhism should be handed over to the care of Ceylon Buddhists, will doubtless receive consideration; but we should not forget in this connexion that we have in Burma even a greater number of Buddhist fellow-subjects who desire and deserve consideration."—*Academy*, Feb. 19.

KOSAM.—*Gupta Inscription.*—Dr. A. Führer, the Assistant Archæological Surveyor in the N. W. Provinces, on a recent visit to Kosam on the Jamnā, the ancient Kosambi, found—a little to the west of the present village, at Prabhosā—a high rock (the base of which has been quarried away) with a cave in it, now inaccessible, and over the entrance an inscription, in eight short lines, apparently in early Gupta characters. An impression of this will be taken as soon as scaffolding can be secured to reach it. Possibly this may be the Dragon-cave mentioned by Hieuen Thsang.—*Academy, April* 9.

TURKESTAN.

SEMIRJETSCHIE (Government of).—*Two early Christian Cemeteries.*—Dr. Chwolson has just issued a pamphlet (*Syrische Grabinschriften aus Semirjetschie*, St. Petersburg, 1886) in which he publishes twenty-two new Syriac inscriptions recently discovered in the government of Semirjetschie, which is W. of the Chinese frontier of Kuldscha, N.E. of Khokand, E. of Syrdaria, and S. of Semipalatinsk. The inscriptions belong to two early Christian cemeteries situated about 55 kilom. from each other. The first was discovered in 1885 by Dr. Pojarkow, who found more than twenty tombstones, all with crosses, but some without inscriptions. The second and much larger cemetery was found by a surveyor named Andrew, and in it six hundred and eleven tombstones have already been discovered, all with crosses, and the greater number with inscriptions. They are mere fragments of natural rock, unhewn and irregular, and the inscriptions and crosses, scratched with the point, are rude. The Christians who erected these monuments were Nestorians, who were the great missionaries of the Far East. The letters have often, by the side of the ancient forms of the estrangelâ, an evident Nestorian character. It is unfortunate that the inscriptions edited form so small a part of the whole discovery. They are all dated, and cover a period of about five centuries, from 1169 to 1649. Although the era is not mentioned, it is doubtless that of the Seleukidai, which would place the earliest in 858–59, and the latest in 1338–39 A. D.—*Journal Asiatique*, Nov.–Dec., 1886, pp. 551–58.

PERSIA.

The Greek sculptor Telephanes.—In connection with the recent discoveries by M. Dieulafoy in Persia, M. Heuzey calls attention to a passage in Pliny which mentions the fact that a Greek sculptor of great merit, Telephanes of Phokaia, was, during part of his career, in the service of kings Xerxes and Darius. This is interesting in view of the interpretation of the art of the two countries during the last period of the Akhæmenid dynasty. —HEUZEY in *Revue polit. et littér.*, Nov. 1886.

CAUCASUS.

Vases.—At a recent meeting of the *Soc. nat. des Antiquaires* (Dec. 1), M. Bapst presented photographs of a number of vases, discovered in the Caucasus, which belong to the series of these precious antiquities that have been found for several years in the government of Perm and in Southern Russia.—*Revue Critique*, 1887, No. 1.

TIFLIS.—The new archæological museum attached to the Cathedral of Sion at Tiflis is making rapid progress. All the archæological treasures

hitherto negligently cared for in the various convents of the Caucasus, and notably in that of Helat near Kutais, will be removed to this building. An instance of this negligence is the destruction by mice of a very precious manuscript written on parchment in the ninth century by the monks of Mount Athos.—*Academy*, Dec. 18.

PALESTINE.

PALESTINE EXPLORATION FUND.—Herr Schumacher communicates observations made during recent official journeys. He gives an account of the discovery of a large number of tombs, oil-presses, cisterns, *etc.*, of the kind familiar to those who have looked into Capt. Conder's memoirs. On the southern slope of Tell-el-Fokhhâr, exactly one mile east of Acre, there have been uncovered, at a depth of 22 ft. below the surface, the foundations of a great wall of large stones with the well-known marginal draft. Herr S. suggests that the ancient city extended as far as this mound; but the wall may belong to an ancient fortress. Capitals, portions of statues, *etc.*, have been found here.—*Athenæum*, Dec. 25.

Herr SCHUMACHER reports a discovery of interest from the shores of the Lake of Tiberias. It has long been known that ancient remains and ruins are scattered about on the small plain south of the modern city, but they have never attracted much attention. Robinson tried to prove that the modern town stands on the site of the Herodian city. Herr Schumacher has now traced the whole wall of Herod's city of Tiberias: it is three miles in length, and is oblong in shape, the long side toward the lake. At its southwest corner there rises a lofty hillock, five hundred feet in height: this hillock is crowned with ruins which were noted by Lieut.-Col. Kitchener, but he could not examine them. The ancient wall of Tiberias ran up, and was connected with a strong wall around this hill; within the wall are ruins, probably of Herod's palace, certainly of a fort. This, then, was the acropolis of Tiberias, which is now proved to have been, in the time of our Lord, no mean Galilean village, but a great and stately city, its wall three miles long, and for a mile in length facing the sea, dominated and guarded by Herod's stronghold, built on a hill five hundred feet in height. Tiberias will henceforth occupy a large and important place in the restoration of the country at the time of the Gospel-history. —*Athenæum*, April 16.

HIPPOS.—Eleven years ago, M. Clermont-Ganneau pointed out that the Semitic corresponding to Hippos would be *Sousitha*, corresponding to the Arabic word *Sousya*, and he suggested that the word be looked for. Herr Schumacher has found in the Jaulân the very name *Sousya*, with extensive ruins, in which, apparently without knowing M. Cl.-Ganneau's suggestion, he sees the ancient site of Hippos.—*Athenæum*, Dec. 25.

PHŒNICIA.

SIDON.—*Discovery of rock-cut Tomb-chambers and Sarcophagi.—The Times* (London) of March 30 and April 7 published letters of the Rev. W. K. Eddy, American Missionary, written from Sidon, relating the discovery of a very remarkable series of sarcophagi in rock-cut chambers, excavated in the four sides of a square shaft sunk 30 ft. in the bed-rock. *The Independent* (N. York) of April 21 published an account that included some observations made by Dr. Ira Harris of Tripoli, who accompanied Mr. Eddy.

Mr. Eddy afterward wrote a more careful account of the discovery and sent it to the JOURNAL: it is printed under *Correspondence* on pp. 97–101. This fuller description includes, beside new details of objects described in former letters, the notice of further discoveries: a fine sarcophagus beneath the floor of the *west room*; seven other sarcophagi (making 16 in all); an unrifled tomb; and 300 coins.

Certain variations appear in the different descriptions: *e. g.*, Dr. Harris (*The Independent*) says that the statues around the temple-sarcophagus in the *east room* are seven spans high [5 ft. 3 ins., instead of 3 ft. according to Mr. Eddy]; and he adds that in the *south room* there were numerous human skeletons lying about.

Professor Porter reports (*Times*, April 7) that the workmen, in clearing out the *débris* from the bottom of the shaft, uncovered a pavement, beneath which was found a huge sarcophagus of the Phoinikian or Egyptian type, not unlike the famous one of Shalmanezer, but without inscriptions.

The following description of this discovery in an Arab newspaper, the *Lisan-ul-Hal*, speaks of female warriors represented on the large sarcophagus of the *west room* (*cf.* p. 100): it is reprinted in *The Academy*, April 23, from *The Scottish News:*

"Last week, while some laborers were engaged quarrying stones in a piece of ground near the garden of the cave facing the Sidon aqueduct, they discovered a spot resembling a sunk well, and, after they had dug to a depth of six or seven metres, they came upon the entrance to an open cave, which contained two marble sarcophagi, the one beautifully sculptured, the other plain. The length of the first was found to be four cubits and a half, and its breadth three cubits, by about the same height. It is of white, clear marble, and on its sides all round are cut in relief six human figures, each one of which is about a cubit in length. On the heads of the sarcophagi on each side are three figures like the others, with various other figures under them, and above them chariots and figures of horses and women. On the covers, also, are figures of chariots drawn by horses, and followed and preceded by mounted horsemen. Inside the larger sarcophagus were found human bones, and also the bones of three dogs. Further excavations led to the discovery of a second cave, containing three sarcophagi, one of which was larger and finer than the one first discovered. On it were representations of battle scenes between horse soldiers and female warriors. Among other scenes there is a representation of a horseman seizing a woman by the

hair of her head and killing her, the blood flowing from her neck; while another warrior is striking a horseman in the face with a javelin, and another striking him in the side, and dead bodies lie under the horsemen. On the lid of this sarcophagus is an eagle with a diadem on its head, and in front of it heads with two faces. The second sarcophagus has on its sides representations of women weeping, and figures of various kinds with long necks and heads with two faces. The third sarcophagus has figures of lilies and flowers.

"Continued excavations led to the discovery of two other caves at the same place. These also contained sarcophagi, which were plain, having no other adornment beyond figures of lilies and such like. The whole number of sarcophagi discovered in the four caves is nine, of which three are worthy of regard, the others being plain."

SYRIA.

A SCHOOL OF BIBLICAL ARCHÆOLOGY FOR SYRIA.—Henry W. Hulbert writes to *The Academy* from Beirût, Jan. 6, 1887, as follows: "A project is well under way to establish, in the East, an institution which shall do, for Semitic study and the archæology of the ancient Semitic lands, what the various schools of archæology at Athens are doing for Greek and Greece.

"Last July, at their annual meeting, the board of managers of the Syrian Protestant College at Beirût, in response to a memorial presented to them, unanimously decided to recommend to the trustees of the college, living in New York, U.S.A., that a new department be added to the college, to be called 'The School of Biblical Archæology and Philology,' and that an endowment of $100,000 be raised, with a view of opening the proposed school in October, 1887. It was recommended that a permanent director be appointed, that a library, thoroughly equipped with all publications bearing upon the Orient, be established, and that an archæological museum be started. It was urged that the school, while it would have the full support of the college, should have an autonomy of its own, and be responsible, not to the general faculty of the college, but directly to the board of managers. The president of the college would, of course, be an *ex-officio* member of the faculty of the school.

"The object of the school, as its name indicates, is to afford the best possible facilities for study in the East, both in the line of philology and of archæology. The more popular feature will be the opportunity it will afford students of the Bible to study that book amid the surroundings that gave it birth. The topography of Bible lands, the manners and customs of the present inhabitants of Palestine, the various aspects of nature which may throw light upon the Holy Scriptures, will be taken up fully. But besides this more popular aspect, the school will make arrangements for the thorough study of all the Semitic languages, emphasising especially the Hebrew, Arabic, and Syriac. The best native teachers will be employed. The school will also possess a full equipment of tents and instruments for

field work; and will each year, as opportunity offers, attempt to add something to our knowledge of these lands. Its work will not conflict with that of any society now at work in the East; but it will hope to obtain and hold the sympathy of all who are interested in the task of exploring Western Asia.

"That Beirût is the proper centre for such an enterprise is obvious to anyone who has made a careful survey of the question. It is the most healthy city in the East, easily accessible, in close communication by steamship and telegraph with all parts of the world. Its position is central. Jerusalem, Damascus, Cyprus, and Hums are less than twenty-four hours away; Egypt, Rhodes, Tarsus, Antioch are only two days distant. Beirût is the commercial centre of Syria, has good roads, pure aqueduct water, and a large English and American community. The Syrian Protestant College, under whose wing this school is to be fostered, is a well-established and successful institution, which has many friends in England as well as in America. It holds a charter from the Legislature of the State of New York. At its head are men who are well acquainted with the East, and whose horizon is not limited by the immediate work of giving Syria an institution of higher learning.

"The trustees of the college in New York have entered heartily into the enterprise; and during this month (January) the affair is to be made public, and a strong attempt will be made to arouse the interest of all those who have at heart the exploration of Western Asia. It is expected that it will take some years to get the school upon a solid financial basis, and it will depend for its start upon the voluntary contributions of those interested in it. The most pressing need is a library. The school needs £1,000 to spend at once on books, and £5,000 as an endowment for the library. The college has already the nucleus of a good library, and a fine large library-room, which will answer all the purposes of the school for a century to come."—*Academy*, Jan. 22; *Presbyterian Review*, Jan. (Henry W. Hulbert).

A circular has been issued by the New York trustees (Secretary D. Stuart Dodge, 11 Cliff St., N. Y.) in which it is urged that, while efforts are being made for the permanent endowment, the enterprise should be started on pledges taken for five years, by which the necessary yearly expenses of about $3,000 could be met. The suggestion is made that the various Theological Seminaries, and the Universities and Colleges having Oriental departments, should each contribute yearly, for five years, the sum of $100. This sum is certainly the minimum to be expected.

ANTIOCH.—Mr. Greville Chester writes from Antioch, calling attention to the deplorable fact that the magnificent walls of the city, the finest existing specimens of crusading work, are being demolished and used for building-material.—*Athenæum*, Dec. 25.

PALMYRA.—*Bilingual inscription.*—M. Heuzey communicated recently

to the *Acad. des Inse. et Belles-Lettres* (Dec. 24) the Greek text of a bilingual Palmyrene-Greek inscription, engraved on a tombstone from Palmyra. It reads: *Μάρκος Ἰούλιος Μάξιμος Ἀριστείδης κόλων Βηρυτίος πατὴρ Λουκίλλης γυναικὸς Παρτίναχος.* It refers to a citizen of the Roman colony of Beirût, *colonia Julia Augusta Felix Berytus.—Revue Critique*, 1887, No. 1.

The Decipherment of the Hittite Hieroglyphs.—*The Academy* of March 5 quotes from the London *Times* the following letter addressed by Capt. Conder, R. E., to the President of the Palestine Exploration Fund:—*Chatham;* Feb. 24, 1887: "The decipherment of the curious hieroglyphs found at Hamath, at Aleppo, at Carchemish, and throughout Asia Minor has for many years been considered one of the most interesting questions of Oriental archæology. Many attempts have been made to read them, but none of these could be considered successful so long as the language of the texts remained unknown. It has been my good fortune within the present month to discover what that language is; and I shall, I think, have no difficulty in convincing Oriental scholars of the reality of this discovery, since not only the words, but the grammar as well, can be demonstrated to belong to a well-known tongue. In fact, the discovery, once made, seems so simple and obvious that I can only wonder that it has not previously been observed.

"The complete reading of the texts is still attended with difficulty—first, because of the mutilated and decayed condition of the inscriptions; and, secondly, because of the imperfections of the published copies; while in some cases symbols only once or twice repeated must remain obscure until further examples can be obtained. I have no doubt, however, that careful study of the original texts will clear up many of these minor difficulties, when once the simple and obvious key to the language is recognised. I have no doubt, also, that it is already quite possible to understand the sense and character generally of all the ten principal texts at present known. I may observe that this character is known to have been in use in 1400 B. C., and it is probably very much older.

"Pending the preparation of a memoir on the subject, in which I propose to give a complete analysis, I attach the readings of the more important and certainly decipherable of the inscriptions. It appears that they are invocations to the gods of Heaven, Ocean, and Earth—exactly the deities (including Set) whom we know from Egyptian and cuneiform tablets to have been adored by the Hittites and other tribes of Asia Minor. This we ought to have already suspected, since the inscriptions in some cases occur on the basreliefs of deities. It is, no doubt, a disappointment to find that they are not historical; but I shall be able to show that they furnish, nevertheless, very important historical deductions, and throw a new and most astonishing light on the early history of Western Asia and of Egypt.

"The discovery will, no doubt, be regarded with some incredulity until it can be demonstrated by a full account of the grammatical reading of the inscriptions, the construction of the sentences being apparently one of the main reasons why these inscriptions have not previously been understood. I have, therefore, placed in the hands of two well-known Orientalists (Sir C. W. Wilson and Sir C. Warren) a statement of the basis on which the discovery rests, which will serve to show that the method is not arbitrary, and that the deductions are of primary interest to all students of Oriental history."

Capt. Conder's memoir has since been published (Bentley and Sons), under the title, *Altaic Hieroglyphs and Hittite Inscriptions*. *The Times* (London) of May 11 notices the book and gives long extracts. Capt. Conder claims to have established that the Hittites and the Akkadians were branches of the Altaic race, and "to have found a key to the reading of the Altaic system." He says, "I hope to show that the symbols are the prototypes whence the cuneiform system has developed; that they have possibly a common origin with the hieroglyphic system of Egypt, and that it is not impossible that the Chinese characters may have also developed from the original Altaic picture-writing of which the inscriptions under consideration ("Hittite") represent a somewhat advanced stage, yet a stage perhaps more primitive than that of the Egyptian system, and preceding the cuneiform on the one hand and the Cypriote syllabary on the other." *Cf.* A. H. SAYCE'S review in *The Academy*, May 21. He sums up in these words: "it does not seem to me that the secret of the Hittite inscriptions has been recovered from them. Capt. Conder has advanced the solution of the problem, but no more." *Cf.*, also, review in *Athenæum*, May 28.

ASIA MINOR.

LAST EXPLORATION BY MR. RAMSAY.—During last summer Mr. W. M. Ramsay again explored parts of Asia Minor. He first sought to elucidate the only remaining serious difficulty in the topography of Southern Phrygia, the identification of Trapezopolis, which was situated on the frontiers of Karia and Phrygia in the *conventus* of Alabanda. Its identification by M. Waddington with Kisil-Hissar is inadmissible: the only ancient site with which it can be identified is Hissar, four hours from Serai-keui on the route to Aphrodisias. An exploration of the mountainous country to the north and southeast of Kolossai showed that Kayadibi must represent the site of Ceretapa Diocaesareia, whose lake is the Aulindenos mentioned on coins. All the territory of Ormelion seems to have formed a great imperial domain. At Eyinesh, on a confluent of the Gebren-Sou, an ancient city was discovered by Messrs. Duchesne and Collignon, which Duchesne identifies with Sanaos, and Dr. Sterrett with Themissonion. The order followed

by Hierokles leads Mr. Ramsay to name it Palaiopolis, or Alieros, the latter being the native name. Mr. Ramsay made further investigations concerning the route followed by Manlius in his march from Termessos to Galatia. "We have visited Khadyn-Khan, the site of the ancient Sinethandos or Siniandos, and copied there, in one morning, 64 funerary inscriptions, leaving aside many defaced or illegible fragments. At Sadik (Laodiceia Katakekaumene), or in the neighborhood of this city, I collected, both in 1882 and 1886, about 75 inscriptions."

Hittite monument.—"I also visited the remarkable monument discovered in 1885 by Dr. Sterrett at Fassiker, four hours to the east of Beisheher on the Konieh route. Although without hieroglyphs, it belongs without doubt to the same ancient Cappadocian or Hittite art." It is a species of large obelisk raised on the backs of two lions, all cut in a single block, the lions being only partly disengaged from the mass. On the front of the obelisk, between the lions, a rude figure, probably female, with hands crossed on breast, is carved in relief: it holds, apparently, a crown. Above her stands a larger figure of a god, whose advanced left foot rests on her head, while his right leg is indicated in very low relief: he wears the usual high conical hat. The other three sides of the obelisk seem to be without figures: the back is deeply imbedded.—*Revue Arch.*, Jan.–Feb., 1887.

At the same site Mr. Ramsay found a rock-cut relief representing the Dioskouroi with the inscription, *Διὸς κόροι Σαμοθράκων θεοὶ Ἐπιφανεῖς.*

Assarlik (Karia).—At a meeting of the *Hellenic Society*, April 21, Prof. P. Gardner read a paper by Mr. W. R. Paton on some tombs he had recently discovered in the neighborhood of Halikarnassos. The tombs described by Mr. Paton are on the ridge facing the akropolis to the southeast, the most conspicuous being two large tumuli on a saddle between two rocky eminences. Both are of the well-known beehive form with an avenue or *dromos* leading into them, the whole structure being surrounded by a circular wall. In the first tomb were found fragments of pottery and of iron weapons; in the second, fragments of a cinerary vase, of a thin curved plate of bronze nailed to wood, gold spiral ornaments, and fragments of iron weapons. To the southwest of these two tumuli were a series of circular and rectangular enclosures formed by single courses of polygonal stones. In and about these enclosures, which were evidently the remains of tumuli, were found fragments of sarcophagi and of pottery, bronze fibulæ, gold ornaments, and fragments of iron weapons. On all the fragments, with one exception, which bore trace of painted ornament, there was no trace of any but geometric design. The forms of the vases did not show the variety and peculiarity of the early Island-types. The fibulæ were all of one pattern. The weapons were exclusively of iron. The bodies had in all cases been burnt. Besides other tombs and enclosures in the neighbor-

hood, Mr. Paton found one remarkable tomb of beautiful masonry, which, from its magnificence and conspicuous position on the top of a hill, he was inclined to regard as the tomb of one of those Karian princes who are mentioned in the Attic tribute lists. It was, at any rate, of later date than the Assarlik tumuli, and showed that the same style of sepulchral architecture long survived among the people of this district. In conclusion, Mr. Paton argued against Mr. Newton's identification of Assarlik with Souagela, and thought it was, more probably, in the territory of Termera. Mr. Paton's paper will appear, with illustrations, in the next number of the *Journal of Hellenic Studies*. Mr. A. J. EVANS dwelt upon the resemblance in general plan of these tombs, with their avenue, domed chamber, and outer circle, to tombs found in all parts of Europe, from New Grange in Ireland to Mykenai. The ornament also recalled Mykenai. The presence of iron and the ornament on some of the vases pointed, however, to a later date. —*Athenæum*, April 30; *Academy: cf. Classical Review*, vol. I, pp. 81, 82.

PERGAMON.—The last discovery at Pergamon was of a small but very beautiful Ionic temple, of low structure, yet of admirable proportions and exquisite workmanship. Hitherto, no clue has been found to the title of its dedication. Among the immense mass of antiquities sent to Berlin are vases, statues, architectural ornaments, and inscriptions.—*Athenæum*, Dec. 11.

According to the *Levant Herald* (Oct. 13–14) the Ministry of Public Instruction has sent to Pergamon a number of guards to watch the ruins of this new temple and to prevent pillage. The excavations here not having nearly reached completion, the German Government is seeking for a renewal of the contract, so as to recover important fragments of the temple.

The last excavations on the akropolis resulted only in the uncovering of the marble foundations of a building on the summit. Work was begun again in October.

An inscription of the II or III century found at Poiradjik, near Pergamon, has been published by Th. Reinach in the *Revue Historique* (Sept.–Dec., 1886), as follows: [*μονα*]*ρχία . . . διὸ . . . | κατ*]*έτος ἔκα*[*στ*]*ον. Καὶ πρῶτος ἐπρυτ*[*άνευσεν* | *. . . . ας καὶ ἐξ ἐκείνου μέχρι νῦν πρυτά*[*νεις ἀεὶ* | *διατελοῦσιν. Ὀρόντης δὲ Ἀρτασύ*[*ρου . . . . . | . . .*]*ὸς Βάκτριος ἀποστὰς ἀπὸ Ἀρταξέρ*[*ξου τοῦ* | *Περ*]*σῶν βασιλέως ἐκράτησεν τῶν Περγα*[*μηνῶν* | *καὶ μ*]*ετῴκισεν αὐτοὺς πάλιν ἐπὶ τὸν κοι*[*. . . . . | εἰς*] *τὴν πα*[*λαι*]*ὰν πόλιν. Εἶτα Ὀρόντης . . . . . | . . . τρε . . .* [*Ἀρτα*]*ξέρξῃ ἀπέθανεν . . . . . .* This is of interest for the early history of Pergamon, as it shows, (1) that there, as elsewhere, the prytans succeeded a monarchical state, and (2) that Orontes the Baktrian, having revolted under Artaxerxes Mnemon, about 363 B. C., conquered the Pergamenians and established them again in their ancient city, *i. e.*, probably at Teuthrania.—*Revue Arch.*, Jan.–Feb., pp. 88–89.

SMYRNA.—*Vandalism.*—The wholesale destruction of Macedonian, Byzan-

tine, and medieval walls on the ancient akropolis of Smyrna has been going on for eighteen months. The Turkish authorities are selling the stonework to all comers, while the recent development of the city makes the demand for it very great. Of the walls of Lysimachos only three small portions remain: the Genoese round towers and walls that crown the summit to the west are being blasted with gunpowder.—JOSEPH HIRST in *Athenæum*, Nov. 20.

"*Hittite*" *seals and cylinders.*—At a recent meeting of the *Académie des Inscriptions*, M. HEUZEY read a paper upon a collection of objects of so-called "Hittite" art, recently presented to the Louvre by M. Dorigny. The most important of these are a number of cylinders and seals of hematite which had been discovered in the neighborhood of Aidin, upon the old frontier of Karia and Lydia. The designs of the figures engraved on them recalls the art of Chaldæa and Babylonia; but their distinguishing mark is the exceptional development of purely decorative work—borders, frames, and belts of separation. In particular, there is found a system of scrolls, imposed on one another, similar to those which are so characteristic of the monuments at Mykenai. The study of these objects has enabled M. Heuzey to revise the series of Asiatic art, by now classifying as "Hittite" many cylinders, *etc.*, hitherto regarded as Babylonian, Assyrian, or even Persian.—*Academy*, March 19, from the *Revue Critique*.

KYPROS.

Excavations have been continued here throughout the year 1886 with good success, and it is even hoped that systematic and regular excavations are soon to be undertaken with the permission of Sir Henry Bulwer, probably by French archæologists.

ARSINOE=POLIS-TIS-CHRYSOKOU.—The excavations made here have been at the cost of three Englishmen, Messrs. C. Watkins, G. Christian, and J. W. Williamson, and their success is mainly due to the perseverance of Mr. Watkins. The objects discovered were to be exhibited in Paris during the spring: Messrs. Froehner and Hoffman are preparing a catalogue.

In the first place, there is the most striking resemblance to Athens and Vulci, on the one side, and to Kameiros, on the other. Two cups with red figures of severe style bear the inscription ΗΕΡΜΑΙΟΣ ΕΠΟΙΕΣΕΝ, which occurs at Vulci (Klein, pp. 115–16); and a third has the inscription ΚΑΧΡΥΛΙΟΝ ΕΠΟΙΕΣΕΝ, which has been found in Italy and Attika (Klein, pp. 124–30). On the other hand, a belt of silver gilt, of four thin plaques with pendants, recalls the archaic jewelry of Kameiros discovered by Salzmann: these plaques bear, in relief, the Persian Artemis holding in each hand a deer or ram; and two winged lions, adossed.

The tombs are generally trenches, but in some cases are in the shape of carefully excavated sepulchral vaults to which a staircase descends: the passage generally contains terracotta statuettes thrown pêle-mêle and *intentionally broken*.

Among the objects discovered are many fine red-figured vases, lekythoi of known Greek types, urns with ox-heads in relief, statues in calcareous stone, and numerous terracottas, often of excellent style without trace of archaism or stiffness.

Kypriote Inscriptions.—Of singular interest are the numerous inscriptions in Kypriote characters, found here. Professor Deecke has published in the *Berl. phil. Woch.*—beginning Oct. 9, 1886 and continuing up to date—a first series of 131, of which he had copies and squeezes: of these, ten are on stone, one on topaz, and 110 on vases. One of those on stone reads: *Ἄριστος* [*τᾶι*?] *Ἀριστοκύπρω παιδί*. The name of King Aristokypros of Soloi, who died in 498 B. C., was already known (Herod. v, 113). On another we find the name *Stasandros*, which was that of a Kypriote prince in the service of Alexander.

At the beginning of November, Richter found a large red-figured amphora whose main subject is Aphrodite with Herakles and Karis: the inscription, which is difficult to read, contains the word ΚΑΛΟΣ: he also found a broken pyxis with numerous and well-drawn figures, accompanied by their names, ΘΕΜΙΣ, ΝΕΜΕΣΙΣ, ΕΡΩΣ.

A new season of excavations was planned for February, March and April of this year, and Richter will begin this summer to prepare for the publication of the discoveries.—*Revue Arch.*, Jan.–Feb., pp. 83-87.

IDALION=DALI (near).—*A Phoinikian inscription* on a marble slab, consisting of about 130 letters, has lately been discovered, in a small Greek church close to Dali, by Herr Max Ohnefalsch-Richter. A squeeze of the inscription, kindly given by the discoverer to Mr. D. Pierides, has enabled the latter, on a cursory examination, to find that it is of great importance, for it gives the name of Baalram, son of Azbaal; and, as we know from another inscription found at Dali in 1869, and now in the British Museum, that Baalram was the father of Melikiathon, the line of succession of the Phoinikian kings of Kition from Baalmelek to Pamiathon is clearly established: the following is the list in lineal descent:

Baalmelek	B. C.	*circa*	450–420
Azbaal	"	"	420–400
Baalram	"	"	400–380
Melikiathon	"	"	380–350
Pamiathon	"	"	350–300

The inscription was cut in the third year of Baalram's reign: the parts which have most suffered are the beginning and a considerable portion at

the end. In the first were merely recorded the month and the day of the month; but the large obliterated ending must have contained the name of the dedicator, that of his father, *etc.* There was also a short second line, now beyond all hope of restitution, which dealt with the usual formula of a vow. The reading, so far, is as follows:

1. [The . . day of the month . . .] *in the third year of the reign of Baalram, King of Kition and of Idalion, son of Azbaal, King of Kition and of Idalion, son of Baalmelek, King of Kition* [this monument was set up and dedicated by ————] *to Anat.*

2. *After hearing his voice may she bless him* (or her).

It is worthy of note that the founder of the dynasty ruled over Kition only.—D. PIERIDES in *Academy*, April 23, May 7.

TAMASSOS (near Politikon).—Details are now for the first time available concerning Dr. Richter's excavations on this site, mentioned on p. 478 of Vol. II. The most important discovery made there was of a compact group of Phoinikian tombs dating from the beginnings of Greek influence in Kypros. They are mere trenches dug in the earth, deep or shallow according to the richness of the contents. Of extraordinary interest is a large urn found in one of the deepest tombs, in which two other interesting vases were also found. This urn was covered with paintings after being baked. The outlines of the figures are black, the filling-in red; the shields, arms, hair, beard and eye-balls of the figures are black. The heads are all red except that of the gorgon and the lion (?). These scenes are painted below a row of ram-heads in relief, and consist mainly of two hunting scenes, and of Perseus killing the gorgon,—the earliest appearance, according to M. Reinach, of a Greek legend on Kypriote keramics.

Two bilingual inscriptions.—Two new bilingual inscriptions, Phoinikian and Kypriote, of great interest have been found at Tamassos, where no Phoinikian inscriptions had yet been found. The first, which is entire and well preserved, is published by Professor Wright in the *Proceedings* of the Society of Biblical Archæology (Dec. 7, pp. 47–51): "This is the statue which gave and set | up Menahem, son of Benhodesh son of Mena|hem, son of Arak, to his Lord, to [Reshe]ph | Eleyith, in the month of Ethanim, in the year | thirty, 20 + 10, of King Malkiyathan, king of | Kition and Idalion, because he heard (his) voice. May he bless (him)."

The second is badly defaced, but M. Ph. Berger, in studying it for the *Corpus Inse. Sem.*, has translated it as follows: "On the 16th day of the month of Faalot, in | the 17th (?) year of King Melekiaton, king of | Kition and Idalion; this is the statue given by | Abdsasam, son of . . ., to his lord Resef-E|lehites. A vow which he made; because he heard his voice. May he bless him."

The divinity Resef-Elehites mentioned on both these inscriptions is a

new divinity, or at least a new form of one already known, and is comparable to the two divinities Resef-Hes and Resef-Mikal mentioned on other Phoinikian inscriptions of Kypros. Elehites is evidently a Greek word, and the divinity of Greek origin, and to be termed the Apollon of Helos, on the gulf of Lakonika. In the same way, Resef-Mikal is the Apollon of Amyklai. These inscriptions of Tamassos show the influence of Greek ideas in Kypros, and the predominant role of the ancient Achaian element in Kypriote civilization. They also show that, contrary to present notions, the Phoinikian domination in Kypros extended to Tamassos, at the very beginning of the small dynasty of which Melekiaton was a member; *i. e.*, as early as 350 and perhaps 380 B. C. The first establishment of the Achaians in Kypros seems to be earlier than the invasion of the Dorians, as we find them warring in Upper Egypt in the XII cent. B. C. Conquered by Rameses and Meneptah, the *nations of the sea* must have in part recoiled on the islands of the archipelago.—PHILIPPE BERGER in *Revue Critique*, 1887, No. 9. *Cf.* DEECKE in *Berl. phil. Woch.*, 1886, Nos. 41–42, 51–52; 1887, No. 12; and S. REINACH in *Revue Arch.*, Jan.–Feb., pp. 82–83.

GREECE.

EXCAVATIONS OF THE ARCHÆOLOGICAL SOCIETY.—Among its late work has been the continuation of the excavations on the Akropolis and the ancient Agora of Athens, of those at Eretria and Eleusis, and finally at Epidauros, Mykenai and Oropos.—*Revue Arch.*, Jan.–Feb., p. 62.

ATHENS.—THE GERMAN ARCHÆOLOGICAL INSTITUTE opened this season with five members, four of whom hold *stipendia*. Dr. Petersen has replaced Köhler as Director of the Institute: Dr. Köhler is Professor of ancient history at the University of Berlin.—*Revue Arch.*, Jan.–Feb., p. 64.

BRITISH SCHOOL.—In view of the opening of the School, the Managing Committee have established the following regulations. The students of the School will fall under the following heads: (1) holders of travelling fellowships, studentships, or scholarships at any university of the United Kingdom or of the British Colonies; (2) travelling students sent out by the Royal Academy, the Royal Institute of British Architects, or other similar bodies; (3) other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write, in each season, a report upon their work. Such reports are to be submitted to the Director, and may be published by the Managing Committee if and as they think proper. Intending students are required to apply to the Secretary (Mr. George Macmillan, 29 Bedford Street, Co-

vent Garden, London). No person will be enrolled as a student who does not intend to reside at least three months in Greek lands. Students will have the right to use the library of the School free of charge. So far as the accommodation of the house permits they will (after the first year) be admitted to reside at the school-building, paying, at a fixed rate, for board and lodging. The Managing Committee may, from time to time, elect as honorary members of the School any persons actively engaged in study or exploration in Greek lands.—*Athenæum*, Nov. 20.

Mr. F. C. PENROSE, Director of the School, is now established at Athens. Mr. Ernest Gardner, well known for his share in the excavations at Naukratis, is installed as a student. The Committee have purchased a considerable number of archæological books which are most essential, and to this nucleus have been added valuable gifts of books by the University of Oxford, and various publishing firms of London, Berlin, *etc.*—*Athenæum*, Feb. 26.

On April 13th, Mr. Penrose gave his first lecture in the library of the British School: his subject was the temple of Zeus Olympios, where, by permission of the authorities, he has for some time past been carrying on excavations on behalf of the Society of Dilettanti for the purpose of ascertaining the complete original plan of the temple. After giving the history of the building, which extends over nearly seven centuries, from Peisistratos to Hadrian, he proceeded to give the results of the examination, which show the foundations of one wall apparently belonging to even a more ancient structure—which he called, for convenience, the work of Deukalion, to whom the original foundation of the temple was assigned by a tradition recorded by Pausanias—and various massive foundations, in all probability the work of Peisistratos, together with three distinct beds intended for the pavement of different parts of his temple, which were found at levels varying from about 9ft. to 11ft. below the floor line of the later naos. The walls referred to did not exactly coincide with the foundations of the existing building. Mr. Penrose showed also that some drums, about 7½ft. in diameter, remain of the columns prepared by Peisistratos.

From a small fragment of one of the fluted columns of the naos which he found, Mr. Penrose deduced the diameter and height of the columns and the other dimensions of the internal order. He had ascertained the probable position of the statue, and discussed the manner in which it was lighted, and showed that the disposition of the foundations corroborated Mr. Fergusson's view of the *hypaithron* and general system of lighting connected with this temple, published in his work entitled *The Parthenon*.—*Athenæum*, May 7; *cf.* JOURNAL, p. 171.

AMERICAN SCHOOL.—The fifth year of the *American School of Classical Studies* opened auspiciously under the direction of Prof. Martin L. D'Ooge

of the University of Michigan. Seven students are actively at work, representing six colleges,—Amherst, Beloit, Columbia, Michigan, Trinity, and Yale. Informal reports presented by different members at the weekly sessions in the library of the School have covered generally the results of reading and observation in Athens and Attika. Among the subjects discussed have been the allusions of classic writers to the Akademia, some irrational theories concerning the curves of the Parthenon, the identity of the Pnyx, representative statues of cities and communities, *etc.* Besides the private reading of Pausanias with the students, and topographical excursions, the Director conducts a weekly evening meeting, to which friends not connected with the School are invited.

The work on the new building was begun November 4, and on March 12 occurred the ceremony of laying the foundation stone on the site given by the Greek Government, adjoining that of the English School; the two buildings having a large and shady inclosure in common. A number of archæologists, native and foreign, and the members of the German, English, and American Schools were present at the ceremony; as also were the Ministers for Foreign Affairs and Public Worship, the Inspector-General of Antiquities, and the Secretary of the Greek Archæological Society. The Director of the School made a speech in which he spoke enthusiastically of the institution as the result of private enterprise—an institution which was already in the fifth year of its existence and had done much for science. His expression of thanks to the Greek Ministers present for the hospitality shown to the School, and for the gift of the site, drew from the Minister of Foreign Affairs a eulogium on the services of the American Philhellenes, at the foundation of the kingdom, to the spread of education and schools in a State recently emerged from the slavery of centuries. The American Minister, Mr. Fearn, in an eloquent speech, expressed his pleasure at this affiliation of American culture to the country of high aspirations and the fine arts. As the representative of the English School, Mr. W. Leaf dwelt upon the warm feelings of cordiality and brotherhood which united England and the States. The Director of the German School, Prof. E. Petersen, expressed his pleasure that the energetic people of America had by founding their Archæological Institute given evidence of their lofty aims and their desire to compete in classical studies with the nations of Europe. The assembly broke up after drinking to the prosperity and permanence of the youthful foundation.—*Athenæum*, March 26.

The building for the American School will include, beside the Director's home and a large library for the use of students, lodging-rooms for half a dozen students. The work upon it progresses rapidly, the foundations and basement story being completed (May, 1887), and it will be ready for occupancy at the beginning of the school-year in October, when Professor

Merriam of Columbia College will succeed Professor D'Ooge as Annual Director.

The *Circular of information for students proposing to join the School*, giving a list of books to be read, and advice and information concerning requirements, books, route, board, lodging, *etc.*, may be obtained from the Secretary of the Committee in charge of the School, Mr. Thomas W. Ludlow, Yonkers, N. Y.

The British and American Schools, each having about an acre and a half of ground, stand near together on the upper edge of a tract of land about a quarter of a mile square, the rest of which is occupied by a hospital, a normal school (not yet built), and the monastery of the *Asomaton*, built on the site of the ancient Kynosarges. They lie well up on the southern slope of Lykabettos. The site has never been built upon, and accordingly is specially salubrious; and the view, which stretches from Pentelikos around to Salamis, is little likely to be injured by later buildings.

EXCAVATIONS ON THE AKROPOLIS.—*Ancient stairway to the Akropolis.* —The Ὥρα of Aug. 1, 1886, announced the discovery, near the northern wall of the Akropolis, not far from the Propylaia, of an ancient staircase of 23 steps, cut in the rock and leading to a door just opposite the Areopagos. The walls on either side of the stairs are built in *opus isodomum*, and the door, surmounted by two stones forming an acute angle, has the form of the most ancient Greek doorways. It was closed up with rubble during the Middle Ages. The Ὥρα conjectures the staircase to be that used by the Arrhephoroi, and perhaps that by which the Persians entered. It formed part of the sanctuary of Aglauros, the clearing of which will now be easy. M. Reinach reports that it cannot be earlier than the time of Kimon.—*Revue Arch.*, Jan.–Feb., p. 62.

Bronze Statuette of Athena Promachos.—The Athens correspondent of the London *Standard* telegraphs: Last evening the excavations at the Akropolis resulted in the discovery, at the depth of twelve metres, of a bronze statuette twenty centimetres in height, representing Athena Promachos. This work, belonging to the period before the Persian invasion, is the best specimen of the work of the period which has yet been discovered.—*The Evening Post* (N. York), May 25.

Results of architectural investigations on the Akropolis.—In late numbers of the *Berl. phil. Wochenschrift* (1887, pp. 2, 34, 65) Messrs. Bötticher and Belger have published a careful review of the latest investigations on the Akropolis and of their results for architecture and sculpture. The most important fact is that the present Parthenon does not occupy the site of the ancient one destroyed by the Persians, which was more to the north.

Bronzes.—Between the Erechtheion and the Propylaia were found twelve bronze vases of different models, and a bronze female statuette of a type simi-

lar to the archaic marble-statues found in 1886. This leads to the supposition that the storehouse of bronzes, or chalkotheka, is not far off.—*Berl. phil. Woch.*, 1886, p. 1619.

Inscription relating to Aischylos.—In the next number of the Ἐφημερὶς Ἀρχαιολογική there will be published a newly discovered valuable inscription, found recently in the course of excavations on the Akropolis. The words Αἰσχύλος ἐδίδαξεν, and the certainty that the inscription dates from Ἄρχοντος Φιλοκλέους, go to prove that the first representation of the *Agamemnon* is here concerned, which, as is well known, took place in this archonship, in the second year of the 80th Olympiad, the leader of the chorus being Xenokles, of Aphidnai, whose name is also recorded on the inscription.—*The Times* (London), April 7.

The primitive Athena-temple.—Dr. Dörpfeld has at last published a full account of this temple, which, enlarged if not built by Peisistratos, was destroyed in the Persian invasion. Its site is between the Parthenon and the Erechtheion, and the caryatid portico of the latter is built over a portion of the ancient substructure at its northern edge.—*Antike Denkmäler*, I (1886), pls. I, II; *Mitth. d. d. arch. Inst.* (Athen. Abth.), XI (1886), pp. 337–51.

Archaic marble statue.—Of the two archaic figures recently found on the opposite side of the Erechtheion, one is of marble, like those discovered last year, and resembles them in style, though possessing, as indeed do all the rest, a marked individuality of its own. It was found at a distance of about 100 feet from the rest, to the east, and at precisely the same level, close against the outer wall. This statue differs from those of the same style and period, found the beginning of last year, as regards the arrangement of the hair, the drapery, and the general form of the tunic. The head was found separated from the trunk, but unimpaired, with the exception of the nose. Numerous traces of coloring remain, more especially on the pupils of the eyes, the eyelids, and the border of the tunic. This statue is the largest hitherto found, measuring, without pedestal and a part of the feet, 1.80 metres in height.

Archaic bronze image of Athena.—The other discovery is of a quite unique kind, so far as is yet known. The process of cleaning is not yet complete, so that it is difficult to give details. It is a statue, or rather a relief, of the goddess Athena, belonging to the period of Greek art previous to the Persian wars. It is composed of two plates of bronze gilt that are nailed together. It appears that there was some other material, probably a board, between these two plates, to either side of which were nailed these two reliefs, and that, consequently, when the wood decayed the two plates were joined. The figures on either face are similar, about 15 inches high, but the one is in better preservation than the other. The goddess is represented as a woman of tall, slight, and graceful figure, standing and in profile, the head being

in the proportion of one-eighth of the whole body. The expression of the face is said to be solemn, yet smiling, the folds of the dress are of excellent workmanship, as is also the ægis. Here and there traces of coloring are preserved. It is flat and in low relief. It still remains doubtful what purpose this figure was intended to serve. Probably, however, it formed part of some piece of furniture. It is furnished with holes at the feet and head for attachment. Perhaps it was attached to the top of a tripod so that both its sides were visible. The discovery is of the greatest import, as no counterpart to it exists in any museum.—*Athenæum*, March 26, April 9.

THE EXCAVATIONS AT THE TEMPLE OF ZEUS OLYMPIOS were unfortunately interrupted for some time by an attack of fever which prostrated Mr. Penrose on his return from Sikyon. They have now been resumed, on his recovery, and some further interesting results obtained. It turns out that the temple was really octostyle, as Dr. Dörpfeld surmised, and not decastyle, as had been hitherto supposed. The cella, the position of whose walls has now been fixed, was, therefore, unusually long in proportion to its width. Mr. Penrose has found a portion of the Peisistratean foundation, which has been partly adapted to support the inner columns of the cella; the entire length could not be thus employed, as the old wall does not run due east and west, but deviates some two degrees from the correct direction, while the building of Antiochos has been aligned with extreme accuracy. Some unfinished drums, presumably belonging to the Peisistratean temple, have also been utilized as foundations for some of the columns of the portico of Hadrian and elsewhere in the peribolos. The original cement-flooring of the ancient building has also been found, and the exact level and entrances of the peribolos determined.—*Athenæum*, April 9. *Cf.* p. 167 of JOURNAL.

MUSEUMS.—Kabbadias has finished the classification of the marbles in the Akropolis Museum, and is at present occupied with the reorganization of the Central Museum.—*Revue Arch.*, Jan.–Feb., p. 62.

DELPHI.—A desire long felt by antiquaries is on the point of being realized. The excavation of the remains of ancient Delphi was the logical sequence of the unearthing of Olympia, and for years past there has been a talk of the French undertaking the work. As long ago as 1840, Karl Ottfried Müller proceeded to lay open the still existing southern wall of the terrace on which the temple of the Pythian Apollon stood. The fruit of this excavation, in which the zealous scholar laid the foundation of the illness which eventually proved fatal to him, was fifty-two inscriptions, which were published three years afterward by his pupil Ernst Curtius. The *École d'Athènes* some twenty years ago took up the work, and proceeded further with the excavation of the wall. A thick volume of Delphic inscriptions, edited by MM. P. Foucart, the present Director of the French School, and the late C. Wescher, is a monument of the interesting

finds there made, which are of the greatest value for the history of the Amphictyonic League and of the city of Delphi.

The circumstance that the modern village of Kastri is situated exactly upon the site of the ancient ruins of Delphi has thrown great difficulties in the way of systematic investigation. But gradually these obstacles have been removed, for the Greek Government has determined to compensate the villagers for the loss of their houses, and to assign to them another site. So it has been possible for the French Government to conclude an agreement with the Greek in virtue of which the French are to carry on explorations at Delphi. This agreement was signed by M. Stephanos Dragumis, the Minister of Foreign Affairs, who has shown his familiarity with antiquity by various archæological papers in Greek and foreign journals, and Count Montholon, the French Minister, on the 4th of February, and submitted to the Greek Chamber of Deputies on the 11th of March.

Under the stipulations of this convention, the Greek Government concedes to France the exclusive privilege of excavating at Delphi for five years. The explorations are to extend over the whole of the ground agreed upon by the Director of the French School and the Greek Inspector of Antiquities. The Greek Government undertakes to provide the money necessary for the purchase of the houses and land required for the excavations, a sum of sixty thousand drachmas (equivalent at present rates to £1,850); the expense of the excavations is to be borne by the French. Everything found in the course of the excavations is to remain the property of Greece, and all goods recognized as immovable are to belong to the Greek estate. France obtains the exclusive right of reproduction, publication, and multiplication of the objects found, for five years after the discovery of each. The Inspector of Antiquities is to name a representative at the excavations. The agreement is to last for ten years from the day of its ratification by the Chamber. Both Governments bind themselves to submit the convention to their representative bodies without delay. The ratification at Athens will take place as soon as possible. Such are the stipulations. The main difference between them and those made with the German Government with respect to the excavations at Olympia is, that Greece has not this time allowed itself to be persuaded into surrendering duplicates.—S. LAMBROS in *Athenæum*, March 26.

ELEUSIS.—*Temple of Plouton and Natural Caves.*—During the last eighteen months a great deal has been done here in the way of excavations, since the remarkable discovery of the pre-Periklean temple, burnt by Xerxes (see JOURNAL, vol. I, p. 437). The clearing away of rubbish from behind the Temple of Hadrian has resulted in laying bare *three natural caves* in the rock beneath the akropolis, which seem to have been utilized for purposes of worship, as they are connected together by the massive ground-

work of a *small temple*, which in all probability was dedicated to Plouton. On this site were found *three pieces of sculpture* of very beautiful workmanship: a middle-sized male statue, draped, with naked breast and long flowing hair; and two marbles with representations of Plouton, Demeter and Persephone. The first of these is a fine relief, 3 ft. long by 1½ wide, in two compartments, in the first of which are Plouton and Persephone in Hades, seated at a table on which is food, Plouton offering a beaker of wine to Persephone; while, in the other, Demeter and Persephone are seated at a similar table with food, a nude cup-bearer standing behind the latter. These are not, as was at first supposed, representations of funeral banquets, but of an *anathema* or sacred offering to the deities, as is set forth in the Greek inscription below, where Lysimachides appears as the donor. The other and larger marble is an upper fragment containing the beginning of a long inscription, below which are the well-carved heads of Plouton and Persephone.

Rock-cut Chambers.—Between these caves and the Temple of Demeter, has been disinterred *a rock-cut chamber*, 33 by 10½ ft., of unknown destination, reached by five steps, rough-hewn in the hillside; it has at the back, in the face of the straight-cut rock, a high bench 15 ft. long by 3 ft. high. On the right side one enters, on a little higher plane, another chamber about 12 ft. square, with a low bench in the rock.

Temple of Demeter.—At the west end, has been recently discovered a broad flight of 24 ancient, low steps, 12 ft. long by about 9 ins. high (corresponding to the similar rock-hewn staircase already known to exist at the southwest corner), leading to a level platform cut in the side of the hill, immediately overlooking the temple. From this grand stage it is supposed access was obtained to that upper story of the temple mentioned by Plutarch in his life of Perikles (ch. XIII), whence the uninitiated or others could become spectators of the scenes below. At the top of this ancient staircase, on the right, is another broad staircase (its steps over a foot in height) which leads straight to the akropolis, which crowns the hill. The rock-cut staircase on the south side is to be further excavated.

All the objects that have been discovered, from the beginning of these excavations, have been collected in the house of M. Philios, the director.

The modern Greek church and inclosure that stood last year at the extreme southeast corner, just below the temple of Demeter, have been entirely cleared away, and have revealed, first, the ground floor of several Byzantine houses; secondly, a fine half-circle in large well-squared stones divided by a diameter-wall, 15 yards long, of similarly solid construction; and, lastly, the massive stone walls of the great peribolos itself surrounding the chief centre of Athenian worship. The nature of this singular stone half-circle has not been determined; but it resembles the foundations of a temple recently

laid bare in the old Agora at Athens. If not a temple (dedicated probably to Dionysos, who certainly had a shrine at Eleusis within the sacred inclosure), it was one of those round towers built along the walls to serve as granaries.

The result of these excavations is to convince M. Philios, who has directed them from the first, that the destruction of this vast shrine was not the work of man, but is owing to an earthquake, such as the other day threw down the columns of the great temple of Zeus at Olympia, so recently disinterred by the Germans. M. Philios has in hand an exhaustive work, which will give a full account of all the discoveries at Eleusis.—JOSEPH HIRST in *Athenæum*, Dec. 25.

EPIDAUROS.—In reference to the discoveries made here, which were mentioned in vol. II, p. 480 of the JOURNAL, the complete list of objects found includes 30 small statues, two reliefs, four heads, and 40 inscriptions. Among them were statues and statuettes of Pan, Kybele, Telesphoros, Hygieia, Aphrodite, and Nike. The inscriptions all belong to the Roman period and are mostly votive. These discoveries were made in a large Roman building to the N. E. of the Ionic portico; a part of the W. front and three chambers near the portico had been excavated during the previous year.—*Revue Arch.*, Jan.–Feb., p. 65.

KRETE.—Since 1884 the Syllogos has directed much attention to the collection of antiquities then beginning to be discovered on the island, and a museum was founded for their reception. It was in that year that, owing to the accidental observation of some shepherds, the famous *Cave of Zeus on Mount Ida* (the supposed cradle of his worship) was discovered, of which an account has been given by Fabricius in the *Mittheilungen* of the German School at Athens. This important identification enabled the Kretan Syllogos to undertake excavations on the site on a large scale during the summer of 1885, under the direction of Dr. Halbherr and of Mr. Aerakes, professor in the Gymnasium at Candia. So numerous and important were the objects disinterred in this prehistoric cavern on Mount Ida that they naturally formed the nucleus of the new collection. They consisted principally of bronzes of very archaic style, partly plates worked with the chisel and partly objects cast in a mould; votive shields with figures of an Oriental type; cups, bowls, cooking cauldrons, tripods, *etc.*; an account of which, with illustrations, will be shortly given to the public. During the same year the museum acquired by purchase a fine collection of archaic fictile vases from *Anopolis*, in the province of Pediada, figured with geometrical ornamentation; a Hermes of primitive style, with traces of polychrome painting, and a splendid female torso of a statue found at *Gortyna;* more than fifty large blocks of stone covered with archaic inscriptions from the same place, at a spot called commonly "Alle Vigle." In the following

year excavations were undertaken by the Greek Syllogos in the supposed *Diktean cave on Mount Lassithi*, and in the *grotto of Eileithyia*, mentioned by Homer and recently discovered near *Karterò*, not far from the modern town of Candia. The excavations yielded various bronze and terracotta objects for the further enrichment of the newly founded museum. During the month of October other additions were made by the acquisition of a statue of the Macedonian period, of four well-finished marble heads of the Augustan age, and of six mutilated Roman statues, all from *Gortyna*, as follows: (1) A full-length statue, the size of life, of good workmanship of the Macedonian period, which represents an orator in the act of speaking (the brief description given suggests a certain resemblance to the figure falsely named Germanicus in the Louvre); (2) a male statue larger than life-size, which is still half covered with earth; (3) a female torso, the upper part of which is injured (she stands erect and wears a mantle of many folds); (4) the figure of a man, the upper half of which is missing; (5) two torsos of Roman emperors (the head of one has been found and fitted on, but we have not yet heard of the identification). Owing to this rapid development of archæological interest in the island, the museum is already becoming too small, and the Syllogos is now engaged devising an ampler one for its collections. Other objects not mentioned above, but requiring greater space for proper exhibition, are an archaic *pithos* from *Lyttos;* some fragments of a sepulchral urn, with figures in relief of warriors and of chariots, from *Palekastro*, in the province of Sitia; three enormous *pithoi* (wine jars) from *Knossos*, figured with geometrical decorations in relief; a headless marble statue of Aphrodite; and some arms of very early date, including nine highly interesting bronze axes. In the entrance courtyard are placed a large headless statue of a Roman emperor and a sepulchral marble urn from Knossos, with a scenic representation in relief, having underneath the name *Polybos* carved on the base. This is the urn seen by Capt. Spratt outside one of the gates of Candia, where it served the purpose of a public fountain.—*Athenæum*, Feb. 12; March 19.

The archaic inscriptions found by Halbherr at *Βίγλαις* (*alle Vigle*) and published by Comparetti (*Museo Italiano*, 1886, pp. 190, *sqq.*) are juridical fragments in a very ancient alphabet containing several entirely new letters which seem to be the prototype of the famous Gortyna Code. These fragments make it necessary to rewrite the history of the archaic Greek alphabet, and their importance will be shown in a paper which Professor A. C. Merriam is to publish in the next number of the Journal.

Gortyna.—Dr. Halbherr has at length succeeded in resuming his excavations here, where he discovered the famous archaic law-code inscription, three years ago. In a few weeks' time we hope to give an account of the result of this new undertaking.—*Athenæum*, April 30.

KROPEIA.—A most important piece of sculpture, found at Kropeia, was lately transferred to Athens and deposited in the Central Museum. The object discovered is the pedestal of a statue of most curious and unique form. It bears various representations on its three sides: in the centre is represented an armed horseman, on either side of which appear personages with long garments. This piece of sculpture is one of the few works of art found in Attika resembling Egyptian art as regards the mode of representation, the manner of workmanship, and the form. It was discovered serving as a support to the altar in a chapel at Kropeia. In the same little chapel was also discovered, walled in, a small piece of sculpture representing Herakles destroying the Nemean lion. This has likewise been brought to Athens.—*Athenæum*, March 26.

MOUNT LAURION.—*Christian antiquities.*—In the ancient silver mines of of Laurion many objects have been found belonging to the Grecian workmen, but, hitherto, nothing denoting the presence of Christians except a few workmen's terracotta lamps having on them, in relief, the cross or other Christian symbols. Some members of the French School at Athens, recently, when engaged in exploring the narrow galleries near the surface at a place called Pozzo Anemone, between the two great workings of the French Company at Kamaresa and Sureza, came upon some short inscriptions cut in the rock. Of these inscriptions five or six were identified by MM. Diehl and Radel as clearly Christian, very like those found in the Roman catacombs. Crosses appear frequently upon them, and they consist of Christian phrases or maxims, and invocations of God. They will shortly be published, with illustrations, in the *Bulletin de Correspondance Hellénique.*

Kamaresa.—Amongst the more important discoveries at Laurion, during the past few months, have been some tombs at the new diggings inland beyond Kamaresa. There were here found three large vases, standing about 2 ft. high by 1½ ft. broad, figured in pale-red on black; and several beautifully designed and figured smaller vases; also some spirited terracotta *figurini.* A most interesting object was an ancient bronze delving-hammer imbedded in a sheet of calamine.—JOSEPH HIRST in *Athenæum*, Dec. 4.

LEBADEIA and ORCHOMENOS.—Dr. Schliemann recommenced in March 1886 the unearthing of the sanctuary of Trophonios at Lebadeia, and of the treasury of Minyas at Orchomenos. In the latter building he discovered, in the centre, an archaic base on which three statues were placed; and a great number of fragments of vases of the most ancient style.—*Revue Arch.*, Jan.–Feb., p. 64.

MYKENAI.—Since last June, the Greek Archæological Society has been engaged in removing the accumulated *débris* in the akropolis and in the lower town. Owing to the small number of laborers employed (16), the

work has progressed slowly. Few objects of value, and no gold ornaments, have been found, except a gold wire in spirals, of the same shape as those represented in *Mycenæ* (No. 529). But the surmise that a prehistoric building would come to light has been verified. On this subject Dr. Schliemann writes to a friend in London: "A fortnight ago, I was at Mykenê, and I have convinced myself that, on the summit of the rock, the foundations of the prehistoric edifice have really been found. But they have afterwards been altered, and evidently used for a Doric structure, probably a temple. The prehistoric building seems to have been the old palace. Of the walls no trace is preserved. On the other hand, at the south side, below the summit, one-half of a hall and a small room have been brought to light, which seem to belong to the old palace—all the more so, as in the hall itself is preserved one-half of a round hearth, exactly as in Troy and Tiryns. Of the walls of this hall, and of the little room also, a portion still exists. The walls have the same style of building as those of the Tirynthian Palace: that is, they consist of a lower part of quarry-stone and clay, and above of sun-dried bricks; and they are first covered with a thick layer of clay-dressing, and then with a wall-dressing of lime. This palace also has been destroyed by fire, and the heat was so fierce that nothing has been preserved of the wall-paintings *in situ*. In the rubble, however, several pieces of painted wall-plaster were found. I also found some such at Mykenê in 1876."

It seems that no further excavations have been made on the slope of the castle-rock. On the lower terrace, to the right of Dr. Schliemann's former excavations (plate 2 in *Mycenæ*), a small house with three little rooms was discovered. In the largest of these the fireplace is in the centre (as is always the case), and in good preservation. With the exception of some fragments of terracotta vases and idols, no finds dating back to a prehistoric epoch have been made. A Doric capital was found which seems to belong to the later building on the summit of the rock.—*Academy*, Dec. 11.

OLYMPIA.—Among recent discoveries made here, is that of a Street of Tombs, and a well-preserved archaic head in high-relief. The important identification of the Leonidaion (vol. II, p. 481) was made in consequence of a reunion at Olympia of a number of German archæologists, including Drs. Treu and Furtwängler, for the purpose of completing the study of the excavated sections and the collections of objects found.—*Revue Arch.*, Jan.–Feb., pp. 68–69.

SIKYON.—The excavations undertaken here by the American School were begun only a few days ago, but they already promise good results. A beginning has been made at the theatre, and portions of a structure supposed to be the *scena* have already been brought to light, together with a fragment of a statue.—*Athenæum*, April 9.

THESSALONIKE.—*Sarcophagus.*—While a trench was being dug in the Great

Varda Street, near the Varda Gate, at a depth of 2½ metres a beautiful marble sarcophagus of the pre-Christian Roman period was discovered, which seems to have contained the body of a lady of rank. Lovely earrings, rings, a gold chain, a brooch, and other articles were found in it. Every part of the sarcophagus is covered with fine and well-preserved reliefs.—*Athenæum*, March 26.

THORIKOS.—The American School at Athens has completely unearthed the very ancient and primitive theatre of Thorikos, over against the town and mines of Laurion, beginning the work in April and continuing it in the autumn [1886]. This theatre was formed out of the rock of the hillside in the V cent. B. C., and bears traces of restoration in the III cent. B. C. It had no stage structure of any kind. The cavea has a peculiar form, sweeping inward, in a loop to the right, as viewed from the proscenium. All the seats are roughly cut in the rock and have no stone facings. A very rude low retaining-wall divides the cavea from the orchestra below, which consisted of a primitive earth floor, and another runs across where the stage should be. Nothing remarkable was disclosed, except the existence, on the left, just below the line of the proscenium, of a small temple (*in antis*) of Dionysos; and, just opposite on the right, two rock-cut chambers, with a stone bench running round each. In connection with the temple, near the west parodos-wall were unearthed fragments of an Ionic entablature; painted terracotta tiles and antefixae; a large rude earthenware shell-shaped akroterion of an early period; and a part of a marble stele dedicated to Dionysos, the letters of the dedication, ΔΙΟΝΥΣΩΙ, appearing to be of the Macedonian or Alexandrine period. Questions connected with various irregularities about the parodos-walls are still under investigation.—*Athenæum*, Dec. 4; *Nation*, Dec. 16.

VOLO (near).—Recent excavations at Dymenion, near Volo, have led to the discovery of a prehistoric tomb. The search began several weeks ago, when the Commissioner of the Archæological Society of Athens proceeded to Dymenion to ascertain whether the antiquities thus found were authentic. Nothing official has yet been published, but it now appears certain that the tomb itself dates from the Homeric period. Most of the objects it contains are women's jewels in gold, but there are others in amber and in a kind of resin not yet defined. Almost all of them represent flowers or leaves. They are similar in artistic workmanship to those found in the tombs of Mykenai. Some of them are scarcely larger than a pin's head, and yet leave nothing to be desired in beauty and finish. The excavations of Dymenion, like those of Mykenai, tend to the supposition that the population was seafaring; and certain indications have led to the conclusion that the bodies deposited in the tomb of Dymenion were cremated.—N. Y. *Evening Post*, April 30.

The following item, taken from the *Athenæum* of April 9, appears to refer to the same tomb.

A prehistoric tomb has been discovered at Volo. This tomb is in its structure exactly similar to the one at Menidi, near Athens. Its interior diameter measures about 8½ metres; around the interior of the tomb runs a seat, the width and height of which are forty centimetres. One report says the seat is constructed with baked bricks; but, according to another, the bricks are unbaked, and of the same manufacture as the bricks of the Thessalian villages at the present day. On this seat it is supposed that the priests, relatives, and friends of the deceased sat whilst the body of the dead was being burnt, this taking place in the tomb. Many and various articles have been found in the tomb—some of gold, others of amber, and others of bone.

ZARKOS (Thessaly).—The foundations of a quadrangular marble edifice, 9 met. long by 6 wide, have been laid bare, and by its side a vaulted brick tomb, near which was a colossale male marble statue, of the early Roman period.—*Revue Arch.*, Jan.–Feb., p. 70.

ITALY.

PREHISTORIC AND CLASSICAL ANTIQUITIES.

BOLOGNA (anc. FELSINA).—*Archaic Necropolis.*—The opening of new tombs of the archaic Villanova type continues within the military arsenal. It is to be regretted that, as the work is not carried on for scientific purposes, the results are not what they should be. No archæologist is present, and, consequently, not only is no record kept of the discoveries, but it is impossible to find out which of the objects, that are fortunately saved, were found together. The articles found are mainly of bronze: vases, ornaments, musical instruments, fibulae, armlets; many of them with ornamentation of enamel, amber, and bone. A number of these are among the most beautiful and artistic of the works of this early period yet found in Bologna.—*Not. d. Scavi*, 1886, p. 443.

Necropolis of S. Polo.—The excavations undertaken here in the spring of 1886 did not yield fruitful results, for the reason that the tombs opened had already in ancient times been despoiled. But the general arrangement of the trench-tombs was for the first time clearly ascertained: they were dug in parallel lines, their wide sides facing east and west, and between them and between each row was left a wall or bench carefully cut out of the earth, between 0.80 and 1.40 met. wide. Sometimes this wall is cut in the centre, leaving a passage from one tomb to another. A number of fine large painted kraters came to light.—*Not. d. Scavi*, 1886, pp. 340–49.

Archaic tombs.—Near the *Porta Ravegna* stood the church of *Santa Maria*

in Bethlehem or *del Carrobio*, of very ancient foundation. In demolishing it to make way for a new building, groups of tombs were encountered, belonging to various periods. First came Christian tombs; under these, Roman ones for incineration; the lowest were 3.30 or 3.50 met. below the street-level. The coins show the epoch of these tombs to extend from the Republican period to 242 A. D. (time of Gordian III). Besides many vases of different kinds, there was found a well-modelled headless statue of some female divinity. Below the Roman tombs, at an average depth of four and a half metres were those of the archaic period. Some of these archaic tombs were simply holes, in the bottom of which the ashes and burnt bones were placed: in the greater part, however, the remains were placed in ossuaries of the Villanova type, adorned with graffiti and having the usual cover.—*Not. d. Scavi*, 1887, pp. 3–7.

CALTAGIRONE.—In the Contrada San Mauro, a tomb was found containing many important objects, among which were four terracotta vases painted in black and white; the subject on one of them was a combat of four warriors: also a bas-relief of a lion devouring a boar. In the same region there have been found hoards of Iberian and Sicilian coins.—*Arte e Storia*, 1887, p. 23.

CAPUA.—*Statues of tufa.*—At *Santa Maria di Capua Vetere* have been found, not only a terracotta female statue, but eleven statues of tufa of various sizes, holding swaddled children in their arms like those in the *Museo Campano*.—*Not. d. Scavi*, Dec., p. 456.

CHIUSI (anc. CLUSIUM).—*Sarcophagus of Scianti Thanunia.*—On p. 482 of vol. II, we gave a short description of a remarkable Etruscan sarcophagus. A much fuller account is now given in the *Notizie degli Scavi* (1886, Oct., pp. 353–56). Although the female figure on the cover is less artistic and less carefully executed, it shows better general proportions and more study of the figure, pointing to the second half of the second cent. B. C. The five objects found with the sarcophagus support this date. They are toilet objects in fine preservation, which, though of careless execution, are of even greater richness than those found with the Florentine sarcophagus (the only one comparable to this) and no less interesting: they are (1) a mirror, (2) a situla, (3) an incense-box (*acerra*), (4) an *aryballos*, (5) a strygil. See description of the female figure by W. MERCER in *Athenæum*, Dec. 25.

Monte Venere (Chiusi).—*Mosaic.*—A beautiful mosaic pavement measuring six by four metres has been found here. In the centre are two hunting scenes: above, a hunter with a lance is pursuing three deer; below, two men with lance and double axe are attacking a wild boar. This piece, which is in perfect preservation, has been removed by the owner of the ground to his house: the frame work remains in place. Near by were found the remains of a regular circular building, in the interior of which there came to light several fragments of a fine bronze female statue, especially a beautiful hand.—*Mitth. d. k. k. oest. Mus.*, 1887, I.

FORLI (anc. FORUM LIVII).—*Archaic bronzes.*—Cav. A. Santarelli recently noticed, in the collection of the Marchesi Albicini at Forli, some archaic bronzes of the greatest interest, which proved to have been excavated some 40 years ago in building a bridge near Forli. They are a damaged bronze helmet, a bronze figured shield-knob, and two iron lance-heads and a javelin: they all came from one tomb. On the shield-knob two warriors are hammered in relief, advancing toward each other armed with pointed helmet, round shield, and two lances. According to Cav. Santarelli, they belong to a period between the first and second iron age, and are probably of Umbrian workmanship, though perhaps after the arrival of the Etruscans in the country.—*Not. d. Scavi*, 1887, pp. 8–14.

Archaic tomb.—Some tombs were found in digging for the foundations of the *Cassa di Risparmio*. After opening three *Roman tombs* of minor consequence, the important discovery was made of the *archaic tomb* of a warrior. At a depth of 1.90 m. appeared a skeleton around which were grouped a large number of funerary utensils: small footless *skyphoi*, terracotta tazzas, small urns, a fine black kylix with two slightly raised handles. On the breast of the skeleton were two broken bronze fibulae of the type of the Certosa of Bologna, and a lance-head shaped like a laurel-leaf: this and another lance-head at the feet are of the earliest form, and recall the Ligurian ones of Vellega and those of the necropoli of Tolentino, assigned to the first iron age. This tomb is the earliest found in the province. It reminds one of those at Tolentino, both in the mode of burial and in general arrangement. An urn, a glass, and vases of the Villanova type recall Umbrian civilization; the oinochoe with colored zones, that of the third period of Este and of Tarquinii-Corneto; the fibulae, that of Etruria.—*Courrier de l'Art*, 1887, No. 10; *Moniteur de Rome*, March 6; *Not. d. Scavi*, Oct., p. 349.

KROTON.—*Excavation of the Temple of Hera Lakinia.*—In the *Eighth Annual Report of the Archæological Institute of America*, which is now in press, a brief account is given of some of the results obtained by excavations on the site of this famous temple under the direction of the Archæological Institute. The Institute charged Mr. Joseph T. Clarke and Dr. Alfred Emerson with an exploring mission to Magna Graecia, for which the greater part of the funds were supplied by the Baltimore branch of the Institute. Their main work consisted in excavating, during December and January, the ruins of the temple of Hera near Kroton, of which a single column still remained *in situ*, after its destruction by Bishop Lucifero of Cotrone at the beginning of the XVI century. What remained above ground had never been illustrated, nor had excavations been undertaken.

Lenormant, on a superficial examination of the standing column, had pronounced the temple to be archaic: but Mr. Clarke soon found evidence

that it was erected during the best period of Doric architecture, the latter half of the fifth century. The temple stands upon an immense platform composed of large blocks of stone, which raises it high above the rocks. It was hexastyle with a double range of columns upon the eastern front, and with fourteen columns upon each side. The column which remains standing was originally inclined, the lowest drum being higher without than within,—apparently the first instance of the kind outside of Athens. The peribolos-wall is evident throughout its extent, and in places still rises to a height of seven metres. The stereobate had been mostly torn up and carried away by bishop Lucifero, only the N. E. corner remaining intact. The temple was the most remarkable in Italy for its lavish marble decoration, of which many important fragments were found: roof, gables, interior cornices were all of marble.

The most important discovery of sculpture was that of five fragments of the marble pediment-groups of the temple, which made it possible to identify three other pieces that had been previously found by chance.

Full details of the discoveries have not yet been received, but will probably be given in a Report which will be issued before long. It is expected that a complete monograph on the temple will be published in time.

MARINO (near).—*Archaic tomb.*—In an archaic tomb near Marino there were found a number of archaic objects which have been purchased by the municipality: they consist of a bronze tripod, six necklaces of amber, six fibulae, arms, fragments of bronzes, *etc.*—*Moniteur de Rome*, Jan. 16.

ORVIETO.—*Necropolis.*—The interest of research in this enormous expanse of tombs is now greatly increased by several recent discoveries, of which the most interesting, from the historical point of view, is the conclusive identification of *Volsinium Vetus*, as Orvieto. The demonstration will be published in due course by Gamurrini, to whom it is due. The very last discovery, two weeks since, is of the necropolis which marks the break in the independent existence of Volsinium, when it was finally subjugated in B. C. 280, the city having then been apparently abandoned for a time, this discovery showing evidence of reoccupation after an interval of about 60 years, indicated by numerous Roman coins found in the excavations. But what is most singular is that the tombs built by the returning exiles recur to the type of the earliest or original Volsinian tomb, the *voussoir* arch with a keystone, eschewing the Tarquinian and other later forms which appear in intermediate burials. A gentleman of Orvieto, Signor Mancini, is making, under the supervision of and in coöperation with the archæological department of the Ministry, the most careful and systematic investigation of this stupendous belt of cemeteries, and each tomb as excavated is marked in a general plan and its contents are carefully isolated in Mancini's now immense collection.—London *Times*, April 9.

POMPEII.—*New Street of Tombs.*—Discoveries have been made in the Street of Tombs (*cf.* JOURNAL, vol. II, p. 484) including four monuments, on which some interesting inscriptions have been scratched or painted: a notice of a gladiatorial contest to be held at Nola (?); an advertisement of the finding of a horse on Nov. 25 by Q. Decius Hilarus; an electoral program with names of candidates for tribune of the people and duumvir.—*Not. d. Scavi*, 1887, p. 33.

PRAENESTE=PALESTRINA.—*The most ancient Latin inscription.*—Professor Helbig presented to the *Accademia dei Lincei* (Jan. 16) a gold fibula found near Palestrina with the following inscription scratched in the channel, *Manios. med. fe. faked. Numasioi*, that is, *Manius me fecit Numario* (*Numerio*). The alphabetic and linguistic peculiarities of the inscription will be treated by Herr Dümmler. As this type of fibula is found only in Italic and Etruscan tombs of the VI cent. B. C., the inscription engraved on it is the most ancient Latin that is preserved. It demonstrates the truth of Polybios' statement regarding the written treaty between the Romans and the Carthaginians in 509 B. C., which had been doubted on account of the supposed impossibility that the Latins should then have been sufficiently acquainted with writing: the fibula proves the use of writing at this time, even in private life.—*Rendiconti* of the *R. Accad. dei Lincei*, vol. III, fasc. 2, p. 64.

Early tomb.—M. le Blant sends to the *Académie des Insc.* the news of the discovery in a tomb at Palestrina of numerous gold jewelry of Phoinikian workmanship, and of pieces of *orfèvrerie* of admirable execution, dating from the VI cent. B. C.—*Cour. de l'Art*, 1887, No. 6.

REGGIO (anc. RHEGION).—*Ancient Aqueduct.*—Late diggings have been successful in following the traces of this famous aqueduct over a large space of ground. Being measured on the *fondo Auteri*, it was found to be 0.45 met. wide, 0.90 high on the sides, 1.10 in the centre. It is smaller at this place than before reaching the city, as it had by that time sent out numerous water-pipes through the upper part of the city.

Ancient Baths.—In demolishing the bastion called S. Matteo, a group of constructions came to light showing that there existed in that region an immense portico for promenades, such as are usually attached to Baths. Among the portions of the Baths that have appeared, in extremely good preservation, is an elliptical piscine formed of plates of bronze, to which access was given both from a semi-circular hall with mosaic pavement and from a small square chamber.—*Not. d. Scavi*, Nov., p. 436; Dec., p. 459.

RIVA.—A Hebrew inscription, dated 4380 A. M. = 620 A. D., has been discovered at Riva, and is now in the hands of Prof. D. H. Müller of Vienna. This, we believe, is the earliest dated Hebrew inscription we possess.—*Athenæum*, March 19.

ROMA.—*An Italian Archæological Institute.*—The changes recently made in the organization and publications of the German Archæological Institute, making its centre at Berlin instead of at Rome, have been already noticed on these pages (vol. II, pp. 229–30). As was to be expected, the large Italian element of the Institute feels out of place in an organization now completely Germanized, and an effort is being made to form an Italian Society to be called the *Instituto archeologico Italiano.* It was first proposed by the well-known writer and statesman Ruggero Bonghi in a letter which he published in his periodical, *La Cultura* (Jan. 1–15), of which a translation is here given.

"*Roma, Dec. 28, 1886.*

"*Dear Sir,*—The German Archæological Institute, which has been, up to the present, an association of Germans and Italians who sought to illustrate at Rome, in our own language, the monuments of ancient Italic civilization in all its parts, comes to an end in April, 1888; its publications, the *Bullettino* and the *Annali* will cease to have the form preserved for so many years, in February of next year. To me and to many others it has appeared right and opportune that its place should be taken by a society of archæologists and of patrons and lovers of archæology—especially Italian—both Italians and strangers, like that of 1828 out of which the German Institute afterwards grew," *etc.*

Many archæologists have given in their adhesion, among whom may be mentioned Fiorelli, Brizio, Comparetti, Gozzadini, Pigorini, de Ruggiero, Gamurrini, and others.

Archæology at the University.—It has been finally decided to establish at the University an archæological department: it will be added to the faculty of philosophy and literature, and will include courses on *Greek epigraphy* (Prof. COMPARETTI), *Italic epigraphy* (Prof. LIGNANA), *Latin epigraphy* (Prof. TOMASETTI), *figured antiquities* (Prof. MILANI) and *Roman topography* (Prof. LANCIANI). The courses were opened by Prof. Comparetti on January 24.—*Moniteur de Rome*, Jan. 19.

Death of Prof. Henzen.—Professor W. Henzen, the great epigraphist and first secretary of the German archæological Institute, died on Jan. 27. His loss will be severely felt, especially by the Institution of which he had so long been the head. The Municipal Council at once voted to place his bust, with that of Borghesi, in the Capitol.

Preservation and restoration of Monuments.—The Prefect has forbidden Marotti Geisser and Co. to demolish the *Arco di San Lazzaro* and the other ruins of the ancient *Horrea* or storehouses placed at the foot of the Aventine, at the Marmorata. Near here are; the *Emporium* discovered by Visconti with its passage and quay; the *Navalia;* the wall of Servius Tullius, *etc.*

Among recent restorations may be mentioned: that of the mosaic with

the Rape of Proserpine and the four Seasons; of several statues and busts found on the Caelian in digging for the new military hospital; a statue of Paris, *etc.*

The preservation has been decided; of Bramante's *palazetto* near the *Chiesa Nuova;* of Caravaggio's *graffiti* in the *Vicolo del Campanile.*—*Moniteur*, Jan. 16, March 17.

Capitols in Roman colonies.—An interesting work has been published by M. Castan (*Les Capitoles provinciaux du monde Romain*) in which he establishes the fact, contrary to Kuhfeldt's opinion that every city could have its Capitol, that only to Roman colonies was this privilege allowed, it being considered a symbol of the majesty of the Roman people.—*Bull. d. Comm. arch.*, 1887, pp. 66–68.

Catalogue of works of ancient art discovered in 1886.—In this catalogue, given in the *Bullettino d. Comm. arch.* for December, those works are included which were discovered by the archæological Commission. They include: 2 wall-paintings; 2 mosaics; 9 statues; 12 busts and heads; 10 torsi and fragments; 6 groups of reliefs; 5 vases and sarcophagi; many small objects of bronze and lead; and a large number of important terracottas. All the important pieces, with the exception of the terracottas, have been already described in the JOURNAL.

Terracottas.—Among the many discoveries made in Rome of late years, one of the most interesting, and at the same time the least known, is that of several thousand terracottas, many of the greatest artistic beauty and archæological interest. There are single statuettes, groups, basreliefs, architectural decoration, some in archaic style, some in style of the best period: some evidently belong to a temple, probably of Aesculapius; others (268 pieces) to an aedicula on the Via Appia.—*Bull. d. Comm. arch.*, Dec.

Discoveries on the Via Portuensis.—A long row of ancient buildings has been found on Monte Verde. In the ruins of a portico was an inscription of the Early Empire showing that this portico was rebuilt and adorned with marbles by Julius Anicetus. Near by was a plinth, whose inscription ΚΛΕΟΒΟΥΛΟΣ ΛΙΝΔΙΟΣ showed it to have supported a bust of the famous Kleoboulos, one of the Seven Wise Men: on this same site have previously been found busts and hermae of great Grecians, *e. g.*, that of Anakreon (JOURNAL, I, p. 70). On a fragmentary basrelief of good style was represented the sacrifice of Mithras.—*Not. d. Scavi*, 1887, pp. 19, 36.

Sepulchral Monument.—On the ancient *Via Triumphalis*, outside the Porta Angelica, there were found, in the ruins of a sepulchral monument, several pieces of sculpture, several ossuaria and cippi, and about 25 inscriptions. Among the sculpture are: a statue of Mercury (*cf.* Clarac, No. 1528) of good style; a life-size youthful male bust (Gens Claudia?); a hard-featured beardless bust; a bust of an old man in tunic and toga (*cf.*

type of Seneca in Visconti, *Iconog.* t. XVIC); an ideal female head, probably of a muse; a youthful male head. These are all works of good art. —*Bull. d. Comm. arch.*, Jan., pp. 25–6.

Sepulchral monument of a shoemaker.—Outside the Porta Angelica, on the Via Triumphalis, was found, on Feb. 5, a sepulchral cippus of considerable interest and merit which is reproduced and described by G. Gatti in the February number of the *Bull. della Comm. arch.* (pp. 52–56, tav. III). It is of Carrara marble, and consists of a square aedicula (surmounted by a circular top) within which is carved, in very high relief, the bust of the deceased. Below is the inscription: C·IVLIVS·HELIVS·SVTOR·A | PORTA·FONTINALE·FECIT·SIBI·ET | IVLIAE·FLACILLAE·FIL·ET·C·IVLIO·|ONESIMO·LIBERTO·LIBERTABVSQVE | POSTERISQVE·EORVM·V·F. The portrait is highly characteristic and an interesting work of the latter part of the first century A. D. Above, in the top, are carved two shoemakers' forms.

Archaic water-conduit.—Near San Stefano Rotondo, under the arches of the Claudian aqueduct, has been found a very ancient water-conduit formed by a continuous line of great rectangular masses of tufa, placed side by side, leaving a wide hollow in the centre.—*Bull. d. Comm. arch.*, Dec.

Early Republican inscription.—In the Piazza della Consolazione was found the following inscription:

ADELPVS·REGVS·METRADATI·F
T·SOCIETATIS·ERGO·QVAE·IAM ΟΔ

ET·LEGATI·COIRAVERVNT
HES·MAHEI·F ΦΙ/
ΟΠΑΤΩΡ ΚΑΙ ΦΙΛΑΔΕΛΦΟΣ Ρω
ΟΥ ΤΟΝ ΔΗΜΟΝ ΤΟΝ
ΣΥΜΜΑΧΟΝ ΑΥΤΟΥ
ΕΝΕΚΕΝΤΗΣ ΕΙΣ ΑΥΤΟΥ
ΛΝΟΥΣ ΤΟΥ ΝΑΙΜΑΝΟΥΣ

This important fragment belongs to the series of those monuments recognized by Prof. Mommsen to have been dedicated to the Roman people, after the first Mithridatic war, by the ambassadors of the different peoples of Asia, sent to Rome to give thanks for their liberty, and to confirm alliances. A second but small fragment with the letters LX·ARIOB■|■EI·REGINA, also on a similar fragment of travertine, is restored *Rex Ariobarzanes . . . Junonei Reginae*, and proves the conjectures, (1) that these documents were placed in the temple of Jupiter Capitolinus (in which was a cella dedicated to Juno), and (2) that the temple itself was not on the Ara Coeli.—*Bull. d. Comm. arch.*, Dec., p. 403; Jan., p. 14.

Sculpture.—In a letter to the *Acad. des Inse.*, M. le Blant describes a very

peculiar basrelief recently found: it represents two skeletons, one dancing, the other playing on the double pipe.—*Revue Critique*, 1887, No. 10.

In the February number of the *Bull. della Comm. arch.* (p. 57), Comm. Visconti illustrates a very beautiful and interesting head of a youthful Pan, in Pentelic marble, found in the Villa Casali. It is very like one possessed by Winckelmann (*Mon. Ined.* No. 59) and now in the Museum of Munich (Brunn's *Cat.* No. 102). Gatti is inclined to consider the Roman head as the finer work of art, and assigns the original of it to the school of Praxiteles.

Statue of Ganymede.—The statue, supposed to be of Paris, which was found in 1885 in the Villa Casali, on being reconstituted proves to be a most graceful statue of Ganymede watching his flock, one of which lies at his feet. The original stands with legs crossed: he wears a Phrygian cap. The work is referred to the late Attic or Alexandrian schools.—*Bull. d. Comm. arch.*, 1887, p. 27.

Sculpture.—Near the Campo Verano several sculptures have come to light, notably a life-size athletic head of the best art which strongly recalls the type of Polykleitos.—*Bull. d. Comm. arch.*, Jan., p. 26.

Villa Ludovisi.—Excavations here have brought to light two life-size statues, placed against an ancient wall. They represent men in togas, holding rolls of papyrus in their hands.—*Moniteur*, March 9; *cf. Bull. d. Comm. arch.*, Feb., p. 69.

Mosaic discovered near the Banca Nazionale.—On the Via Nazionale, on the site of the new National Bank, a mosaic pavement well-preserved and of good design has come to light. It contains figures of athletes and gladiators, and is thought to belong to one of the gladiatorial halls of the Baths of Constantine. It is not as fine or as well preserved as the similar mosaic found in the Baths of Diocletian and now in the Lateran museum.—*Moniteur*, March 9, April 2.

In the Via Labicana, on the site of the Baths of Titus, while digging a trench for a sewer, there was brought to light a great wall composed mainly of fragments of marble statues. Its construction appears to extend back to the Middle Ages. The municipal archæological Commission at once took possession of the wall, and its demolition was carried out with the necessary precautions and under the superintendance of an inspector belonging to the Commission. A great quantity of fragments of statues were found which it will probably be easy to reconstruct. About twenty heads were brought to light, mostly life-size, and possibly belonging to statues which decorated the Baths of Titus. These are, in general, heads of divinities, of correct style and of great delicacy of finish. The finest are a head of Jupiter and a head of a gladiator in perfect preservation.

In the Piazza dei Cenci has been found the torso of a colossal statue, of Greek style, which seems to represent the god Mars.—*Moniteur*, May 13.

SICILY.—ABAKAINON.—That the ancient Abakainon, considered to be one of the most northern cities of the Siculi, was situated near the village of Tripi, had been conjectured: this is now well-nigh certified by finding in that neighborhood a number of the very rare coins of Abakainon.—*Not. d. Scavi*, Dec., p. 463.

SULMONA.—*Necropoli.*—Of the three necropoli of the ancient Sulmona, notes have appeared from time to time concerning two of them, in past numbers of the *Notizie degli Scavi;* and in the numbers for November (1886, p. 425) and January (1887, p. 42) are described excavations in a third necropolis, outside the Porta San Matteo. The tombs are of various forms, and both rites, cremation and inhumation, are employed. Many of the tombs contained no objects whatever; those in the remainder were unimportant.

TARANTO (anc. TARAS=TARENTUM).—*Statue.*—On land belonging to Sig. Cacace there was lately found, in a well, the trunk of a statue representing a youth; the head and arms are lost. The workmanship is of surprising beauty, and belongs to the finest period of Tarentine sculpture: the modelling is remarkable. It evidently represents a divinity, and a slight effeminacy would make one conjecture it to be a Dionysos or an Apollon.—*Not. d. Scavi*, Nov. p. 435.

TESTONA (Lombardy).—*Antiquities.*—A large collection of objects and arms belonging to the barbarous period have been recently discovered here and purchased by the Museum of Turin.—*Revue Critique*, 1887, No. 1.

TIVOLI (anc. TIBUR).—*Discoveries in the temple of Hercules Victor.*—The portico named, for so long, a part of the Villa of Maecenas is now found to be part of the famous temple of Hercules Victor. This is proved by the results of excavations undertaken by the *Società delle forze idrauliche*, which is the owner of the property, and whose idea it is to uncover the whole structure. A series of marble cippi, some entire, some broken up to make lime, which bear the *cursus honorum* of a number of distinguished men, was found under the east side of the portico, and shows it to have been a public building. Other entire cippi were found above the quadriporticus in which the *Curatores fani Herculis Victoris* are mentioned more than once; and one fragment bears *aeditui Herculis Victoris*. Further proof is given in the fragment of a cornice on which the club of Hercules appears as a regular ornament.

It has become evident that all the rectangle called the Villa of Maecenas formed part of the Herakleion of Tibur, though as yet it is not possible to ascertain the extent of the sanctuary and the number of buildings it included, facts which the excavations being carried on will probably disclose. What has been proved is, that the temple was of the same form as the Temple of Fortune at Praeneste; that is, was formed of broad terraces

joined together by porticos or crypto-porticos and sustained on gigantic substructures. The cella is to be identified with that still existing behind the Cathedral. In the centre of the sacred area remains of several dependencies of the temple have been discovered: of especial importance is a large hall whose pavement is decorated with a fine polychromic mosaic of geometric design: the door and its two columns are of the Doric order. The inscriptions found here are published in the *Notizie degli Scavi* by Signor Gatti (1886, p. 276; 1887, pp. 28–33).—L. BORSARI in *Not. d. Scavi*, 1887, pp. 25–33.

TODI (anc. TUDER).—*Tomb of a woman.*—Recurring to the beautiful objects found in this tomb and described on p. 490 of Vol. II, some fuller details are given in the *Notizie degli Scavi* (1886, p. 357, *sqq.*) by which those already given can be corrected or increased. The bronze figurine of Bacchus forms the handle of an elegant patera, and that of Seilenos the handle of an *orcio*. In addition, are to be mentioned, (1) a mirror engraved with beautiful figures, (2) an earthenware *rhyton* modelled in most elegant style, having on one side a Seilenos and on the other a Bacchante. The most beautiful of all the articles of jewelry, and deserving of the greatest admiration, are the two large and elaborate earrings.

CHRISTIAN ANTIQUITIES OF ITALY.

CAMERINO.—The *Arte e Storia* (1887, No. 2) calls attention to a remarkable but hitherto unnoticed work of sculpture that stands in the hypogeum of the cathedral of Camerino. It is the mausoleum of S. Ansovino, an isolated structure which rises in four stories to a height of 5.20 met.; it is 2.30 met. wide and 0.98 broad. It has been proved to date shortly after 1260, and is one of the most important works of the period. Under the three Gothic arcades of the upper story stands a statue of the Virgin and Child: below, in the third story, lies the figure of the martyr, protected by curtains held back by angels: the second story is the richest in sculpture, containing eight basreliefs representing incidents in the life of S. Ansovino, between which stand, like caryatids, what seem to be symbolic figures: on the lowest story is carved in relief a line of peculiar animals, in the style of the early Middle Ages. This story is earlier than the rest of the monument, and probably formed a part of an older work.

CASTELLARANO (near).—*Altar-piece by Garofalo.*—In the *Arte e Storia* (1886, No. 28) Prof. Ad. Venturi calls attention to an unknown altar-piece by Garofalo existing in the church of San Valentino in the neighborhood of Castellarano near Sassuolo on the hills above Reggio. It represents the Virgin enthroned with the Child standing on her knees, while Saints Eleucadius and Stephanus stand on either side: in the tympanum two angels support the body of Christ. An inscription, added in 1626, names

as donor the Papal protonotary Sagrato of Ferrara and the year 1517. According to Vasari, Sagrato called Garofalo to Rome in 1508 or 1513. The attribution to Garofalo is certified by the identity of style with his other works. This painting is in his first manner, one of his earliest, there being but two or three known to have been executed before.

FAENZA.—*The medallist Sperandio.*—A document dated 1477, published in the *Atti e Mem. della R. dep. di Storia Patria*, of Romagna, shows that this noted artist was of Roman origin and belonged to the famous noble family of the Savelli: "Magistrum Speraindeum, quondam magistri Bertolomei de Savellis de Roma olim habitatorem Mantue et modo Faventie."—*Repertorium f. Kunstwiss.*, 1887, p. 227.

FIRENZE.—*Centenary of Donatello.*—On the occasion of the fetes for Donatello's centenary, when the façade of Sta. Maria del Fiore was inaugurated, there was opened at the Palazzo del Podestà an exhibition which includes, beside sculptures by Donatello collected from all parts of the country, works of art of the XIV, XV and early XVI centuries: works in metal, arms, stuffs, furniture, leather, glass, majolicas, *etc.* The exhibition was opened about the middle of May.—*Arte e Storia*, 1887, No. 7.

JESI.—*Mediæval Sarcophagus.*—In demolishing one side of the very early church of S. Maria del Piano, there was found, at a depth of more than three metres, a sarcophagus of travertine, measuring 3.70 by 1.15 metres. Both cover and body are carved with ornaments in relief: among the subjects are the cross between two doves, and the lamb with the cross. It is attributed to the XIII century, but the description points to an earlier date.—*Arte e Storia*, 1887, No. 6.

MANTOVA.—It has been ascertained beyond a doubt that the Borgo San Giorgio, near Mantova, devoted itself in the XVI century to the manufacture of tapestries. Acts of decease have been found of *Mastro Aluisio fiamengo tapeciro in del borgo di San Giorgio*, and of *Mastro Nicolò di Carchar tapezir in del borgo di San Zorzo.*—*Cour. de l'Art*, 1887, No. 5.

MODENA.—*Restoration of the Cathedral.*—All late additions to the inner wall of the central apse have been removed, the three early windows reopened, the modern high altar demolished, which covered up the old one with its ten beautiful colonnettes and precious marbles. It has been ascertained, by trials made on various points, that the entire surface of the inside walls of the cathedral was painted. The restoration of the exterior is being continued, and the S. wall has been freed from the shops that disfigured it.—*Arte e Storia*, 1886, No. 32.

PADOVA.—*The goldsmith Francesco da Santa Agata.*—In the collection of Sir Richard Wallace at Hertford House, London, is a statuette of Hercules in boxwood, signed *Opus Francisci Aurificis P.* It is found that this very work is described in a writing of the XVI cent. (Scardeonius, *De*

Antiquitate Urbis Patavii, 1560, p. 374) under a chapter *De Francesco a Santa Agata argentario Patavino*, and is attributed to the year 1520.—BONAFFÉ in *Gazette des Beaux-Arts*, 1886, II, p. 202.

ROMA.—*House of SS. Giovanni e Paolo.*—On the Caelian, by the ruins of the Temple of Claudius, is the church of SS. Giovanni e Paolo, erected originally, under the name *Titulus Pammachii*, by St. Pammachius, a friend of St. Jerome, on the site of the house of the two saints martyred under Julian. Father Germain has made excavations under the church, and has discovered part of the house. Three large and well-preserved chambers of a Roman house, one filled with frescos, have already been entirely unearthed, and others are still full of the materials thrown in at the time of the erection of the church. Under the place marked in the church as the place of martyrdom was found the crypto-portico of the house, where it was the custom to carry out executions.—*Moniteur*, Jan. 6.

An ancient house.—A small house, opposite the Portico of Octavia, on the Via Rua, which belongs to the XII–XIV centuries, has lately been demolished. It was found to inclose a tower of much earlier date which was in a perfect state of preservation. The shape of the tower was rectangular, and its top was crenelated. Unfortunately, it will be necessary to demolish it.—*Moniteur*, Jan. 14.

New excavations in the Catacombs of Santa Priscilla.—In beginning these excavations a staircase was reached which was supposed to lead down to historical crypts of the time of Diocletian. One of these, a large atrium, was reached, but, although certainly a crypt of importance, no inscription or graffito was found to indicate to what martyr it was dedicated. The work is being continued in order to reach, by another staircase, a still lower story.

In the part of the catacomb posterior to Constantine was found an arcosolium with mosaics which are so badly injured that it is difficult to decipher the subjects. In the centre is an Orante; on one side the Magi; on the other a seated person before whom stand three others, one of whom has a nimbus—perhaps Christ before Pilate, and, if so, the earliest representation of a scene from the Passion.—*Moniteur*, April 3.

Early Frescos.—On the Via Nazionale was unearthed a small house whose walls were entirely covered with frescos of the third century A. D. representing, for the most part, biblical subjects. On some of the walls are depicted also mythological figures such as Pegasos on Mt. Helikon, Asklepios and the Serpent, some Muses, *etc.* In the house itself a skeleton was found in its coffin, a singular fact, as, in the third century, it was forbidden to bury within the walls.—*Revue de l'Art Chrétien*, 1887, I, p. 136.

In the small church of the Beata Rita da Cascia, at the foot of the Capitol, has been found, near the high-altar, a magnificent sarcophagus with an inscription which indicates that it was the tomb of the ancient Roman

family of the Boccabella. The arch under which the sarcophagus was placed is ornamented with very remarkable paintings in the style of Giotto. —*Moniteur*, May 11.

MEETINGS OF THE SOCIETY OF CHRISTIAN ARCHÆOLOGY.—At the *December* meeting, Padre COZZA presented a *leaden plate* with a minute Greek inscription, found at REGGIO in Calabria: it was an exorcising tablet by which evil spirits were kept away. A Latin version of the inscription reads: ✠ *In nomine Patris et Filii et Sancti Spiritus. Spiritum Sanctum porto. Filium unigenitum percepi. Et omnem spiritum malum adjuro. Fuge ab ancilla Dei (conturbatio) quae omnem habes malum et omne gravamen et omnem immunditiam et omnem lubricitatem. Et fuge omnis immunde Spiritus per corpus et sanguinem Domini nostri Jesu Christi.—Discede ab ancilla Dei (conturbatio) et exurgat Deus et dissipentur inimici ejus: et fugiant a facie ejus . . .* Mgr. DE WAAL showed the squeeze of a metrical sepulchral inscription on which are the letters . . XTI · BENEDICTI. He reads *Sexti Benedicti*, and considers it the *epigraph of Pope Benedict VI* (972–74). He also announced the discovery, near the basilica of St. Peter, of the remains of the ancient oratory of San Pellegrino with paintings of the VIII century. Comm. DE ROSSI gave an account of the recent discovery of tombs outside the Porta Salaria, which show the direction of the *Via Salaria vetus* along which it is known, from ecclesiastical documents, that many Christian cemeteries exist.

At the *February* meeting, Comm. DE ROSSI gave an account of the excavations by Father Germain under the *church of SS. Giovanni e Paulo*. Mgr. CHEVALIER communicated the results of the excavations conducted under his direction for reconstituting the plan of the ancient and famous basilica of St. Martin at Tour. All the different constructions have been found, from the first one, erected by Saint Perpetuus over the bishop's tomb in the Cemetery, to the last Basilica destroyed at the Revolution.

At the *March* meeting, M. WILPERT spoke of the discoveries he had made through a careful study of the paintings in the *catacombs of Domitilla*. They consisted mainly in the identification of some hitherto uncertain subjects; *e. g.*, the three youths in the fiery furnace with the angel, and the sacrifice of Isaac represented by two doves and the divine hand. Comm. LE BLANT called attention to a sarcophagus in which a figure with the characteristics of the Good Shepherd raises one hand over a basket with bread, and holds a rod in the other. Comm. DE ROSSI announced the reopening of excavations in the catacombs of Santa Priscilla.

At the *April* meeting, the discovery was announced of a pagan tomb outside the Porta Portuensis in which a Christian medal was found on the breasts of the deceased: this fact not only proves the early use of medals, but is of special importance as showing, what was before only suspected,

that Christians were sometimes buried outside of the catacombs. Comm. De Rossi announced the discoveries made in the catacombs of Santa Priscilla, which are given elsewhere.

Exhibition of Textiles, etc.—The success of this exhibition, announced in the last issue (vol. II, p. 496), goes on increasing. The Hospital of *S. Michele a Ripa*, the *Fabbrica degli Arazzi* of the Vatican, the *Opera del Duomo* of Milan, many cathedrals, churches, and religious institutions, as well as the most important Museums of Italy, are sending the earliest and finest examples. The *Arazzi* by Correggio, those of Prince Barberini, and embroideries of the XV cent. from the Hospital of Siena, have already arrived.—*Moniteur*, Feb. 24.

Talamello (near Montefeltro).—*Frescos by Antonio da Ferrara.*—In a small chapel at Talamello an entire series of frescos by Antonio da Ferrara have been recently identified. This is important, as he was the earliest master of the School of Ferrara, and, according to Vasari, the pupil of Agnolo Gaddi, and the grandfather of Timoteo Viti. They are signed: *Antonius de Ferraria habitator Urbini pinxit.* The beginning of the inscription relates that Giov. Seclani, bishop of Montefeltro, built the chapel in honor of the Virgin in the year . . . Though the date is wanting, it is between 1417, when Seclani became bishop, and 1427, a date scratched by a visitor on the painted plaster. The frescos are sadly injured, and in some cases almost entirely obliterated through carelessness and dampness. The Evangelists are in the four corners, the Adoration of the Magi on the right-hand wall, the Annunciation on the left, and figures of saints below each of these compositions. The only other authentic work by this master is the altar-piece in S. Bernardino at Urbino, signed: *1439 Antonius de Ferraria.* If not soon restored and cared for, these frescos will be beyond recognition.—*Arte e Storia*, 1886, No. 32; *Repert. f. Kunstwiss.*, 1887, p. 228.

SPAIN.

Balearic Islands.—Palma.—*Christian mosaic.*—At a meeting of the *Soc. Nat. des Antiquaires* (Dec. 15), M. de Laurière presented the drawing of an important Christian mosaic found near Palma. It represents Adam and Eve, and Joseph sold by his brethren.—*Revue Critique*, 1887, No. 1.

Caceres.—*Antiquities.*—To the west of Caceres, near the road, where ex-votos of bronze and the native goddess *Ataecina Turibrigensis* were found, there have come to light several stone axes, fragments of utensils, mostly of bronze, pottery, and Keltiberian remains.—*Boletin de la Real Academia de la Historia*, Dec.; *Revista de Ciencias Historicas*, t. IV, No. 6, p. 408.

Cuesta de los Hoyos (near Seville).—*Jewish Tombs.*—During excavations made, there were found twelve tombs oriented according to Jewish

custom, and containing a large number of skeletons. According to a document of 1460 A. D., this was the burial-ground of the Jews. Besides these, two were found intact, cut in the rock at a depth of about one metre.—*Rev. de Ciencias Hist.*, t. IV, No. 6, p. 405.

LUSIANA (near Seville).—*Roman baths.*—In digging for water-works, there were discovered some Roman baths. The *piscina*, 1½ met. deep, was found in good condition. The inscriptions and objects found, being in private hands, have not yet been carefully examined with a view to ascertain the date of the constructions.—*Rev. de Ciencias Hist., ibid.*

SUREDA.—*Roman inscription.*—In repairing the ruins behind the altar of the church of St. Andrew, there was found a marble cippus, apparently intended as the base for a statue of Mercury. The inscription reads, MERCVRIO | AVG | Q·VALERIVS | HERMETION | L·D·D·D· Below the inscription was a much-defaced relief, probably the cock, symbol of Mercury. The letters are referable to the second or third century of our era.—*Assoc. d'excursions Catalana*, 1886, Nov.–Dec., p. 205.

TOLEDO.—*Destruction of the Alcazar.*—Not long ago this historic edifice, whose recent restoration cost five millions of francs, was consumed with the entire collection of works of art which it contained. The fire started near the library.—*Cour. de l'Art*, 1887, No. 6.

TOLOUS.—*Cemetery.*—At Tolous, a Roman station on the imperial road from Huesca to Lerida, three kilom. from Monzon, Don Mariano Pano has begun excavations resulting in the discovery of painted and plain pottery, two mosaics, and a large number of coins with Iberian inscriptions of Lerida and Huesca.—*Rev. de Ciencias Hist., ibid.*, p. 407.

FRANCE.

AVIGNON.—*The architects of the Papal Palace.*—M. Eugène Müntz has discovered, in a MS. of the Vatican archives, the names, hitherto unknown, of the architects who built the famous palace of the Popes at Avignon. They are Jean de Louviers and Jean Bisacci.—*Moniteur de Rome*, March 17.

CARNAC (near) (Bretagne).—At a meeting (Dec. 2) of the British Archæological Institute, Admiral TREMLET exhibited a plan illustrating a system of disposing of the remains of the dead in prehistoric times, and of which only three examples have as yet been found. The case in question consists of a series of three chambers, stone-lined and connected by narrow passages, all of which were examined and measured in 1885. These remains are situated at Kerindervelen, near Kermarquer, Carnac.—*Academy*, Jan. 1.

COURBILLAC (Charente).—*A Merovingian Cemetery* has been explored at Courbillac, near Jarnac, by M. Philippe Delamain. It is the first cemetery of the kind discovered in the region between the Loire and the Garonne:

thus far Frankish antiquities of the Merovingian period had been found only in the N. E. of Gaul. A collection of jewelry from this cemetery was presented at the *Acad. des Insc. et Belles-Lettres* (Feb. 4) by M. Al. Bertrand, and M. Deloche expressed the opinion that they were brought from Aquitaine by the companions of Charles Martel.—*Revue Critique*, 1887, No. 7.

FONTAINE ST. LUCIEN (Oise).—*An important Gallo-Roman Cemetery* has been discovered here, and various fibulæ, a large white pearl, some vases, and other relics have been found. It seems to have included about 1,200 tombs.—*Athenæum*, March 5.

GONDRECOURT.—*Toilet-box.*—In the tomb of a woman of the Merovingian period at Gondrecourt has been found a wooden coffer covered with bronze plaques finely stamped with reliefs, two of which, representing nude figures, are especially good. It is a Roman work of the IV or V century. Within was all the jewelry of the defunct, the greater part being of Merovingian workmanship, and not older than the VI century, forming thus a peculiar combination of Roman and Frankish work.—*Revue Critique*, 1887, No. 5.

GRAND (Vosges).—*Roman antiquities.*—The *Academy* of March 19 takes from the *Revue Critique*, of Feb. 21, the following report of a paper read before the *Académie des Inscriptions*, Feb. 11, by M. HÉRON DE VILLEFOSSE, who exhibited a collection of Roman antiquities recently discovered at Grand, near Bar-le-Duc, in the department of Vosges. The collection comprised vases of earthenware and bronze, iron utensils, a hand-saw (*serrula manubriata*), two padlocks, and a fragment of a bronze disk intended for a calendar. This last object has been the subject of special study by Col. G. de la Noë. The disk is precisely one foot (Roman) in diameter. At a little distance from the edge, it is pierced by a series of small holes. Opposite some of these holes are inscriptions, showing that they correspond to certain days in the year, viz., *ante Kalendas viii*, the Kalends, the nones, and the ides of each month, forty-eight in all. From these inscriptions it is, of course, easy to calculate the days corresponding to the other holes. The main object of the instrument was to indicate the length of the day at any time of the year. This was necessary in order to regulate the klepsydra or clock, for the Romans subdivided the day (from sunrise to sunset) into twelve equal parts or hours at all seasons of the year alike, so that the length of the hour increased or decreased according to the length of the day. With this object, a point had been marked on the disk between the centre and that part of the circumference assigned to the winter months. It had been chosen in such a way that its distance from the holes corresponding to the several days varies directly as the length of those days, and conversely as the length of the nights. It seems probable

that the instrument formerly had a graduated guage, which worked round the marked point from which the length was reckoned. Its use would thus be made easy, for it would suffice to turn the guage to the day wanted, and to observe the mark opposite the hole corresponding to that day. The calendar in question seems to have been drawn up for the latitude of Rome, and its date is probably the second century A. D.

MONTGAUDIER.—*Grotto.*—On a "bâton de commandement" from this grotto, made of reindeer-horn, recently presented to the *Acad. des Insc. et Belles-Lettres* (Jan. 14) there are line-engravings of rare perfection and surpassing all those discovered up to the present day. They represent animals of the quarternary fauna, which resemble, in some cases, seals, in other cases, eels. This object is thought by M. de Nadaillac to belong to the most remote antiquity.—*Revue Critique*, 1887, No. 4.

MONT ST. MICHEL.—The condition of the central tower of the church is so dangerous that the local authorities are compelled to proceed immediately to secure that part of the famous edifice. A credit of 1,100,000 francs has been demanded of the French Government for this purpose, and will probably be granted, as the building is a national monument.—*Athenæum*, Feb. 12.

ORGON.—*A new Gallic Inscription* has been found here and transported to the Calvet Museum at Avignon: it was on a cippus found in demolishing an old chapel. Like all the Gallic inscriptions discovered in the South of France, it is in Greek characters: ΟΥΗΒΡΟΥΜΑΡΟC | ΔЄΔЄ · ΤΑΡΑΝΟΟΥ | ΒΡΑΤΟΥΔΕ · ΚΑΝΤЄΜ. The last word is also read *kantena*. This is the first epigraphic mention of the Gallic god Taranus, spelled by Lucan, *Taranis:* the name Vebroumaros is new.—*Revue Arch.*, Jan.–Feb., p. 122; *Academy*, Feb. 12.

ORLÉANS.—*Origin of the painter Jean Grancher.*—Documents discovered by M. L. JARRY prove that Jean Grancher de Trainou, called Jean d'Orléans, was born in the parish of Trino or Trainou near Orléans. The family of the Girard and Jean d'Orléans was noted in the XIV and XV centuries for its artists. The documents show that he worked at the court of duke Jean de Berry and at Bourges up to 1460. Jean d'Orléans and Jean Grancher had not hitherto been identified as one and the same artist, court-painter to Charles VI and Charles VII.—*Gazette Arch.*, 1886, p. 321.

PARIS.—*Discovery of Gerbert's cipher.*—M. JULIEN HAVET has communicated to the *Académie des Inscriptions* an interesting memoir on the cipher used by Gerbert, afterward Pope Silvester II (999–1003), in his correspondence. He has discovered the key to it, and announces its similarity to the Tironian system of ancient tachygraphy. In this system each sign represents a syllable.—*Moniteur de Rome*, March 17.

Substances used in Assyrian antiquities.—At a recent meeting of the

Académie des Inscriptions, M. BERTHELOT read a paper on "Certain Metals and Minerals used in Ancient Assyria and Chaldaea." By the help of chemical analysis he had investigated the substance of several objects from Assyria and Chaldaea with interesting results. A sacred tablet from Khorsabad was found to be entirely composed of pure carbonate of soda—a rare substance even at the present day. Among the objects brought back by M. Sarzec from his excavations at Telloh are two remarkable examples of the employment of metals without alloy. One is a vase of pure antimony; the other is a statuette of copper without any trace of tin.—*Academy*, Jan. 1; article in *Revue Arch.*, Jan.–Feb., 1887.

St. Martin-des-champs.—In the *Bibliothèque de l'École des Chartes* (1886, No. 2) M. Lefèbre-Pontalis seeks to prove that the choir of Saint Martin belongs, not to the XV century, but to the middle of the XII (1130–1150), and that it is contemporary with the apses of Poissy and Saint-Germer.

PESSAN (Gers).—M. Taillebois announces the discovery, Dec. 22, 1885, of 5,395 "deniers et oboles morlans, au nom de Centulle," contained in an earthen vase: he places the burial of them at *c.* 1270.—*Revue Numismatique*, 1887, p. 83.

PEYROUX.—During 1886, there have been found 14 gold-pieces of Charles VIII, Louis XII, François I, Charles IX, Ferdinand V and Isabella of Castile, and the Emperor Charles.—*Revue Numis.*, 1887, p. 83.

PONTEUX-LES-FORGES (Landes).—At the *Fontaine-d'Or*, a hamlet of this village, have been found, in a bronze vase, 45 gold-pieces and 4,115 silver-pieces. The most numerous were those of Richard II (10 gold, 928 silver) and of Henri IV (13 gold, 3,160 silver). The remainder was composed of coins of Charles V and VI, Edouard III, Henri V, Raimond IV d' Orange, Urban V. M. Taillebois, who published the discovery of this treasure, places the date of its burial at *c.* 1415.—*Revue Numis.*, 1887, p. 83.

REIMS.—Two treasures were discovered in 1885, near the church of Saint-Jacques. One was composed of *francs à cheval* of Kings Jean II and Charles V, and of *écus* of Charles VI: the other comprised 369 *écus* of Charles VII.—*Revue Numis.*, 1887, p. 82.

SAINTES.—*Museum.*—M. Auguste Bossay has given to the museum a number of stones and objects coming from excavations undertaken by him at the *Château de Matha*. Among them are an enamelled cross of the XII cent. of gilt copper; fragments of pottery with green champlevé enamel; an angel's head in gilt terracotta; arms; coins; *etc.* Dr. Vigen has also donated three Merovingian vases from excavations made at the cemetery of *Neuvicq sous Montguyon.*—*Cour. de l'Art*, 1887, No. 6.

SAINT-DIÉ.—*Cathedral.*—On the south-wall of the cloister a wall-painting has come to light. The three figures which it contains are Princess Christina of Denmark, duchess of Lorraine, her son Duke Charles III and her

brother François IV of Lorraine. They are represented kneeling in prayer before a statue of the Virgin, now destroyed.—*Revue de l'Art Chrétien*, 1887, I, p. 135.

SAINT GERMAIN.—*Catalogue.*—M. Salomon Reinach has published a catalogue of the Museum of National Antiquities at *Saint Germain-en-Laye*. This rich collection had not yet been catalogued, and the work is a model in execution.

SWITZERLAND.

The waters of Lake Constance are unusually low this spring. Relics of lake-dwellings are accordingly being energetically sought by the local authorities close by Constance, and a body of workmen standing up to their waists in water have made a regular haul of weapons, ornaments, and domestic utensils of the ancient lake-dwellers. Part of the treasures will go to the Museum in quaint old Heberlingen, on the other arm of the lake, and the remainder to the Rosgarten Museum in Constance, which contains one of the finest lacustrine collections extant.—N. Y. *Evening Post*, April 22.

BELGIUM.

NAMUR.—*Roman Inscriptions.*—The important discovery has been made, in the walls of the citadel, of six funerary Roman inscriptions as follows: (1) D. M. | [C]ASSIVS . POMPEIANVS | SIBI ET MATTAE VXSORI | TOTO FILIO | V. F. (2) D. M. | SECVRINIO . AMMI|O PATRI . VLP . V[A]N|AENIAE MATRI ET | SECVRINIAE AMMI|AE . V. F. | MADICVAE DEDICATAE. (3) D. [M]. | HAL . DACC▒ | SONIS . FIL . SIB[I] E[T] | LVBAINI VXSO[RI] | VICTORI ET PR[V]|DENTI FILIS ▒. (4) D. M. | ACCEPTVS VICTORIS SIBI ET | AMMAI SVAE CONIVG ET VICTO|RIO VICTORINO B F COS | FRATRI PO SVI. The other two only allow one to read the name *Sabinus*, and to guess that of a freedman, Ursus. These names are those of Germanic inhabitants of Namur, and three of them evidently came from Germanic roots, *halde* (clivus), *taub* (frons, tolia), *mahdig* (metiendus). The country was then becoming Romanized, as is proved by the Roman names of the younger generation. The form of the letters indicates the second century. Only one title appears, *beneficiarius consularis;* but this is of considerable importance, because it proves that Namur belonged to *Germania inferior*, which was governed by an official of this rank, while *Belgica* was governed by one of Praetorian rank. Thus the line of demarcation between the provinces must have lead from Anvers toward Namur, which latter place was a strong military station.—*Muséon*, 1887, I, p. 111; *Berl. phil. Woch.*, 1887, No. 5.

THIRIMONT.—*Roman Villa.*—The well-preserved ruins of a vast and beautiful Roman villa have been found here: it dates from the second cent. A. D. Among the discoveries are a large hypocaust, a bath, numerous fragments

of red and black vases, worked objects in iron and bronze, frescoed plaster, and coins. It is a curious fact that this villa, burnt in the IV cent., must have been afterwards rebuilt by a Frankish tribe, as numerous remains of the VIII and IX centuries have been found.—*Muséon*, Jan. 1887, p. 111.

GERMANY.

AUGSBURG.—*Museum.*—It is proposed shortly to open a metropolitan Museum for Art and Antiquities in the Hall of the Exhibition which was recently closed.—*Mitth. d. k. k. Oest. Mus.*, 1886, XII.

BERLIN.—The new *Institut für Alterthumskunde*, which has been founded at the University of Berlin by Profs. Theodor Mommsen and Otto Hirschfeld, has been joined by Prof. Ulrich Köhler as third teacher. He has undertaken the department of Greek antiquities.—*Athenæum*, Dec. 25.

New Pergamene group.—Freres and Possenti, who are at work on the fragments of sculpture from Pergamon, have succeeded in recomposing another group from about fifty pieces. It is the usual scene: a Giant overthrown who seeks to keep back the right arm of a goddess who is attacking him with a sword.

Another figure is also nearly ready, a female figure of remarkable beauty in transparent drapery.—*Berl. philol. Wochenschrift*, 1887, No. 10.

HAMBURG.—*Mediæval antiquities.*—In digging for the foundations of the new Rathhaus at Hamburg, a number of articles belonging to the early Middle Ages were found—weapons, domestic utensils, skeletons, ornaments, *etc.* This is easily accounted for by the fact that it is the site of the first "Burg" or castle of Hamburg, which was taken by storm under Duke Bernhard of Saxony 700 years ago. The most interesting of these relics of old Hamburg have been placed in the museum.—*The Times* (London), March 21.

REGENSBURG.—*The Porta Praetoria.*—The freeing of this Roman Gate from the later constructions that encircled and hid it, is being carried on, showing plainly its quadrangular construction. The height of the opening, from the present level, is about four metres.—*Berl. phil. Woch*, 1887, No. 3.

AUSTRIA-HUNGARY.

CARNUNTUM.—Austrian papers report excavations on the site of Carnuntum which considerably increase our knowledge of that Roman town (*cf.* JOURNAL, vol. I, p. 458).—*Academy*, Feb. 5. See, also, *Summaries of Periodicals*, pp. 205–6.

SANTA LUCIA (near Trieste).—An enormous prehistoric necropolis has been discovered here, and is now in course of excavation. The remains appear to belong to the "Hallstatt period," or rather to some part of it.—*Academy*, March 26.

VIENNA.—While excavating under a house in the Gumpendorfer Strasse,

some workmen have discovered a stone tablet with a well-preserved inscription of the reigns of the Emperors Trebonianus Gallus and Volusianus.—*Athenæum*, Feb. 5.

Exhibition of Ecclesiastical Art.—From the middle of March to the end of August there is to be held in the Imperial Austrian Museum an exhibition of Christian art. Up to the present there have been 200 contributions representing more than 1,000 objects, including the finest works belonging to the Cathedral-treasuries of Vienna, Prague, Brünn, Salzburg, St. Pölten, Agrain and Zara, and to the treasuries of at least 50 abbey and parish churches.—*Mitth. d. k. k. oest. Mus.*, 1887, II.

SWEDEN.

The *Ausland* reports a peculiarly interesting "find" in Sweden. In the course of the researches going on under the conduct of the archæologist G. J. Carlin, at the cost of the Royal Swedish Academy of Antiquities, a burial-place of the bronze age has been opened. A stone coffin, 11 ft. in length, and containing two bodies, was discovered. One of the bodies had been burnt, and was wrapped in woollen cloths, while the other, which bore no sign of having been exposed to a fire-process, was enclosed in an oak coffin. Portions of the woollen garments and the skins in which the bodies were dressed are well preserved. A bronze sword, also found there, has suffered much from oxidation, but its wooden sheath, covered with leather, is in excellent preservation. The writer spoke of it as 2,500 years (?) old. The discovery is important in two aspects—first, only once before in Sweden (in the province of Halland) has any woven material been found belonging to the bronze age, while no oak coffin of that period in such a perfect condition has hitherto come to light; next, it is certainly unique to find in one and the same grave, and of the same period, examples of two different species of burial.—*Athenæum*, Jan. 22.

TURKEY.

CONSTANTINOPLE.—*The decay of Santa Sophia.*—According to *La Semaine des Constructeurs*, the mosaics of Santa Sophia are rapidly perishing; and, unless something be done at once to preserve them from the attacks of dampness and barbarism, they will soon disappear. The rain, pouring into the seams of the neglected roof, and soaking through the light spongy bricks of the domes, throws off great patches of the mosaic. It is said that the church itself is in the greatest danger, as the enormous buttresses which were built forty years ago by the Italian architect Fassati, to resist the dangerous spreading of the domes, have proved to be wrongly applied, and that the movement, although checked for a time, has recommenced.—*American Architect*, Feb. 19.

PHILIPPOPOLIS.—*Aristotelian fragments.*—M. Petros Papageorgiu, a Greek

scholar residing here, has discovered an ancient manuscript containing passages of Aristotle's works. The MS. is believed to be of the XIV century, and consists of 180 pages comprising the following extracts:—pp. 1 to 76, four books of *Περὶ Οὐρανοῦ, On the Heavens;* pp. 77 to 124, two books of *Περὶ Γενέσεως καὶ Φθορᾶς, On Generation and Corruption;* pp. 125 to 178, the first three books of *Περὶ Ψυχῆς, On the Soul;* pp. 179 and 180, an extract of *Περὶ σοφιστικῶν Ἐλέγχων.*

The manuscript is in excellent preservation, the vellum being clean and strong, and all the letters being perfectly legible. It bears marginal annotations which are probably of the XV century. M. Papageorgiu is now comparing the manuscript with existing editions of Aristotle's works, and he finds that the text differs in many important passages from these editions, and notably from Didot's, which is in general use on the Continent. This is the more interesting, as the manuscript gives extracts only from the genuine Aristotelian collection, and not from any works which commentators have agreed to regard as spurious. As soon as M. Papageorgiu has finished his collating he will publish a pamphlet giving the result of his researches.—*The Times*, London, April 27.

GREAT BRITAIN AND IRELAND.

ENGLAND.—*Preservation of Monuments.*—By an Order in Council, dated March 7, the Ancient Monuments Preservation Act has been extended to the six following antiquities: (1) Little Kit's Coty House at Aylesford, in Kent; (2) the chambered tumulus at Buckhold, in Gloucestershire; (3) the Druid's circle and tumulus on Eyam-moor, in Derbyshire; (4) the Pictish tower of Carloway, in Rossshire; (5) the Ruthwell Runic cross in Dumfriesshire; and (6) St. Ninian's Cave at Glasserton, in Wigtownshire. —*Academy*, April 9.

AUCKLAND.—*Early Sculpture.*—At a meeting of the British Archæological Association, March 16, the Rev. Dr. Hooppell sent for exhibition photographs of remarkable pieces of sculpture found at St. Andrew's, Auckland. They are of Saxon date, and although they vary considerably in style they are of extreme interest. They consist of fragments of shafts of crosses and other pyramidal objects, sculpured slabs, and the like. Some of the shafts are covered with interlaced foliage and figures of great beauty and delicacy of execution in high relief, evidently executed with a chisel and by an artist of ability. They open a new chapter in the history of early art.—*Athenæum*, March 26.

CAMBRIDGE.—Dr. BARRATT, of London, has offered to present to the Museum of Archæology a collection of Roman antiquities, chiefly objects in bronze and glass, altars, *etc.* The collection is valuable, not only in itself, but as forming the nucleus of a department as yet not represented in the museum.—*Academy*, Nov. 6.

Prof. J. H. MIDDLETON is lecturing at Cambridge this term upon "The History of Mediæval Art." He also proposes to work privately with students of either classical or mediæval art.—*Academy*, Jan. 22.

CANTERBURY.—In the course of excavations preparatory to the erection of a new bank at Canterbury, was found a Roman terracotta image about six inches in height, and in a good state of preservation, declared to be at least 1,500 years old. The figure is that of a female holding a child on either arm, and represents, it is said, the goddess of Matrimony. It has been secured by the sheriff of Canterbury for presentation to the local museum.—N. Y. *Evening Post*, May 10.

CHICHESTER.—*Roman Walls.*—Excavations made here last year, at the time of the visit of the British Archæological Association, yielded the important discovery that the city-walls, hitherto supposed to be of mediæval date, are built upon Roman foundations. The massive base of the Roman work was laid bare and examined.—*Athenæum*, Feb. 5.

COLCHESTER.—At a meeting of the British Archæological Association, Jan. 5, attention was called to the dilapidated condition of the remains of St. Botolph's Priory-church, Colchester. The building having been unroofed and exposed to the elements for many years, the effects of exposure, and of the recent earthquake, are so serious that the arcades of the nave are likely to fall at any moment.—*Athenæum*, Jan. 22.

DARLINGTON.—At the meeting of the Brit. Arch. Assoc., Feb., Mr. Pritchett described some fragments of early sculpture found in St. Cuthbert's church, visited during the recent congress. One of these is the head of a Saxon cross covered with interlaced patterns; another is a part of a hog-backed tomb, several examples of which were met with during the congress. The style of workmanship indicates an early date for both of these objects. Several other carved stones were found during the restoration of the church.—*Athenæum*, Feb. 12.

LONDON.—*Lectures at the Royal Academy* were delivered by Mr. A. S. Murray on *Greek Sculptures as expressive of the Emotions.* Prof. J. H. Middleton also gave a course of lectures at the Royal Academy during February: three lectures upon *Methods of Decoration as applied to Greek, Roman, and Mediæval English Architecture;* and two lectures upon *Early Mediæval Sculpture.* Mr. R. S. Poole, of the British Museum, gave a lecture upon *Medals*, March 9.—*Academy*, Jan. 15; Feb. 12.

Lectures at the British Museum.—Mr. W. St. Chad Boscawen delivered, in April, a series of lectures on the History and Civilization of Babylonia, embracing the period from the Fall of the Assyrian, to the Fall of the Babylonian, Empire.—*Bab. and Orient. Record*, April.

BRITISH MUSEUM.—*Catalogue of acquisitions.*—Mr. CECIL SMITH is doing valuable service to archæology by publishing, in *The Classical Review* (pp. 26, 27, 80, 81, 117–19), a detailed catalogue of the acquisitions

of the Museum during 1886, with a view, finally, of giving "a full monthly statement of acquisitions, . . to keep subscribers *au courant* with the antiquities of the National Collection, and, wherever possible, with the important additions to the principal local museums" (p. 25).

Identification of silver-ware.—In 1785 a peasant of Caubiac, near Toulouse, discovered seven silver vases, which, after being lost sight of, are now found by M. Mowat in the British Museum (Hall of gems and jewelry).—*Gazette Arch.*, 1886, p. 320.

Antiquities found in the City.—At a meeting of the Brit. Arch. Assoc., March 3, were exhibited a variety of antiquities recently found in various parts of the City. The most remarkable was a marble bust of a young Roman lady found at Walbrook: the features are of great beauty. Some burnt Samian ware was found at the same time; while, at a lower level, a flint implement was discovered, one of the few prehistoric relics which have been met with in London.—*Athenæum*, March 12.

OXFORD.—*The chair of archæology at Oxford*, vacant by the removal of Prof. Ramsay to Aberdeen, will not be filled up till May. This postponement, we understand, is due to the necessity of passing a new statute, in order to take advantage of a promised augmentation of the present scanty endowment. In the meantime, the delegates of the common university-fund have appointed Mr. L. R. Farnell, of Exeter College, to lecture and give informal instruction in classical archæology and art during the vacancy. We may further mention that Miss Jane Harrison is delivering a course of lectures at Oxford this term on "Greek Vase Painting," in connection with the society for the higher education of women.—*Academy*, Feb. 5.

The Ashmolean Museum, under its new keeper, has been transformed. The collections are not only well ordered and well displayed in good cases, but are rapidly increasing in interest and value. Lately, the keeper has presented a fine collection of Greek terracotta masks and figures from Taranto; and Mr. Fortnum has lent a number of antique bronze ornaments from Italy, ancient bronze celts, and other weapons, some beautiful Greek and Roman bronze figures, Greek and Etruscan vases, Roman pottery and glass, besides other objects, from his priceless collections.—*Academy*, March 12.

SOUTH SHIELDS.—*Roman altar.*—A few days ago, during pipe-laying operations, a Roman altar was discovered a little to the west of the Castrum here. The dedication is to *Mars alatus:* another instance of which we have in the inscription on a silver plate found at Barkway, Herts, now in the Brit. Mus. (*C. I. L.* VII, No. 85). The altar is 2 ft. 6 in. high by 12 in. wide, and has on one side a *patera* and a *praefericulum*, the other side is defaced. The full inscription is: MART. ALA. | VENICIVS | CELSVS | PRO SE ET ***** | VSLM.—*Academy*, April 30, May 7.

IRELAND.—*Forgery of Irish Antiquities.*—For some time a wholesale for-

gery of antiquarian objects has been carried on in the north of County Antrim. A gentleman was able to watch the two forgers make flint arrow-heads, abrade and drill hammer stones and manufacture an urn, all copied from genuine objects used as models. Among other objects manufactured are large rough flint celts. The sale of these forgeries to visitors is all the easier on account of the existence in this region of genuine antiquities.—*Academy*, March 19.

AMERICA.

UNITED STATES.

The flood last week inundated the Slade flats about two miles north of Oneonta, N. Y., and when the water subsided Mr. Slade found the ground covered with fragments of ancient pottery and Indian arrow-heads. From a place a few yards square about 2,000 pieces of pottery, 100 arrow and spear points, granite axes, and other rare and interesting Indian relics were collected. It is believed that a part of an old Indian village or Indian mound has been laid bare by the water.—N. Y. *Evening Post*, May 10.

MEXICO.

TEOTIHUACAN.—*Discovery of a fresco.*—It is announced that Señor L. Batres has made, during his excavations here, the important discovery of a polychrome fresco (on Sept. 20) representing figures offering prayers to the national gods: the colors are still fresh and strong, the figures well preserved and of a remarkably accentuated ethnic type.—*Revue d'Ethnographie*, Sept.–Oct., 1886.

PACIFIC OCEAN.

EASTER ISLAND.—*Stone Images.*—The remarkable features of this small island are the huge stone statues, to the number of several hundred, which lie scattered about. They were chiselled with rude skill from the lava in the craters of extinct volcanos, and transported to all parts of the island, where they were set up; but most of them have since been overthrown by earthquake shocks. Some are forty feet in height, and some still remain unfinished in their quarries. Nothing is known of their origin, though they are evidently the work of a race far in advance of the present inhabitants. One of these statues has been placed on board the U. S. steamer Mohican, and is on its way to the Smithsonian Institution: it weighs between twelve and fifteen tons. There are some of these statues in the British Museum, under the portico; and another is said to have been carried off by a German vessel about two years ago.—*Amer. Architect*, 1887, Feb. 5, p. 71; *Athenæum*, March 26.

A. L. FROTHINGHAM, JR.

SUMMARIES OF PERIODICALS.

ARCHAEOLOGISCH-EPIGRAPHISCHE MITTHEILUNGEN AUS OESTERREICH-UNGARN. Vol. X. 1886.—Th. Mommsen, *On Domaszewski's Essay on the Roman Standards.* The standard is regarded as the sign of a separate command; hence the eagle of the legion is not a mere symbol, but shows that a commander is present, and indicates his position. The five standards which Plinius (x. 4. 16) describes, would be out of place in the legion as described by Polybios; but they were probably disregarded even before they were done away with A. U. C. 650. The position of the *signum* was probably behind the maniple to which it belonged, though, when the troops were on the march, the *signum* was probably in the van. Although legionary cohorts were not a regular institution until some time during the seventh century of the city, they seem to have employed in special cases before that time. They consisted of heavy-armed and light-armed soldiers combined, and closely resembled the auxiliary cohorts. The composition of the cohort was the same as that of the legion, the only difference being in the number of men.—A. Domaszewski, A. Hauser, R. Schneider, *Excavations in Carnuntum 1885.* The ruins of Carnuntum lie at the eastern extremity of the basin of Vienna. Originally a Roman camp, the place became more and more important, until Hadrian gave it a municipal corporation with the name of *municipium Aelium.* In 375 A. D. the place had, however, so far fallen away as to be called by Ammianus Marcellinus *desertum et squalens.* The fifteenth and fourteenth legions were stationed there, the fifteenth before Hadrian's time, the fourteenth from that time on. The excavations of 1885 are the work of an association formed for the purpose in 1884. Before that time the excavations upon this site had been more or less desultory. Twenty-six inscriptions, most of which are fragmentary, are here published. Most of them are gravestones, and afford little information, though some light is thrown upon the order of promotion in the Roman service. The forum has been laid bare, and found to be an open space 41.85 m. in length by 37.85 m in breadth, surrounded by a wall, and apparently by a colonnade. The space was paved with stone, and had gutters to carry off the rain-water. A plan of the forum is given (pls. II, III). A number of foundations of buildings were discovered to the south of the forum, but for what purpose

they were intended is not clear. About 600 m. to the S. W. from the camp the foundations of a tower were found. These are interesting because they are the first example of concrete casting at Carnuntum. The foundations are not built of blocks of stone or brick, but of concrete cast between supporting walls of wood. A plan is given (pl. IV). About 350 m. to the S. W. of the camp was discovered an extensive cemetery with numerous sarcophagi, reliefs, *etc.* (over 400 articles of various kinds). A plan is given (pl. V). Five reliefs are described. No. 1 represents a man and a boy; a third figure, doubtless that of a woman, is broken off. These were not entire figures, but busts in relief. No. 2 represents Ikaros as a nude, winged corpse (cut in the text). No. 3 represents the *genius loci* with chiton, chlamys, and cornucopia. The head, legs, and part of the arms are wanting (cut in the text). A second similar figure is mentioned. Here the head surmounted by a modius is preserved. No. 4 is very fragmentary: it represents apparently a Nereid riding upon a lion-headed sea-monster (cut in the text). The torso of a draped female figure, probably a dancer, is described. It is of marble, 0.2 m. in height, and of good execution. Many small articles of various kinds were found. Cuts are given of a small terra-cotta plaque with a figure of Victoria (of which only the upper part is preserved) and of four fibulae. Pl. I. 1 represents a fragment of a gold ornament with the inscription FELICESTVN. Pl. I. 2 represents a fragment of a bronze tripod: the legs are adorned with panther-heads, and probably ended in claws.—TH. GOMPERZ, *On Attic Sepulchral Epigrams.* The epigram published by Köhler (*Mitth. Athen.* X. 405) is compared with Kaibel No. 44, 4. Kaibel No. 68 is completed as follows: *Ὄλβιον, εὐγήρων ἄνο[σον χαλὸν εὔτεκνον ἰσθλόν, | τύμβος δ' εὐθά̣[ατον χρύπτει Ἀριστόβιον.*—C. JIREČEK, *Archæological Fragments from Bulgaria.* I. *Dacia mediterranea.* The chief towns of this province were SERDICA (Sofia), PAUTALIA (Küstendil), GERMANIA (Banja), NAISSUS (Niš) and REMESIANA (Bela Palanka). The country, especially the towns, is here described. Six fragmentary inscriptions from Sofia, three Greek and three Latin, are published, followed by three in Greek and one in Latin from the neighborhood of Sofia. Twelve inscriptions came from Küstendil and its neighborhood, while Banja and the village of Ryla furnish one each. II. *Ancient Mines.* The mines of these regions were famous in ancient times. The mineral wealth of Pautalia is also known to us from the coins struck there. Gold was formerly, as now, found in the streams, while several silver-mines existed in the neighborhood of Pautalia. The situation of these ancient mines is described, as is also that of lead, copper, and silver mines near Kratovo and Bosilov grad. Iron mines are numerous and wide-spread in various parts of these regions. III. *Roman Roads.* The road from Sirnium over Serdica, Philippopolis and Adrianapolis to Byzantium is described with its branches. The

site of Bessapara is determined. Ten inscriptions, more or less fragmentary, are published. Pl. VI is a map of the region about Sofia and Küstendil.—G. SCHÖN, R. WEISSHÄUPL, *Monuments from Brigetio.* Twenty inscriptions are published, of which four are from mile-stones, and three from sarcophagi. One sarcophagus is adorned with reliefs representing (1) Orestes, Pylades and Iphigeneia, and (2) Apollon and Marsyas. The torso of a seated figure of Zeus, and a seated statue of Athena, of which the head, right arm and left hand are wanting, are described, as are also four stelai with reliefs.—J. DÜRR, *On the Inscription from Samothrake Ephem. epigr. IV, p. 53.* O. Hirschfeld's reading of the first line of this inscription (*Arch.-epigr. Mitth. aus Oest.* v. 224 f.), and his supposition that it is connected with a visit of Hadrian to Samothrake, are supported.—A. RITTER V. PREMERSTEIN, *Roman Votive Stone from Unter-Haidin near Pettau.* A votive inscription to Volcanus Augustus is published and discussed. It was dedicated by a *vicus* of Poetovio.—H. ROLLETT, *The Ancient Inscribed Gems of my Collection.* Forty-three gems are described, and the inscriptions upon them are published.—C. JIREČEK, *Archæological Fragments from Bulgaria.* IV. *The Pontus-region and the Eastern Haemus.* This region is described with special reference to ancient geography. Not far from the town of Jambol lay the ancient Kabyle (later Diospolis), but its exact site is undetermined. Two Greek inscriptions from Jambol are published, beside four others from neighboring places. Six inscriptions from Apollonia (Sozopolis of the Middle Ages) are also given. The baths of Anchialos (*Aquae calidae, Θερμόζωλις, Θέρμη* in the Middle Ages) are described, and a sepulchral inscription in Latin is published. Four inscriptions from Anchialos and two from Mesembria are published. Varna, the ancient Odessos, furnishes six inscriptions, Balčik (Carbona of the Middle Ages, probably the ancient Dionysopolis) and its neighborhood six, while two more come from points slightly further along the coast to the North. The inland town of Sumen furnishes a somewhat fragmentary inscription of, apparently, the third century B. C. written in a Doric dialect. The inscription records an honorary decree of the inhabitants of Kallatis. Strategoi and Probouloi are mentioned as magistrates. The neighborhood of Preslav is described, and a Latin inscription from Silistria and one from Reselec, between Vraca and Pleven are published. Most of the inscriptions are fragmentary sepulchral or votive. Three inscriptions are added in the appendix. Throughout this article much attention is paid to relics of the Middle Ages. Pl. VII is a map of the region described.—F. STUDNICZKA, *From Servia.* The writer describes a number of monuments seen by him during a journey of ten days from Belgrad to Šabac on the Save. The most remarkable are two colossal reclining statues of Apollo and Minerva in Kragujevac. The Minerva has lost her head, left hand, and right

forearm. The Apollo is better preserved. Both figures are draped, and Minerva wears a breastplate with scales. Sketches of seven reliefs are given. One represents a gorgoneion, the rest are gravestones. Several of these have the so-called feast of the dead in combination with other figures, including a man on horseback.—E. LOEWY, *Inscriptions from Rhodos.* Thirty-three inscriptions are published. Of these, twenty-two are from Rhodos, three from Lardos, two from Lindos, three from Marino, and three from Massari. Most of them are sepulchral inscriptions; five, or possibly six, are fragments of honorary decrees; one (No. 23) mentions the college of Meniastai.—K. MASNER, *Relief upon a mirror from Caere* (pl. VIII). A relief in the Austrian Museum for Art and Industry is published. Dionysos is seated upon a chair and holds his thyrsos in his left hand. Opposite him stands a half-draped female figure toward whom a child is stretching out his hands as if to go to her from Dionysos. The relief was much injured and has been restored.—E. BORMANN, *The Tribus Pollia.* Those Roman legionaries who were not already Roman citizens were enrolled in the tribe Pollia when they enlisted. The towns of Northern Italy toward the Gallic frontier were also allotted for the most part to the same tribe when they acquired the citizenship. This is explained by the connection of the name Pollia with the verb *pollere*, since this name was of good omen for warriors. An inscription from Capena is published which was placed by a freedman upon the grave of his former master who had been himself a freedman. The tribe of each is mentioned.—TH. GOMPERZ, *The recently discovered grave-inscriptions of the Jewish Catacombs near the Via Appia.* The form κιτοῦντε is explained as equivalent to κοιτῶνται. One of these inscriptions (*Mitth. d. Inst. Röm.* I, p. 56) is restored.—K. BARON HAUSER, *Inscriptions from Carinthia.* Four fragmentary Latin inscriptions are published.—A. RITTER V. PREMERSTEIN, *Newly-discovered Roman Inscriptions from Poetovio.* Two fragments of inscriptions are published. One is a dedication to Mithras, the other mentions the thirteenth legion.—A. V. DOMASZEWSKI, *Greek Inscriptions from Moesia and Thrake.* Eleven dedicatory inscriptions are published from copies and squeezes made by the writer during a journey in Servia and Bulgaria.—A. V. DOMASZEWSKI, *On Greek Inscriptions.* Remarks upon *C. I. A.*, II, 476 and *Bull. de Corr. Hellén.*, X, p. 112. HAROLD N. FOWLER.

BULLETIN DE CORRESPONDANCE HELLÉNIQUE. Athens and Paris. **Vol. X. 1886. No. 6. December.**—T. HOMOLLE, *Inventories of the Delian temples in B. C. 364* (pp. 461–75). An inscription, in cursive transcription, found near the temple of Apollon at Delos: it is dated B. C. 364 (ἐπὶ Τιμοκράτους ἄρχοντος Ἀθήνησι, ἐν Δήλωι δὲ Αἰσχίνου), and consists of 147 lines, the first 60 of which are quite new, while the others are found

on inscriptions from Athens (*C. I. A.* II. 813 *B*, 817 *B*, 820). It is an inventory of the sacred objects in the Delian temples (the Artemision, the temple of the Athenians, and the temple of the Delians), indicating also the acquisitions of a given year, with information as to where they were kept; it also throws much light on the administration of the Delian temples in the IV century. These treasures are in the custody of *ἀμφικτύονες*, delegates from Athens and from Delos, annually chosen, at least three from each city; each of the two groups has a secretary. The objects under their charge, which are of a great variety—votive offerings from various persons from differents parts of the Hellenic world, in gold, silver, bronze, pottery, *etc.*, such as phialai, kylikes, kraters, rings, seals, wreaths of myrtle and laurel in gold, statuettes, strigils, baskets, incense-holders, *etc.*, *etc.*—are reviewed in detail, counted and weighed, with notes of defects, by both the retiring and the incoming officials, in the presence of the senate of Delos, and of the *ἱεροποιοί* (earlier called *νεωκόροι*); the catalogues are duly engraved on stelai and deposited in duplicate both at Athens and at Delos. The rules followed in this procedure are given *C. I. A.*, I. 32.—E. POTTIER and S. REINACH, *Excavations in the nekropolis of Myrina: inscriptions on terracotta figurines* (pp. 475–85). To the 169 inscriptions discussed in vol. VII, pp. 204–30, are here added 45 obtained in more recent excavations, chiefly by the late M. Veyries in 1882. These comprise signatures of koroplasts (Hermokrates, Hieron, Pythodoros, Diphilos), and a series of curious inscriptions on wings (*ἴσχηβος*, *φέρων*, *κίθαρις*, *θυμίατρον*, AIΘIOYY), probably intended—from some fancied resemblance—as a reminder, to the koroplast, of the figure to which the wing in question should be attached, the different parts of the figures having been moulded separately. A list follows of 25 inscriptions on terracotta figurines, found mostly at Myrina since 1882, and elsewhere published.—G. COUSIN and G. DESCHAMPS, *Inscriptions from Mûghlâ in Karia: the κοινὸν Ταρμιανῶν* (pp. 485–91). Four inscriptions are published, identifying Mûghla and the unknown localities *Ἀρτουρβα* and *Παράβλεια*, as part of the site of the *κοινὸν Ταρμιανῶν*.—S. REINACH, *Two terracottas from Kyme* (pp. 492–500; pl. XIII). In 1881, M. Reinach conducted excavations in the nekropolis of Kyme, near Myrina. In 1874 excavations had been made there, and statuettes mostly hieratic with coiffures and high *στεφάναι*, and comic masks had been found, but not figures of male and female dancers. Many articles purporting to come from Kyme are frauds (*cf.* JOURNAL, I, pp. 429–32). M. Reinach opened 150 graves, the contents of which were mostly confiscated by the Turkish officials and sent to Constantinople. Two small heads were saved and are now in the Louvre. The first was found in a vase of the Samian style, which was in a larger jar with ashes: it is a tragic mask with high *ὄγκος*, with rich coloring (face brownish-yellow, red lips, blue eyes, reddish-brown

beard). Work so artistic is unique among terracottas from Kyme. The second head is that of Herakles, and was found in a most remarkable tomb, which contained 105 common vases, 147 pieces of glass paste, strigils, many fine vases, lamps, finger-rings, keys, a mirror, a large figurine, *etc.* This head is hollow, and has an opening at the back with a stopper, on which is a miniature head in relief: within were found two terracotta knuckle-bones. The type of head is Lysippeian, so frequently found in terracottas from Myrina, Smyrna, and Tarsos. Though this contrivance is unique in a terracotta head, it has its analogues in several vases made in the shape of heads. Something of the kind is referred to in Plato, *Symp.* 215 A.—G. RADET and P. PARIS, *Inscriptions from Pisidia, Lykaonia, and Isauria* (pp. 500–514; to be continued). These 36 inscriptions are of late-Roman or Byzantine times, and are frequently of barbarous orthography. I. *Pisidia, Nos. 1–3.* No. 1, which contains the new word *ἀρχιτεκτοσύνη*, identifies, with the site of Kiesmé, the ancient town Sillyos. No. 3 is in honor of Septimius Severus. II. *Lykaonia, Nos. 4–36.* These are mostly funerary, and of late date. The Lykaonian proper names are very un-Greek: *e. g.* the new names, Doudas, Douda, Kakkis; also Sousos, Tattas, Pappas. No. 6 (Ikonion) imprecates the wrath of Men upon the violator of the stele. No. 26, in Latin, in honor of the Emperor Gordian III, seems to indicate the existence of a Roman colony at Zosta (Lystra?). Several Christian inscriptions, though barbarous in style and orthography, are interesting. No. 18 (near the highway, a league from Zosta) *Νο[ύ]μος καὶ Οὐαλέριος ἐκόσμησαν Παῦλον τὸν μάρτυρα μ(νήμης) χ(άριν).*—AA. EM. KONTOAEON, *Miscellanies* (pp. 514–21). Twenty-two inscriptions (edited in modern Greek) mostly of Roman times, dedicatory, honorary, *etc.*, from Klaros, Tralleis, Nea Phokaia, Nysa, and Thyateira. No. 3 (Tralleis) is a fragment of a letter from a king of Syria to the inhabitants of the city. No. 1 is in elegiac verse, in honor of the learned and accomplished Gorgos, buried in Attika (*Κεκροπὶς ἐν κόλποις κρύπτει κόνις*).

Vol. XI. 1887. Nos. 1-2. Jan.-Feb.—M. HOLLEAUX, *Head of a woman found in the ruins of the sanctuary of Apollon Ptoos* (pp. 1–5, pl. VII). In May, 1886, the author found, in the enclosure of the temple of Apollon Ptoos at Perdikovrysi, a marble head of a woman which strikingly resembles those of the statues found in Feb. 1886 on the Athenian akropolis: these, with this fragment and with other figures found at Delos and at Eleusis (*Ἐφ. Ἀρχ.*, 1883, pl. v, 2), form a distinct series in the history of archaic Greek sculpture. This head is surrounded with a high *στεφάνη*, painted with the meander-fret: it has earrings in the form of large rosettes (seven petals) painted in white: the coiffure is elaborate: the front of the face is surmounted by a row of small awkward ringlets, while masses of hair rudely divided fall down the back: the face is large and full; the

brow slightly retreating; eyes, almond shaped, obliquely set; lips full and raised at the corners with a smile. The work shows careful and conventional treatment, but no artistic genius. The presence of a statue of a woman in a precinct of Apollon is surprising. The author suggests that the figure was an *ex-voto* offered to Athena, who, as Athena Pronaia, from the evidence of several remains (pottery and bronzes, inscribed *Ἀθηναίας Προναίας*) discovered here, may have had a sanctuary in front of that of Apollon (as at Delphi). The author does not venture to determine whether this statue is that of a priestess or of the goddess herself.—C. DIEHL and G. COUSIN, *Inscriptions from Lagina* (pp. 5–39; to be continued). The famous temple of Hekate at Lagina in Karia has already furnished many important inscriptions (Newton, Hauvette-Besnault, and Dubois). The author here publishes 45 inscriptions, 40 of which were discovered by Benndorf. I. Lists of 165 priests and priestesses of Hekate (B.C. 100–A.D. 300): the office was held for one year, and often went in families, several members of which had sacred functions at the same time. II. Inscriptions relating to the cult of Hekate. The goddess had her mysteries and festivals: the most important festival occurred every four years (*πενταετηρίς*). At this festival the chief-priest had to see that sacrifices were duly offered, and hymns sung in honor of the goddess; that races, gymnastic and dramatic exhibitions took place; he had to give banquets, to distribute oil, wine and wheat, also money among his servants. Many strangers attended the festival; largesses were made, and the city of Stratonikeia received especial favors.—P. PARIS, *Excavations at Elateia: the temple of Athena Kranaia* (pp. 39–63; pls. I, II, VI). This temple, of which Paus. alone of the ancients speaks, was about 20 stadia from Elateia upon a height difficult of access. Dodwell visited it early in the century, and found it in a much better state of preservation than at present. The article fully discusses many important points. The temple had long since been largely overthrown, and its site was covered by later structures: its main axis lay N. and S.: it was 18.80 met. long; columns, .75 met. in diam., with 20 flutings, in poros stone: fragments of capitals show abaci of different height. Temple was normal Doric, hexastyle; hence with 13 columns on sides: in dimensions it closely resembles the so-called Theseion at Athens. The external decoration was elaborate, as may be inferred from fragments of terracotta gargoyles (lion-heads) much resembling some found at Olympia, antefixae with delicate anthemion-ornamentation, some of which seems to be suggested by a local flower (wild heliotrope): color was used on the antefixae, red ground and white relief; black, red, and yellow egg-and-dart moulding; astragal in cornice above painted lotus-flowers and anthemia alternating. No trace is left of portico and houses of priests mentioned by Paus. A single inscription of the Empire, referring to this *στοά*, was

found.—G. RADET and P. PARIS, *Inscriptions from Pisidia, Lykaonia, and Isauria* (pp. 63–70; contin. from vol. x, p. 514). Fifteen insc. from Isauria (Apa, Tachtali, Kinik, Isaura), of the Empire, honorary, dedicatory and political: some of them are metrical. No. 51, the single word *ἀρχιπρυτανεύσαντος* proves the existence at Isaura of a college of prytanes.—Σ. Κ. ΠΑΝΤΕΑΙΔΗΣ, *Inscriptions from the island of Kos* (pp. 71–79). I. Two insc. conferring proxenia; one, on Protomachos. II. Site of the gymnasium for youths and epheboi; in honor of a generous gymnasiarch. III. Site of the Theatre; honorary decree, in elegiac verse. IV. Long decree of the people of Iasos, conferring golden crown and other honors on Teleutias. V. Three silver coins of Kos.—P. FOUCART, *Explorations in the plain of the Hermos, by M. Aristote Fontrier* (pp. 79–107; pl. XIV, map). These explorations were confined to that portion of the valley of the Hermos lying in the triangle formed by the cities of Sardeis, Magnesia, and Thyateira, with the adjacent parts. The inscriptions discovered throw much light on the Persian and on the Macedonian occupation and rule, and fix definitely the sites of several cities injured by the earthquake of 17 A. D. (Tac. *Ann.* ii. 47): they range in date from Eumenes II (B. C. 160) to the V century A. D., and include a copy of a letter from one of the Seleukidai confirming to a town near Magnesia the right of asylum enjoyed by its ancient temple of Persian Artemis; details of the cult of Persian Artemis at Hierocaesarea (priest called *ἀνὴρ μάγος*); references to cult of Tyrimnas (at Thyateira); numerous honorary inscriptions (to Tiberius, to Claudius, to Caracalla, in whose honor a colossal statue had been erected, *etc.*); the name of a new proconsul is furnished, Asinius Sabinianus; list of epheboi (*circa* 150 B. C.) grouped in two classes, *διετεῖς* and *ἐφέτειοι*. No. 23, from Thyateira, attests the industrial activity of that city: in it the dyers (*βαφεῖς*) honor a benefactor. Besides the corporation of dyers at Thyateira, were already known those of the *κεραμεῖς*, *ἀρτοκόποι*, *βυρσεῖς*, *λινουργοί*, *χαλκεῖς χαλκότυποι*, and *σκυτοτόμοι*. The latest insc. is the epitaph, on a red marble sarcophagus, of Makedonikos, *ἐπίσκοπος . . . . καθολικῆς ἐκκλησίας*, perhaps the patriarch of that name (A. D. 495–511).—G. RADET, *Letters of the Emperor Hadrian to the city of Stratonikeia-Hadrianopolis* (pp. 108–28). Three letters, copied on a single block of marble, each not less than fifteen lines long, addressed by Hadrian to the archons, senate, and people of this town, and dated exactly (= Feb. 11, and March 1, A. D. 127). A list of other letters of Hadrian is also given. The town of Stratonikeia-Hadrianopolis lies in the valley of the Kaikos, and the author places it at Djeneviz-Kalch near Yamourli: it had early existed as Stratonikeia, but was refounded by Hadrian. The letters furnish us some information about embassies, choice of ambassadors, expenses, audience before the emperor, forms of imperial correspondence, *etc.*; also a new

name as proconsul of Asia, that of Stertinius Quartinus (or Quartus); and, as procurator, that of Pompeius Severus. *Appendix.* Five short and unimportant dedicatory and funerary inscriptions from Yamourli and Seledik.—P. FOUCART, *The fortifications of the Peiraieus in 394–393 B. C.* (pp. 129–44). Two important inscriptions, discovered on the site of the ancient fortress Eëtioneia at the Peiraieus, are here given in facsimile, and are fully discussed. In cursive they are *Ἐπὶ Διοφάντο ἄρχον|τ(ος), Σκιροφοριῶνος | μηνὸς ἑ(ς) τὰ κατ' ἡ|μέραν ἔργα ζεύγ|εσι τὸς λίθος ἄγου|σι | μισθὸς:* (symbols for 160 drachmae). *σιδηρίων μι|σθός:* (symbols for 53 drachmae). *In the archonship of Diophantos* [B. C. 395/4], *in the month of Skirophorion, for the jobs by the day: hire of the teams bringing the stone, 160 drachmae; hire of the iron instruments, 53 drachmae* (Note: *ο* = *ου*, *ε* = *ει*, and *ἡμέραν*). The second inscription reads: *Ἐπ' Εὐβολίδο ἄρχοντ|(ος) ἀπὸ τοῦ σημέο ἀρχάμενον μέχρι τοῦ μετώπο τῶν πυλῶν τῶν κατὰ τὸ Ἀφροδίσιον ἐπὶ δεξιὰ ἐξιόντε:* (symbols for 790 feet) *μισθω(τῆς) Δημοσθένης Βοιώτιο(ς) α(ὐ)τῆι προσαγωγῆι τῶν λίθων. In the archonship of Euboulides* [B. C. 394/3]: *beginning at the standard (?), when one goes forth to the right, to the front of the gates of the Aphrodision, 790 feet; contractor, Demosthenes the Boiotian, together with the supply of the stone.* These two inscriptions establish several important facts. According to Xenophon (*Hell.* IV. 8) and Diodoros (XIV. 85), the Long Walls were rebuilt by Konon in the spring of 393 B. C. We here learn that important steps had been taken in this work fully two years before, and that, one year before, the matter had been put directly into the hands of a Boiotian contractor, instead of the usually chosen officials, the *τειχοποοί*. These inscriptions were cut, before the walls were completed, upon the lower courses of an earlier wall. The features of this earlier wall—which is thus given a date *ante quem* and therefore can be no other than Themistokles's wall—are traced in detail. The quarter Aphrodision adjoined the Eëtioneia, while the temple so-called erected by Themistokles (*schol.* to Hermogenes, *Rhet. graeci* (Walz), V, p. 533) was actually within the enclosure of the Eëtioneia; and the Aphrodision of Konon (Paus. I. i. 3) lay nearer the sea, between the *Πεντὲ στοαὶ* and the *Κάνθαρος*. This important article is illustrated by two plans. *Appendix.* P. F[OUCART], a short inscription found on the Akropolis in 1886, containing the beginning of a decree passed by the senate and people of Eretria and of Athens, in the archonship of Euboulides.

No. 3. March.—C. DIEHL and G. COUSIN, *Inscriptions from Lagina* (pp. 145–68; contin. from p. 39). Twenty-six inscriptions, mostly communicated by Benndorf, relating to the cult of Hekate. The sanctuary flourished under Roman rule: Sulla recognized its rights of asylum, Tiberius and Augustus confirmed them. The sanctuary comprised the temple proper, the sacred domain (*ἱερὰ χώρα*), and a large precinct (*περιπόλιον*), in which

dwelt the servants of the goddess, forming a distinct community. One inscription refers to restorations made after a great calamity, probably the invasion of the Parthians.—B. LATYSCHEW, *Inscription from the Chersonesos* (pp. 163–68). This inscription, probably on the base of a statue, was lately found in the Crimean Chersonesos: it reads: *Σέξτον Ὀκτάουιον Φρόντ[ω]να, πρεσβευ|τὴν καὶ ἀντισ[τ]ράτηγο[ν] Αὐτοκράτορος Δομ[ε]|τιανοῦ Καίσαρος θεοῦ Σεβαστοῦ Γερμανι|κοῦ ὁ δᾶμος.* It shows that Fronto was governor of lower Moesia, as well as *praefectus classis*.—G. RADET, *Notes on ancient geography: Attaleia in Lydia* (pp. 168–75). There were two cities in Asia Minor named Attaleia: the one (modern Adalia) near the borders of Pamphylia. The site of the other city has been problematical until recently. The town is not mentioned by any historian, but is found on Peutinger's map (confused with Attea), in Pliny, and in Steph. Byz., by whom it is vaguely placed as either in Aiolis, in Mysia, or in Lydia. The author would place the city at Yenidje-keui, a town about three leagues N. N. E. from Ak-Hissar (ancient Thyateira), which from its nearness to the confines of Aiolis, Mysia, and Lydia might be placed in either district by an inaccurate writer. *Appendix: Akrassos.* This town, mentioned in an insc. here published, is shown to have lain in the upper valley of the Kaikos, near Attaleia. It is not to be confounded with Nakrasa (L. Schmidt in Smith's *Dict. of Geogr.*; Pape).—M. HOLLEAUX, *Excavations at the temple of Apollon Ptoos: fragments of archaic statues* (pp. 178–200; pl. VIII). The fragments here published are in very imperfect condition, but are thoroughly characteristic. They all belong to the "Apollon" statues of the earliest style, representing a naked beardless youth, standing erect, arms along the sides, left leg slightly in advance, feet flat on the ground, hair long, falling heavily on neck. All the statues to which these fragments belong (Perdikovrysi, anc. Akraiphia), originating in Boiotia, are related more or less intimately to the "Apollon" of Orchomenos, and with it form a distinct group as over against other archaic "Apollons" (of Thera, of Tenea, *etc.*): for example, they have not the improperly called "Aiginetan" smirk, characteristic of the latter figures. All the Boiotian statues are the work of artists of the same spirit and methods. Three fragments clearly belong to statues contemporary with the "Apollon" of Orchomenos; two are later, but older than the statue published in vol. X, pl. IV; one fragment (pl. VIII) belongs to a statue contemporary with it. The free position of the arms and other features make it probable that this figure marks a transition from the first to the second series of archaic Apollons, and may be placed in the second half of the sixth century B. C. Though later than the Apollon of Tenea, it shows a very different artistic conception: it has more vigor and freshness, great independence, and no mannerism. This is shown by a minute analysis of the torso. Then follow brief descriptions of 34 frag-

ments of heads, of torsos, of hands, legs, feet with bits of the pedestal attached, in too imperfect a condition for chronological classification. On Fragm. 36 is an illegible inscription. This type of statue is frequently found in Northern Greece, at Perdikovrysi more than eleven replicas. Of these the oldest are probably as old as the seventh century, and the latest of the last third of the sixth. These fragments indicate a progressive activity among the Boiotian sculptors, for about sixty years. The "Apollon" type may be traced to Peloponnesos, whence it was imported to Northern Greece, probably by the so-called Daidalidai, and especially by Dipoinos and Skyllis. In Boiotia, however, it received an individual and independent treatment in accordance with local taste, and we therefore claim the existence of a Boiotian (not "Theban") school at this early date.—H. LECHAT, *Excavations at the Peiraieus on the site of the ancient fortifications* (pp. 201–11). These excavations were carried on (March 3–12, 1887) by the sailors of the French frigate *Victorieuse*, under the general supervision of the Director of the French School at Athens, in the hope of finding the site of the Aphrodision of Themistokles, mentioned in the last number of the *Bulletin*. A gateway leading toward the temple, with an ancient inscription, was discovered, but not the temple itself. M. Bernay furnishes a detailed note, of architectural interest, on the groundplan of the buildings lying between the two circular towers, which show remarkable provision for defence against the military and naval engines of war. It is probable but not certain that the Aphrodision was situated about 30 met. beyond the eastern tower. Numerous objects were discovered in excavating: funerary stelai, fragments of pottery with stamped inscriptions (from Thasos, Rhodes, Knidos). One of these inscriptions showed a curious blunder of the artist, who in preparing his stamp reversed the letters of the name (*Σωρίχου ἀστυνόμου*), but not the name itself. A fragment of a gutter-tile, probably from the roof of the fortifications, inscribed [*πλίνθος δη*]*μόσια Πειρ* (*αϊκή*) was found, as also a perforated (*τετρυπημένη*) copper disk, inscribed *ψῆφος δημόσια*, one of the ballots used in the Heliastic courts.—MISCELLANIES. *Comment on a note from G. Hirschfeld on κοινὸν Ταρσιανῶν* (p. 212). H. claims that we cannot be certain that the identification of MM. Cousin and Deschamps (see above, p. 209) is correct.—AA. EM. KONTOAEON, *Inedited inscriptions* (with notes by P. F[oucart]) (pp. 212–23). Nineteen inscriptions, edited in modern Greek, almost exclusively of Roman times: they comprise decrees, dedications, epitaphs, *etc.*, and come from Krete, Insos (ten), Tralleis, Synnada, Pisidia, Sagalassos, Salla (correcting Mr. Ramsay in *Bull.* VII. p. 268), and in Sparta.—BOOK REVIEW (pp. 223–24). ALBERT MARTIN, *Les Cavaliers Athéniens* (Paris) is reviewed by H. L[ECHAT].

No. 4. April.—G. COUSIN and G. DESCHAMPS, *A Senatus-Consultum from Panamara* (pp. 225–39). This article opens a series on the inscriptions

discovered within the sanctuary of Zeus Panamaros near Stratonikeia in Karia. The inscription is dated (Aug. 15) 39 B. C., and is the twelfth *senatus-consultum* known: it is a Greek copy set up in the city, and consists of the beginning of a decree passed by the Roman senate; hardly more is preserved than a few names of consuls, witnesses, ambassadors. The two consuls, L. Marcius Censorinus and C. Calvisius, were precisely the only two senators who five years before defended Julius Caesar as he was assassinated. The inscription furnishes little that is new; *e. g.*, the name of the month Herakleon. The article closes with a corrected reading of an inscription from Lagina published by Newton, *Cnidus, etc.*, vol. II, p. 793.—R. DARESTE, *Inscriptions from Gortyna* (pp. 239–44). Text (cursive) and French translation of fragments of the famous code relating to reparation for damages caused by animals, to conditions for enfranchisement, to the law of adoption. The inscriptions have already been published by Comparetti and others.—G. FOUGÈRES, *Excavations at Delos in April-August, 1886: Greek and Latin Dedicatory inscriptions* (pp. 244–75). The author furnishes his gleanings in Delos after the thorough and protracted work of MM. Homolle, Hauvette-Besnault, S. Reinach and Paris: they are important, and comprise dedicatory inscriptions, fragments of decrees, inventories, gymnastic inscriptions, 21 pieces of sculpture of different periods, many architecturally interesting remains. The dedications (38) are here published: they range in date from the third century B. C. to the earlier years of the empire. Nos. 1–4 are in honor of *συγγενεῖς* of Ptolemaic kings and queens; No. 4 is metrical. The signatures of several sculptors are found: Hephaistion, Eutychides, Agasias, Boëthos, and the new name Theodosios. Antisthenes in No. 5 was perhaps a sculptor. The epithet *Μεμανός* applied to Zeus is new, as also the proper name Meniske.—M. HOLLEAUX, *Archaic statue found at the temple of Apollon Ptoos* (pp. 275–87; pls. XIII, XIV). This article supplements articles in vol. IX (1885), pp. 474–81, 520–24; vol. X (1886), pp. 66–80, 98–101, 190–99, 269–75; vol. XI (1887), pp. 1–5, 178–200. In the *Bulletin* for 1886 (X, pp. 269 ff., pl. VI), is published a headless statue of Parian marble, with a votive inscription scratched on its surface, found at Perdikovrysi in 1885. In June, 1886, the head of this statue was found, and this article sums up the results gained by a comparison of the complete statue with similar works. It is to be placed in the second series of the representations of "Apollon." It is clearly not of Boiotian origin: it shows distinct Peloponnesian influence, and must be ascribed to a school closely related to that from which proceeded the Aiginetan marbles; but it is earlier than the figures of the western pediment of the Aiginetan temple. The statue, which is a replica of a bronze original, is evidently of the style of Kanachos, and doubtless is to be traced to the Sikyonian master's famous Didymaian Apollon. In the

Appendix, the inscription is republished: (reverse) *Πυθίας ὀχραιφ[ιεὺς] | καὶ Ἀσχρίων ἀν[ε]θ[έταν]* || (direct) *φι* ..... | *Πτωϊ[εῖ?* ..... *ἀργυ]ροτόξωι.* P. F[oucart] discusses the date of the inscription, which, on epigraphic grounds, is probably to be placed at about 450 B. C., which is fifty years later than the date apparently required by the statue on purely archæological grounds.—P. FOUCART, *Note on an Inscription from Olympia* (pp. 289–96). This inscription, published and restored by Treu in *Arch. Zeit.* 1879, p. 212 (Roehl, *I. G. A.*, No. 380), has hitherto been referred to Theagenes of Thasos (Paus. VI. 11. 2). The reasons for this identification are most instructively criticised. The author, however, restores the inscription in a more satisfactory manner, as that of the Rhodian Dorieus son of Diagoras (Paus. VI. 7): the points in favor of this identification, as against Treu's, are the presence of *ἀχονιτί* in the text of Pausanias and in the inscription; and the exact concurrence of the number of games mentioned in Paus. with those that the stone would most naturally have borne, judging from the fragments. The use of the Ionic alphabet in the inscription of a Rhodian is shown to be not without abundant precedent (*A. Z.*, 1878, p. 129; *ibid.* 1880, p. 52; Roehl, *I. G. A.*, No. 500; Kirchhoff, *Studien* (pp. 40–49).—A. E. KONTOLEON, *Miscellanies, with notes by P. F*[oucart] (pp. 296–301). Ten short inscriptions from Chalkedon in Bithynia, Smyrna, Tralleis, Magnesia near Sipylos, Sparta in Pisidia, and of unknown provenience (*προελεύσεως*). No. 1, of pre-Roman times, illustrates the early connection between Megara and Chalkedon, and furnishes the names of hitherto unknown officials, *ἀνχριτῆρες*. These inscriptions, chiefly of Roman times are mortuary, dedicatory and gymnastic.—**BOOK REVIEWS** (pp. 302–4). G. F[ougères] briefly reviews TH. HOMOLLE, *Les Archives de l'Intendance sacrée a Délos* (315–166 B. C.), Paris, 1887; and, by the same author, *De antiquissimis Dianae simulacris Deliacis*, Paris, 1885. J. H. WRIGHT.

ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. **JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1886. No. 3.**—FR. STUDNICZKA, *Representations of Athens upon Fragments of Pottery from the Akropolis of Athens* (pl. 8). Fragments of five representations are published. No. 1, upon a fragment of a pinax, represents the birth of Athena in the manner familiar to us from black-figured vases. The style is like that of Korinthian pinakes, but an inscription shows that the work is Attic. This is the oldest extant representation of the birth of Athena, and the oldest extant piece of Attic painting except the "Dipylon-vases." The date suggested is the second half of the seventh century. No. 2, upon what seems to be part of the cover of a large pyxis, represents the lower part of an Athena. The figure must have stood in the position of a Palladion. A very large shield (Aegis) adorned with large snakes must have hidden the greater part of

the figure. No. 3, upon what seems to be a fragment of an amphora, represents the upper part of an Athena. She wears an Aegis, and has a shield, spear, and high-crested helmet. Behind her, part of a trident is visible, and before her a hand holding a staff. Perhaps the strife of Athena and Poseidon was represented here in the form of a *sacra conversazione*. The painting is very careful and elaborate. The colors used are those in vogue before the introduction of the black-figured style: white, red, and reddish-brown, beside a little yellow. The style resembled that of Amasis, to whom this work is conjecturally ascribed. He is believed to have been a man of foreign, probably Libyan, origin, who lived at Athens. No. 4, upon a piece of a small kylix, shows part of a seated Athena with an Aegis upon her outstretched left arm. The seat is black, the rest of the painting is executed in a non-lustrous, reddish color, which does not, however, hide the black outlines,—a rare mixture of the black-figured with the polychromatic manner. No. 5, upon seven fragments of a flat dish, represents in black, on a glossy yellowish ground, fragments of an Athena in warlike attitude. The snakes of the Aegis are alternately bearded and beardless. Several figures of Athena are mentioned, the garments of which are adorned with representations of athletic contests. It is suggested that such representations may have been embroidered upon the Panathenaic peplos.—P. KABBADIAS, *Archermos the Chian* (figure). The following inscription has been found on the Akropolis. It is cut upon a fragment of a marble column with Doric flutings .... (Ἄ)ρχερμος ἐποίεσεν ὁ χῖ(ος) ... (ἀνέ)θεκεν Ἀθεναίαι πολιάχο(ι). It is suggested that one of the statues found near the Erechtheion may be the work of Archermos, but, at any rate, the inscription proves that he worked at Athens or for Athenians. Perhaps Archermos introduced at Athens the art of working in marble, which presently supplanted the older Attic art of wood-carving. Near this inscription a bronze head was found. This is conjecturally ascribed to Theodoros of Samos, with reference to an inscription published Ἐφ. Ἀρχ. 1886, p. 81, No. 5.—K. N. DAMIRALES, *Inscriptions from the Akropolis*. Three fragmentary inscriptions are published. The first contains part of a decree in honor of the city of the Tenedians and Aratos and his brothers. *Cf. C. I. A.*, II. 1. No. 117. The other two are also fragments of honorary decrees of the fourth century B. C.—I. PANTAZIDES, *Corrections to an Inscription from Epidauros and a passage of Pausanias*. A number of false readings and especially false punctuations in the inscription (Ἐφ. Ἀρχ. 1883, p. 229, No. 60) are corrected. The inscription is one of those concerning cures. Paus. II. 36. 1, we read Ἀλικὸς λόγος ἐν στήλαις ἐστὶ ταῖς Ἐπιδαυρίων. Now several Ἀλικοί, *i. e.* men from Alike, are known from inscriptions, and the passage is emended to Ἀλικῶν λόγος κτέ.—P. KABBADIAS, *Inscriptions from the Excavations at Epidauros*. No. 103 is an account of the expenses for

the building of the temple of Asklepios. It is written on two sides of a slab of marble, is divided into four columns, and contains in all 305 lines. The work was all done by contractors, many of whom were foreigners, and appears to have been allotted to the lowest bidder. The names of the contractors are given as well as those of the men (probably prominent Epidaurians) who were surety for them (ἐγγυηταί). The whole work was under the direction of Theodotos the architect, who was paid by the year at the rate (apparently) of one drachma a day. He drew his pay for three and a half years and seventy days, which gives us an idea of the time employed in the building. The contracts for all parts of the temple are specified, and this makes it certain that the temple to which the inscription relates is that of Asklepios, although this is nowhere stated; for the inscription mentions all the parts of a peripteral Doric temple with prodomos but no opisthodomos. Now of the two temples at Epidauros (that of Asklepios and that of Artemis: plans of both are given) that of Asklepios alone answers to this description. The signs used for numbers are peculiar. X = 1000 dr., ⊟ = 100 dr., — = 10 dr., . = 1 dr., I = 1 obol, < or (= ½ obol. The characters used seem to fix the early part of the fourth century as the date of the inscription. An ἐργαστήριον is mentioned, doubtless a temporary workshop. Περίστασις seems to be used to denote the porch about the cella. —B. Staes, *Archaic Relief from the Akropolis* (pl. 9). An archaic relief is published. At the left stands Athena, clothed in long garments which fall in artificial archaic folds. She wears a helmet, the crest of which was once probably executed in color, but has now disappeared. She holds her right hand against her breast, while with her left she holds a fold of her robe. Opposite Athena stand two draped female figures of which only the lower part is preserved. Between Athena and the first of these stand two diminutive figures, probably worshippers, and a similar figure is inserted between the two female figures first mentioned. With these small figures is an animal only the hind part of which remains. It appears to be a sow, though the writer suggests that a cow may be meant. The relief is executed in the highest style of archaic art. The stone is broken into four pieces.—Chr. D. Tsountas, *Catalogue of Names.* An inscription from the Stoa of Attalos is published. It contains a list of nearly 60 names.—Plate 10 represents a marble head from Eleusis, about which an article is promised for the next number. HAROLD N. FOWLER.

GAZETTE ARCHÉOLOGIQUE. 1886. Nos. 9-10.—E. Jeannez, *The altar-piece of the Passion in the church of Ambierle in the Roannais* (pls. 27, 28). This church received as a gift from a noble of the Forez, Michaud de Chaugy, in 1466, a large altar-piece with closing doors, for the high-altar of the church. It is a magnificent work of primitive Flemish art,

still in a wonderful state of preservation. This triptych is composed of three compartments which contain, in richly-carved niches, seven of the principal scenes of the Passion carved in wood in the round. An oaken framework incloses the whole, which is covered by six doors painted on both sides. In the central carved compartment the Crucifixion is represented; on one side, the Descent from the Cross, the Deposition, the Resurrection; and on the other, the Kiss of Judas, the Crown of thorns, and the Flagellation. Each group is surmounted by an elegant arcade in flamboyant Gothic. The figures and decoration were gilt and painted: the composition is fine and the expression and action remarkable. Of even greater importance are the paintings on the four large lower doors, which represent the donator, his wife, father and mother, all kneeling in prayer. The coloring is powerful, the drapery fine, and the conception simple. Though given in 1466, according to the inscription, the paintings were executed earlier, between 1460 and 1463. They were in Beaune, before being transported to Ambierle, and, as the Sire de Chaugy was in the service of Philippe le Bon of Burgundy, the name of Roger van der Weyden naturally presents itself as that of the painter of this altar-piece: he is also proved to have been brought into connection with the Sire de Chaugy, and he is well known to have executed works in Beaune, Dijon, and other places in Burgundy.—M. COLLIGNON, *Archaic marble torsi from Aktion (Louvre)* (pl. 29). The two torsi here reproduced were found in 1867–68 in the ruins of the temple of Apollon at Aktion, when M. Champoiseau carried on excavations there. They have been in the Louvre ever since, without being suitably illustrated; but the interest excited by M. Holleaux's discovery of similar statues at Perdikovrysi (Boiotia), has brought them out of their obscurity. The heads and part of the legs are wanting: the altitude is exactly that of the Apollon of Orchomenos, and the statues of Thera, Perdikovrysi and Tenea. They are attributed to the second quarter of the VI century B. C., as less ancient than those of Thera and Orchomenos and anterior to that of Tenea. In this connection, a useful list is given of this class of archaic statues. In reference to the Egyptian character of the statues, Prof. Collignon thinks that the influence of Egypt was exercised on early wooden prototypes of these marble statues, and he gives a curious example of such a nude male xoanon in wood from a red-figured amphora in the British Museum.—F. DE MÉLY, *The great cameo of Vienna* (pl. 31). This famous cameo has been supposed, on the authority of Peiresc, to have been brought from Palestine and given to Philippe le Bel by the Knights of St. John, and by the latter given to the convent of Poissy; to have been taken during the religious wars and sold to Rudolph II for twelve thousand gold pieces. From documents here brought forward, it appears that the cameo was preserved throughout the Middle Ages at S. Servin at Toulouse. It was

so prized and held in such veneration that Pope Paul II offered to the city, in exchange for it, to build a stone bridge over the Garonne, to give 50,000 gold pieces besides, and to double the livings of the canons. Francis I, by his menaces, forced the church to lend it to him in 1533, as he wished to give it to Pope Clement VIII. It is uncertain whether it returned to France after the Pope's death, and when it became the property of Austria. —A. NICAISE, *An ancient marble bust found at Chatelet* (pl. 32). This work was probably found during the excavations carried on at Chatelet during the latter part of last century: it may represent Antinoüs.—E. MÜNTZ, *Inedited frescos of the Papal palace at Avignon and the Chartreuse at Villeneuve* (third article) (pl. 33). This paper is entitled *Chapel of St. Martial*, concerning whose painted decoration by Matheus Johanetti of Viterbo and several other Italian and French painters there are documents between 1343 and 1346. A careful description is given of all the frescos, which reproduce incidents in the life of St. Martial. In comparing them with Italian Giottesque paintings, M. Müntz finds many points of similarity but less inspiration, less dramatic feeling, and a more ordinary style and composition.—H. DE CURZON, *The church of Nogent-les-Vierges* (Oise) (pl. 30). This small church is interesting from its finely-proportioned bell-tower and the three periods of its construction. The aisleless nave appears to belong to the early Romanesque style: the transept, with three aisles, bears the central tower, and belongs to the XII century: the large Gothic three-aisled choir, though it contains details both earlier and later, may be assigned to c. 1241.

Nos. 11-12.—R. DE LASTEYRIE, *Archæological study on the church of Saint-Pierre d'Aulnay* (Charente-Inférieure) (pls. 34, 35, 36). This remarkable church, on the borders of Poitou and Saintonge, has never been carefully studied, notwithstanding its artistic merit and fine state of preservation. Its history is obscure and its age cannot be proved by documents, though its style assigns it to the middle of the XII century. It is here illustrated with three heliotype plates and several cuts. The nave and aisles both have a pointed tunnel-vault, like most churches of Poitou. The architecture of the church, though worthy of study, is surpassed in interest by its rich figured and ornamental sculpture. The three portals are filled with reliefs, and even the windows of the apse are richly decorated.—A. CARTAULT, *Greek terracottas: Pan and a Nymph, Aias and Kassandra* (pls. 37, 38). After an introduction, classifying this scene under three aspects, the writer describes the group here illustrated. Pan and the nymph are seated side by side in front of a herma, and she is repelling his advances by pinching his ear. Quite a number of terracotta groups figure scenes taken from the Trojan war, and that on plate 38 apparently represents the rape of Kassandra by Hektor: the first work is in good Greek style, the second clumsy and late.—AL. SORLIN

DORIGNY, *A torso of Hadrian in the British Museum.* In this fragment of a statue found on the site of Kyrene by Beechy, in 1821, the writer recognizes a portrait-statue of Hadrian, analogous to that now in the museum of Tchinly-Kiosk at Constantinople, of which it is doubtless the original. It was probably executed in the Cyrenaica, as the cuirass bears the front face of Zeus Ammon, the symbol of the province.—ERNEST BABELON, *A dancing Satyr: bronze statuette in the Cabinet des Médailles* (pls. 39, 40). This statuette, 40 centim. high, has long remained unnoticed. It is in perfect preservation, and evidently a replica, executed in the first century, of some chef-d'œuvre of Greek sculpture. A review of the various types of Satyrs created by Greek artists shows that of Myron representing Marsyas to be the only possible prototype of the present statuette, which appears to approach more nearly to the original than other more or less free replicas that have been recognized: the Naples, Lateran, and Patras Satyrs. The archaic treatment of hair and beard, the rigidity of the forms, are Myronian. The question, as to what objects the Satyr holds in his hands, is difficult to decide, each being broken off: the writer conjectures a wine-horn in the raised and a quarter of game in the lowered hand.—L. COURAJOD, *The door of the tabernacle of the baptismal font in the Baptistery at Siena* (pl. 41). This basrelief of enamelled bronze forms part of the Ambras collection in the Museum at Vienna. The subject is Christ risen, bearing his cross: above, the Annunciation is represented by two minute figures. M. Courajod's investigations have shown that this relief was originally the door of the tabernacle of the famous baptismal font at Siena, and was executed by Giovanni Turini in 1434.—EUG. PIOT, *On a Missorium of the collection of M. Eug. Piot* (cont. and end). Of the ten *Missoria* known or preserved the one here published is the best-preserved, though in point of size it takes only the fourth rank. It is of molten silver. The subject of the relief is Herakles strangling the Nemean lion, and points by its style to the period of the last Antonines. It formed part of the collection of the Marchese Carlo Trivulzio about the middle of last century. A. L. F., JR.

GAZETTE DES BEAUX-ARTS. **1886. June.**—ALFRED DE LOSTALOT, *The Salon of 1886: Painting* (1st article).—PAUL MANTZ, *Andrea Mantegna* (3rd article). Mantegna having worked at Padova, Verona, and possibly at Venezia, moves to Mantova about the year 1460, where he is occupied in decorating the castles of the Marquis Lodovico Gonzaga.—HENRI DE CHENNEVIÈRES, *The Balls of Marie-Antoinette.*—REVIEWS and BIBLIOGRAPHY.

July.—PAUL MANTZ, *Andrea Mantegna* (4th article). Mantegna continues at Mantova under the patronage of Federico and Giov. Francesco II di Gonzaga. In 1485 he painted a Madonna for the Duchess of Ferrara,

probably the very picture recently uncovered at Milano. During the same year he began the celebrated Triumph of Julius Cæsar. In 1488 he goes to Roma and decorates a little chapel for Innocent VIII and painted The Virgin seated upon a rock. In 1490 returned to Mantova.—ALFRED DE LOSTALOT, *The Salon of 1886: Sculptures, drawings and engravings* (2d and last article).—ARY RENAN, *Gustave Moreau* (2d and last article).—EDMOND BONNAFFÉ, *Studies on Furniture in France in the XVI century* (5th article). He distinguishes the types of the *armoire* and cabinet of this period.—CH. EPHRUSSI, *The Medal-makers of the Renaissance.* A review of the sixth livraison of the work of Aloïs Heiss, treating of Sperandio of Mantova.—CORRESPONDENCE.

August.—PAUL SÉDILLE, *Modern Architecture in England* (3rd article).—PAUL MANTZ, *Andrea Mantegna* (5th article). After his return from Roma, with a new inspiration from antiquity, Mantegna paints two pictures of Judith, the Judgment of Solomon, and completes the Triumph of Julius Cæsar. In 1496 he had finished the Madonna della Vittoria, in celebration of the battle of Fornuovo. To his later years belong also the Parnassus and Wisdom victorious over the Vices. He died at Mantova Sept. 13, 1506.—E. GOT, *Concerning the Museum of the Comédie-Française.*—H. DE GEYMULLER, *The latest works on Leonardo da Vinci* (2d article).—ÉMILE MOLINIER, *The exposition of the historic art of Limoges.* A special notice of some objects of the XII and XIII centuries.

September.—J. A. CROWE, *Sandro Botticelli* (1st article). Born in 1447, the pupil of Fra Filippo, and associated with the Pollajuoli, Botticelli becomes later imbued with the principles of the goldsmith's art. For the Medici he paints the Adoration of the Magi, the Birth of Venus, Springtime, and Pallas and the Drinking Bacchus. To this period belong the small panels at Dresden representing the Legend of Saint Zenobia, also the frescos in the Sistine Chapel.—LOUIS COURAJOD, *The imitation and counterfeiting of objects of ancient art during the XV and XVI centuries* (1st article). Examples of medals and bronze figurines are cited where the dependence upon an antique model is made evident.—EDMOND BONNAFFÉ, *The boxwood Hercules of Hertford House.* From the inscription on the base, reading: OPVS FRANCISCI AVRIFICIS P., the statuette had been attributed to Francesco Mocchi (1580–1648). M. Bonnaffé brings to light a passage from the Paduan Chronicles of Bernardino Scardeone describing this statuette as made by Francesco, a Paduan silversmith, in 1520, and sold to Marco Antonio Massimo for 100 gold crowns, the equivalent of 5,000 francs.—PAUL MANTZ, *Andrea Mantegna* (6th and last article). To the period just preceding his death belong the Comus, the Triumph of Scipio, a Saint Sebastian, and the Christ bewailed by the holy women. His engravings cannot be accurately dated, but may be roughly classified as pro-

ceeding from a ruder to a softer and surer manner of execution.—SPIRE BLONDEL, *Gilded leather.* Stamped and painted leather made as early as the XI century in Cordova. During the Renaissance period, the art spreads over Europe, reaches its climax in the XVII century, and then declines.—SALOMON REINACH, *Courier of Ancient Art.*—E. DURAND GRÉVILLE, *Correspondence from America.*

October.—ANDRÉ MICHEL, *The Museum of Brunswick.*—H. DE GEYMULLER, *The latest works on Leonardo da Vinci* (3d and last article).—LUCIEN MAGNE, *The Museum of stained glass.* Though hardly a year old, the Museum of stained glass in Paris contains important specimens of colored glass of the XII and XIII centuries, and examples of less importance of the Renaissance period.—LOUIS COURAJOD, *The imitation and counterfeiting of objects of ancient art during the XV and XVI centuries* (2d and last article). The special dependence of certain artists on antique models is further illustrated.—H. HYMANS, *Belgian correspondence.*—JULES LAFORGUE, *Centenary of the Royal Academy of Arts of Berlin.*—ANDRÉ PÉRATÉ, *Italian Correspondence.*

November.—EDMOND POTTIER, *The Antiquities of Susa brought to the Louvre by the Dieulafoy mission.* The substructure of the palace of Artaxerxes at Susa was found to contain bricks belonging to a frieze representing archers. This frieze is referred to the time of Darius (521–485 B. C.), and the archers are thought to represent the special guardians of the King. The influence of the Greek Art of Ionia is brought forward to explain the style of the sculpture.—PAUL MANTZ, *A Tour in Auvergne* (1st article): *Andrea Mantegna and Benedetto Ghirlandajo at Aigueperse.* In the chapel of the church at Aigueperse (Puy-de-Dôme) is a Saint Sebastian painted in the best style of Mantegna. As it hails from the house of Bourbon it might have come to Aigueperse through Clara of Gonzaga, sister of the Marquis Francesco II, who married Gilbert of Bourbon in 1481. In the church is a charming Nativity with an inscription ascribing the painting to Ghirlandajo and giving the date, which unfortunately is not quite legible. —ÉMILE MICHEL, *Gérard Ter Borch and his family* (1st article). A biographical notice of the father Gérard, the sister Gesina and brother Moses. —EUGÈNE PLON, *Leone Leoni and Pompeo Leoni.* A résumé of the volume, which has now been published, entitled *Les maîtres italiens au service de la maison d'Autriche: Leone Leoni, sculpteur de Charles-Quint, et Pompeo Leoni, sculpteur de Philippe II.*—HENRI HYMANS, *Belgian correspondence.* —H. HYMANS, *German correspondence:* An exposition of ancient pictures at Düsseldorf.

December.—PAUL SÉDILLE, *Modern Architecture in England* (4th article).—J. A. CROWE, *Sandro Botticelli* (2d and last article). About 1475 he painted the Assumption of the Virgin, now in the National Gallery,

London. In 1481 he paints upon the walls of the Sistine Chapel of the Vatican. In 1482 he returns to Firenze. In the year 1500 he joins the sect of the *piagnone*, and henceforward his pictures give evidence of his having relied too much upon his assistants.—ANDRÉ MICHEL, *The Museum of Brunswick* (2d article).—CLAUDE PHILLIPS, *English Correspondence.* The latest acquisitions of the National Gallery.—AMÉDÉE PIGEON, *Progress of the arts in England.*—PAUL MANTZ, *A Review of Lafenestre's La Vie et l' Œuvre de Titien.*—BIBLIOGRAPHY. ALLAN MARQUAND.

JAHRBUCH DES K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS. Vol. I. 1886. No. 3.—L. SCHWABE, *Charioteer, bronze in Tübingen* (pl. 9). A small bronze in the archæological collection of the University at Tübingen is published and discussed. For comparison, cuts are given of a Syracusan tetradrachma and of a bronze statuette found in 1883 on the Akropolis at Athens. The Tübingen bronze appears to be a Greek original, probably of a time not later than the middle of the fifth century. A nude bearded man, with a helmet on his head, is standing with both knees bent, stretching his right hand forward, while his left hand is drawn back with considerable exertion. The position is characteristic of a charioteer, and as such the figure is interpreted. The previous mythological interpretations are discarded, and the opinion is expressed that this little bronze was a votive offering.—E. FABRICIUS, *The Plataian votive offering in Delphi.* The bronze column formed of twisted serpents, now in the Atmeidan at Constantinople, is published from a drawing. The inscription is published separately, and former readings are corrected. The first three lines read:

ΙΟ
ΓΟΛΓΜΟΝ
ΓΟΛ ΜΓΟΝ

The former reading of these letters led Göttling to restore as follows: *Ἀπόλ(λ)ωνι θ[ε]ῶ[ι στάσαντ' | ἀ]γ[άθη]μ' ἀπὸ Μ[ηδων]*, which the new reading makes impossible. The restoration proposed is: *τοίδε τὸν | πόλεμον ἐ|πολέμεον.* This is satisfactory as regards its sense, and gives to the three lines the same number of letters. The distich given by Diodoros, XI, 33.2, which was unaccounted for if the votive inscription was that proposed by Göttling, may well have been inscribed upon the pedestal. By reference to representations of tripods on painted vases, as well as to small tripods found at Olympia and tripod-bases at Athens (three cuts), it is shown that votive tripods frequently had, besides their three legs, a middle member which sometimes took the form of a column. Such a central member was not necessary as a support, but may have served in the case of large tripods as a drain for rainwater, and was certainly desirable for æsthetic reasons. The serpent-column in Constantinople was, then, the central mem-

ber of the tripod at Delphi, not its sole support. The legs of the tripod were probably of bronze, only the kettle and perhaps the handles and various ornaments being of gold. A restoration of the tripod is given after a drawing by P. Graef.—B. Graef, *Peleus and Thetis* (pl. 10). Two vases are published. No. 1 is an *amphora a colonette* formerly in the Campana collection (Sala A, No. 6) now in the Louvre. No. 2, now in the possession of Professor H. Heydemann in Halle, was found at Ruvo. It consists of seven fragments. No. 1 has been explained as Odysseus and Nausikaä (Bolte, *De monumentis ad Odysseam pertinentibus*), but the inscription in Korinthian letters shows that Peleus is represented. On both vases here published, Peleus is crouching in concealment, ready to seize upon Thetis. Other similar representations are discussed. The myth of Peleus and Thetis appears in two forms. According to the local Thessalian legend, Peleus overcomes Thetis. This story is kept distinct from the version according to which Thetis is bestowed upon Peleus by Zeus. Both versions are followed by the poets, but are not combined. The first version is generally adopted by the vase-painters. The second was probably told in the *Kypria*. As appendix, a catalogue of representations of Peleus and Thetis is given. —J. N. A. Svoronos, *Scenes from the Iliad on an Etruscan Sarcophagus*. A group of nine warriors on a sarcophagus from Corneto (*Mon. Ined. dell' Ist.* XI, tav. 58; and *Annali*, 1883, tav. T. V. p. 243) is published, and explained as a representation of the scene, *Iliad A*, in which Odysseus supported by Aias and Eurypylos resists the advance of the Trojans after Agamemnon and Diomedes have been wounded and have left the field.—**Miscellanies.** R. Engelmann, *Harpy*. A vase from Vulci now in Berlin (Furtwängler, *Katal. d. Vasen*, 2157) is published. The chief representation is a Harpy holding in each outstretched hand a struggling youth. The Harpy has a face like a gorgoneion. Her head, arms and body are human, while the rest of her form is that of a bird. She has four wings. On the shoulder of the vase is a youth running toward the right. With his left hand he holds a large bird by the neck, and in his right hand he brandishes a stick.—W. Malmberg, *On two figures from the votive offering of Attalos*. The wounds of the dead youth in Venice (*Mon. dell' Ist.* IX, tav. 20, 3) are such as would be made by a lance passing through the body. The two openings are in the same horizontal line; the lance must therefore have been in the hands of a foot-soldier. The dying warrior in Naples (*Mon.*, tav. 20, 4) is wounded in a similar way, except that the wound evidently came from above, and was therefore dealt by a horseman. The opponents of the Gauls, *i. e.* the Pergamenians, were, then, represented as horsemen as well as foot-soldiers. The young giant who lies at the feet of Apollon in the frieze of the great altar of Pergamon (*Beschreibung d. perg. Bildwerke*, p. 9) is mentioned as the closest parallel to the dying warrior

in Naples.—A. MILCHHOEFER, *The middle southern metopes of the Parthenon.* The eight middle metopes of the southern side of the Parthenon (Michaelis, *Parthenon*, Taf. 3, No. XIII–XX) are explained as the destruction of the children of Niobe.—A. FURTWÄNGLER, *The Praying Boy.* A cut of a gem from the collection of Baron Stosch (Winckelmann, *Descr. des pierres gravées du feu Baron de Stosch*, p. 316 n. 9; Tölken, *Verzeichniss der antiken vertieft geschnittenen Steine d. kgl. Gemmensammlung*, Vorrede, p. XX) is given. It represents, not Prometheus chained to a rock (as certain injuries to the stone led Winckelmann and Tölken to believe), but a praying youth similar to the well-known Berlin bronze. The gem, however, is derived from an older type than the bronze.—O. PUCHSTEIN, *The Praying Boy.* The stories, that this statue was found at Herculaneum, and in the bed of the Tiber, are shown to be without foundation.—A. CONZE, *The Praying Boy: a correction* (*Jahrbuch*, I, p. 8). Furtwängler is said to be the first who declared both arms of the Berlin bronze to be modern: but the priority belongs to Valentinelli (*cf.* Schlie, *Bull. d. Inst.* 1868, p. 173 ff.). Cornelissen's interpretation of the figure as ball-player (*Mnemosyne*, 1878, p. 424 ff.) is untenable.—BIBLIOGRAPHY.

No. 4.—A. KALKMANN, *Aphrodite on the Swan* (pl. 11 and vignette). The relation of the swan to Aphrodite is discussed, and it is suggested that the *ales equus* of Catullus (66.54) is a swan. *An Attic Lekythos* in the Berlin museum is published (pl. 11, 1). Over the waters flies a swan upon which sits a richly clothed female figure. Her garment is blown by the wind and swells out behind her. Before her flies Eros. Behind her a youth is seen sitting upon a rock and looking at her over his shoulder. The nude parts of the female figure and of Eros are white. Gold is used upon the wings of the swan and of Eros, and upon the personal ornaments of all the figures. The garment of the central figure is studded with dots of gold, and similar dots appear upon the water and in a row at the top of the picture. These dots seem to be stars, and the whole to represent the star of Aphrodite. Several representations are discussed in which Aphrodite and the swan seem to symbolize the return of spring. *An Attic vase* in the Berlin museum is published (pl. 11, 2). Aphrodite, two Erotes, and the swan occupy the middle of the painting. At each side is a Nereid seated upon a dolphin; next comes at the left Dionysos, at the right Hermes; and at the extreme right and left is a seated nymph. Aphrodite is standing behind the swan, which hides her feet. The Erotes are floating in the air. The swan is white, as are the nude parts of Aphrodite. Gold is used upon personal ornaments. Two similar representations are described. The explanation offered is that Aphrodite Anadyomene is represented. A silver plaque is compared, which De Witte (*Gazette Archéol.*, 1879, p. 17) connected with Pheidias' representation of Aphrodite rising from the sea.

Perhaps the vase-painting depends more or less directly upon Pheidias. Two reliefs published in the *Arch. Ztg.* (1864, pl. 189) are discussed. One in the Louvre, which was found at Carthage, appears to represent the *virgo caelestis* or *Venus Caelestis* of Carthage; while the other, now in Florence, and reliefs in Berlin and London are rather repetitions of well-known *motifs* than original compositions. A krater in Vienna (Benndorf, *Gr. u. sicil. Vasenb.*, p. 78) with a representation of six deities, one of whom is seated upon a swan, has been variously interpreted. Here the figure upon the swan is explained as Aphrodite, though a complete interpretation is not attempted.—H. HEYDEMANN, *Representations of Phlyakes upon painted vases.* The Phlyakes were the comic actors of Magna Grecia. The vases upon which they are represented are all, with two exceptions, from Magna Grecia. The most usual form is the krater, though the oinochoe occurs five times, and other forms occasionally. The style of drawing is easy and sure, sometimes even careless, with excessive ornamentation. All these vases belong to the third century B. C., and most of them to the first half of the century. The phlyakes usually wear ridiculous and ugly masks except where something is gained by omitting them. Male figures wear the phallos. The actors are stuffed out with cushions, unless a contrast between fat and lean persons is to be represented, and over these cushions tights are worn to keep them in place. The clothing which the actors wear over these stuffings is that of ordinary Hellenic life, except when mythological personages are represented, in which case they are distinguished by their usual attributes. The scenes represented are sometimes Dionysiac processions, sometimes comic representations of mythical events or of ordinary human life. Though some of these paintings may represent scenes of plays as they were given on the stage, we are unable to connect any one scene with any known play. In spite of the resemblance of the actors here represented to those of the old comedy, it is not likely that these paintings are derived from the old comedy, for the time of their manufacture is much too late, but coincides with the period of the greatest popularity of the phlyakes of Lower Italy. A catalogue of 53 vases with representations of phlyakes is given and illustrated with fourteen cuts. An appendix consists of a descriptive list of 97 plates which were to have composed the fifth volume of Tischbein's *Collection of Engravings from ancient vases.*—**MISCELLANIES.** M. FRÄNKEL, *A Vase of Hischylos* (pl. 12). A vase-painting in the Berlin Museum, No. 2100, is published. A bearded man is represented who holds a cup in his hand. He wears a chlamys, boots, and a peculiar headdress like that of a woman. The figure is black. The inscription is *Ἰ]σχύ[λ]ος ἐποίη[σεν.*—E. AFSMANN, *On the ship-pictures of the Dipylon-vases.* The form of the sail on the fragment published in *Mon. ined. d. Inst.* IX, tav. 40, 4 supports Kroker's view, that the paintings

of the Dipylon-vases are derived from Egyptian originals. The appearance of a deck as well as of a beak on the ships of the Dipylon-vases is opposed to the common theory, according to which these vases are of very great antiquity.—BIBLIOGRAPHY. HAROLD N. FOWLER.

JOURNAL OF HELLENIC STUDIES. Vol. VII. No. 2. Oct., 1886.—E. J. POYNTER, *On a Bronze Leg from Italy.* The British Museum has recently acquired a superb fragment representing the right leg of an armed figure in motion, of heroic size. The leg is preserved from above the knee to the middle of the foot, and is armed in a greave bearing a Gorgon-head in front of the knee-pan. Mr. Murray furnishes some notes on which the article is based. M. Piot, from whom the fragment was obtained, was of opinion that it represented a runner in the armed race. To this Mr. Murray objects, that the action of the muscles is not that of a runner, and that with the leg were found three pieces of drapery, which precluded its representing a runner, since the armed race was run without drapery of any kind. The greaves were abandoned as cumbrous about 400 B. C. Mr. Murray accepts a date of about 420 for the statue, on the ground that it is scarcely conceivable that a work of such largeness and simplicity of style could have been produced at a later time; while the Gorgon-head bears a striking analogy to coins of the VI century, and the border ornament of the drapery belongs to the same period. The attitude was of one standing with weight of body on left leg, the right thrown a little back, only the front of the foot touching the ground, as in an armed statuette, perhaps of Ares, in the Museum. Mr. Poynter gives a series of four studies of legs from the living model, to show that in no backward attitude of the leg could the muscles take the aspect presented by the bronze, but it must have been in advance with toes resting on the ground. The bronze greave is made to express all the action of the muscles beneath.—J. E. HARRISON, *The Judgment of Paris: two unpublished Vases in the Graeco-Etruscan Museum at Florence.* The publication of these two vases of the early black-figured type, depicting the judgment of Paris, gives occasion for a classification of the various types of the myth on vases, and a suggestion as to the origin of its earliest form, namely, a procession composed of Hermes followed by the three goddesses. The processional form, and the absence of Paris from the scene are not to be explained, with Welcker, as due to some special literary emphasis, nor, with Lückenbach, to the love of archaic art for processions, but to the adoption of the type of Hermes leading the Charites. Three other types are to be noted: (1) procession form, Paris present and stands facing Hermes; (2) procession form, Paris present seated, and usually surrounded by some attempt at scenic effect, a tree, house, flock; modified by the goddesses arriving in chariots, or their num-

ber reduced to two or one; (3) procession form abandoned, Paris seated or standing, the three goddesses grouped around in every variety of pose, often many unimportant accessory figures.—E. A. GARDNER, *The Early Ionic Alphabet.* The inscriptions on the pottery found in the temenos of the Milesian Apollon at Naukratis by Mr. Petrie show that the Abu Simbel writing of the mercenaries of Psammetichos is not to be regarded as the oldest form of the Ionic alphabet, but rather a local variety prevailing in Rhodes, in which the Omega was not yet in use. While the Abu inscriptions belong to the time of the second Psammetichos, at Naukratis Omega had already been employed for some fifty years among true scions of Miletos, and is thus pushed back a century beyond the supposed date of the lion from Branchidai now in the British Museum, which has been hitherto regarded as exhibiting the earliest example of its occurrence. —C. WALDSTEIN, *Notes on the Collection of Ancient Marbles in the possession of Sir Charles Nicholson, Bart.* These marbles are from Asia Minor, and all, except one, have been described by Michaelis, *Ancient Marbles in Great Britain.* The single exception is a mutilated statue, represented in the plate. Its pose illustrates the type of Hermes in the Hermes of Andros at Athens, the Belvidere Hermes, and the Farnese Hermes, in the British Museum. These are all traced back to an original prototype in the Praxitelean Hermes of Olympia, but are later than Lysippos, and have undergone changes in the Lysippian direction, and passed through the bronze technique. This is less pronounced in the Hermes of Andros, which still retains much of the dreamy sentiment. The others have more decision and are more mechanical, showing a greater reliance on the skilful use of tools, as so often found in Roman work. The Nicholson statue approaches the technique of the Andrian, but with a greater insistance on a more realistic indication of the muscles, and the head is iconic, like that of Caius Ofellius Ferus discovered by Homolle at Delos (*B. C. H.*, 1881), and recognised by Overbeck as a Hermes type, a modified replica of the Praxitelean. This forms in fact the link between the last and the group of other statues mentioned above, and belongs to the middle of the second century B. C., when we have mention of the custom of borrowing types from earlier Greek works in connection with the revival of Greek art at Rome. —L. R. FARNELL, *The Works of Pergamon and their Influence.* This is mainly a description and criticism of the later additions to the frieze of the great altar. It is noticeable that here and in the frieze of Priene alone is Kybele given an active share in the gigantomachy. Throughout the frieze the sculpture so far lacks the faculty of vivid characterization that few divinities are distinctly recognisable, and these are made so by certain obvious and conventional attributes, rather than by any individual character appearing in the forms or countenance. The absence of high

spiritual expression is due not to a reserve power but to a failure of power. A small head in the British Museum originally described as that of a satyr from Trebisond is wrongly identified as such, and next after the "Dying Alexander" stands in the closest relationship to the Pergamene frieze.—CECIL SMITH, *Nike Sacrificing a Bull.* This well-known type is illustrated by a bronze mirror-case from Megara, recently acquired by the British Museum. It represents a well-clad Nike pressing with her knee on a fallen bull, and drawing up his head by the nose while her right hand holds the knife ready for the blow. The earliest known type is that of the balustrade of the temple of Nike at Athens, and the suggestion is made that it passes on from this,—where the Nike is erect with one knee on the bull which she stabs, where she is fully draped and is of a decidedly feminine character,—through a series of developments, till she kneels beside the bull, the knife hanging purposeless in her hand, her body undraped and her form androgynous in type.—G. HIRSCHFELD, *C. Julius Theupompos of Cnidus.* Among the noted men of Knidos in his own day, Strabo (656) mentions Theopompos and his son Artemidoros, calling the former the friend of the god Cæsar, who has been identified by Newton and Waddington as Augustus. Hirschfeld, however, relegates them to the preceding generation on the authority of a passage of Plutarch in his life of Cæsar (48), in which Julius is said to have given freedom to the Knidians to gratify Theopompos, a man of literary pursuits, who is also mentioned, probably, by Cicero, *Ad Atticum*, XIII, 71. By Cæsar's bounty he obtained the right of Roman citizenship and adopted the *praenomen* and *nomen* of his protector, Caius Julius, as found in three inscriptions. Accordingly, it is the son Artemidoros who attempted to warn Cæsar of the plot against his life by handing him the roll containing the details of the conspiracy, on the morning of the assassination.—F. B. JEVONS, *The Rhapsodising of the Iliad.* Of the various theories to account for the composition of the *Iliad*, that of aggregation is faulty, because it is not based on a study of the conditions under which literature developed in the earliest Greek times; that of expansion, now the more popular, has confronting it the fatal objection that it fails to account for the inconsistencies now existent in the text. The present shape of the *Iliad* is due to the demands of a reading public which did not exist in Greece till 420 B. C. The aggregation and expansion theories are both concerned with reducing the limits of the poem within the possibilities of oral delivery at a single sitting. This would be necessary for the age of the rhapsodists, who, however, have not yet been traced earlier than the sixth century. But the *Iliad* existed before this, and the only period when an audience was to be found of the nature postulated by the production of the poem as we have it, was the epic period—the period of the earliest audience known, that of the family of the chieftain, continuing the same from night

to night, in which the tale begun one evening may be continued on the next. Hence it is to this period that the composition of the *Iliad* is to be assigned, and practically in its present length also. Fick has proved conclusively that it was originally composed in Aiolic, and was Ionicised at the end of the sixth century. This was done by the rhapsodists, who did not achieve the task at one stretch, but piecemeal, selecting such portions as suited the locality, the audience, the occasion; and some portions containing references to Aphrodite were Kypriotised before they were Ionicised. To the rhapsodists, then, are to be attributed the inconsistencies of our present text. Some are due to their habit of rounding off their recitation by a few lines which wound up their extract very well, but which, if read as part of the continuous text, cause much confusion. Others are to be referred to inserting a line or two to recall or explain to their audience features of the story necessary for the comprehension of the extract. That an incident—rhapsody or book—is now easily detachable proves only that it was frequently detached for recitation, not that it originally had an independent existence, still less that it is an interpolation. Indeed, we know on good external evidence that the *Iliad* was rhapsodised. We do not know, and there is no external evidence of any description which leads us to suppose, that it was ever expanded. The consequences of a *vera causa* should be exhausted before having recourse to the action of causes purely hypothetical. The rhapsodists are a *vera causa* in producing the inconsistencies of the poem; expanders and diaskeuasts are not.—J. B. BURY, *The Lombards and Venetians in Euboia.* This is an attempt to unravel the tangled thread of Negroponte history, which is a missing chapter in Finlay, from 1205 to 1303. The materials are taken mainly from Hopf's work.—H. F. TOZER, *A Byzantine Reformer.* The object of this paper was to give some account of the scheme of political and social reform for the Peloponnesos which was propounded in 1415 by Gemistos Plethon, who is noted for the prominent part which he played in reviving the study of the Platonic philosophy in Western Europe. In his proposed reforms he was largely influenced by the writings of Plato. Society should be divided into three separate classes: (1) the cultivators of the soil; (2) those employed in trade and manufactures; (3) those whose function it was to maintain order. He even advocated the socialistic doctrine, that the inhabitants of the country at large have an inalienable right to the possession of the soil, and the ownership of this should be vested in the state, to the exclusion of all private holdings; and, while acknowledging the harshness involved in such a change, he excuses it on the plea of the necessities of the case and the pressure of circumstances, and expresses his willingness to withdraw his proposal in favor of any other which could claim to be a better solution of their difficulties. It is hardly necessary to say that his proposed reforms were never carried into execution. A. C. MERRIAM.

MITTHEILUNGEN DES K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XI. No. 3.—F. Dümmler, *Communications from the Greek Islands.* IV. *Oldest Nekropoleis in Kypros* (3 supp. plates). From June to Sept. 1885, Dr. Dümmler made investigations in the service of the German Archæological Institute at Athens for the purpose of determining to what races and epochs the various graves of Kypros belong. He finds that L. Palma di Cesnola by his careless, or worse than careless, reports of excavations and discoveries has caused great confusion. Dr. Dümmler sums up the results of his investigations concerning the oldest nekropoleis in the following words: "The oldest nekropoleis in Kypros belong to an inland race (*i. e.*, a pastoral and agricultural people), perhaps Semitic but certainly pre-Phoinikian, whose remains show a so detailed agreement with the civilization discovered by Schliemann at Hissarlik, that mere influence cannot be assumed, but identity of race must be inferred. The remains of this population exhibit a development of the Trojan civilization, without being on that account necessarily of later date. They extend at latest down to the Doric migration, and probably back into the third millenium before our era." This statement is supported by a careful description and discussion of: (I) the extent and distribution of the oldest nekropoleis; (II) the form and arrangement of the graves; (III) the contents of the graves, consisting of (1) objects of stone, metal, *etc.*, (2) vessels of terracotta, (3) idols, terracotta figures, *etc.*; and (IV) the ethnographic position of the oldest nekropoleis. The Greeks of Kypros, who spoke an Arkadian dialect, appear to have come to the island before the Doric migration, and to have brought with them their non-Phoinikian alphabet.—H. G. Lolling, *Lesbian Inscriptions.* Sixty-three inscriptions from Lesbos are published. No. 1 is a new publication of the inscription *Arch. Ztg.* 1885, p. 142 f. No. 14 is a revision of the inscription published by Conze (*Reise auf der Insel Lesbos*, IV. 3). No. 15 is a revision of a well-known decree of the time of Alexander the Great (Hicks, *Manual of Greek Historical Inscriptions*, p. 225). No. 16 is a revision of *Arch. Ztg.* 1885, p. 150. No. 24 was first published by Anagnostis (Ὀλίγα τινα περὶ Λέσβου, 1871, p. 8). No. 36 was copied by Cyriacus, *cf. Ephem. Epigr.* II, p. 4, No. XI. No. 41 is *C. I. G.* 2201. No. 44 is Conze, IX. 2. The rest are new, mostly of Roman times. They consist of fragmentary decrees, votive inscriptions, funeral inscriptions, *etc.*—E. Petersen, *Appendix to p. 269, No. 11.* A metrical inscription on a gravestone in Mytilene (No. 11 in Lolling's article) is given with restorations and a translation. The deceased are Pompeius Spurios and his sons Nestor and Hedylos.—W. Dörpfeld, *The Temple in Korinth* (pls. 7, 8). Dr. Dörpfeld's excavations in January and February 1886 have determined the ground-plan of the temple. It had six columns at each end (E. and W.), and fifteen on each side (N. and S.). Each end was

formed as a *templum in antis* with two columns between the *antae*. The columns at the ends measure 1.72 m. in diameter, those on the sides 1.63 m. The intercolumniations at the ends are 4 m., at the sides 3.70 m. The length of the temple, measured on the upper step, was about 53.30 m. There was an eastern and a western cella, the first about 16 m., and the second about 9.60 m., in length. A foundation as if for a statue was found in the western cella. These two apartments were entirely separate, and each was entered from the outside. The temple consisted, then, of two sanctuaries, *i. e.*, it was a double temple. In each cella were two rows of columns, in the eastern one probably four columns in each row, in the western only two. The porch before the eastern cella was only 2.71 m. deep, while that at the west was 4.23 m. deep. The foundations of the temple were laid upon the rock, which was cut to receive them, but foundations were laid only where a wall (or a row of columns) was to be built. Consequently, though the walls and even the foundations have mostly disappeared, measurements could be taken from the lines or grooves cut in the rock. At the West-front a slight but regular curvature was found in the foundation, which, being formed of the living rock, cannot have sunk under the weight of the building. The two central columns stand about 2 cm. higher than the corner columns. It is not known to what deity or deities this temple was consecrated. In the remains of a Roman or Byzantine building, some 500 m. to the north of the temple, remnants of a second Doric temple were found. This must have been hardly if at all inferior in size to the temple of Zeus at Olympia. Its site is unknown.—E. PETERSEN, *Athena-Statues from Epidauros* (figure). No. 1 is shown by an inscription to represent Athena Hygieia. With its base the figure is 0.72 m. high. This statue, as well as the others, is of white marble. The goddess is fully draped, wears a helmet adorned with a sphinx and two winged horses, and carries a shield on her left arm. Her right hand is missing, but it seems to have held something, perhaps a lance. On the base is a fragment of some object, perhaps a torch, at any rate, apparently, not a serpent. The figure resembles that of the new-born Athena on the Puteal in Madrid, and may be an imitation of the Athena in the eastern pediment of the Parthenon. The goddess is in rapid motion toward the right (of the spectator), and certainly does not resemble the traditional Hygieia. No. 2 has an inscription telling that Alexander dedicated Athena to Artemis at the command of the god (Asklepios?). This figure is represented as in rapid motion toward the left (her own right). The figure is fully draped with a double chiton, and wears a Korinthian helmet. Something else seems to have been upon the base beside the goddess. Petersen suggests that it was the olive-tree, and thinks this figure may stand in the same relation to the western pediment of the Parthenon as No. 1 to the

eastern. The olive was certainly believed to possess healing qualities. The execution of this figure is better than that of No. 1, and on the whole it seems to be older, though both are late work. No. 3 has a metrical inscription with date ἐπὶ ἱερέ]ως Αὐρ. Νικήρατος. The statue is dedicated as a thank-offering for the recovery or the birth of a child. It is 0.49 m. high, without the base. The figure is fully draped, and stands quietly with the weight of the body resting on the right leg. The helmet is Attic. The aegis upon the breast of the goddess is a simple semi-circle without the gorgon's head. This figure corresponds much more nearly than the other two to our idea of Athena Hygieia.—MISCELLANIES. H. G. LOLLING, *The Heroön of Aigeus.* From Paus. I. 22. 4 f. the conclusion is drawn that the heroön of Aigeus was at the foot of the bastion of the temple of Athena Nike, where the temple or sanctuary of Ge Kurotrophos and Demeter Chloe is generally supposed to have been.—H. HEYDEMANN, *Painted Vase from Boiotia.* The painting of the vase published in the Ἐφ. Ἀρχ. (1883, pl. 7, p. 171 ff.) is said to go back to the same original as that of the vase from Melos, now in the Louvre, which represents the battle of the gods and giants.—O. ROSSBACH, *On the Vase from Athiens.* The archaic vase-painting published in the *Jahrbuch des k. deutschen Instituts* (1886, pl. 8) is explained as a representation of a man walking in a garden. The long object which has been explained as a staff or switch is here interpreted as the tail of the bird which is flying above the man.—E. LOEWY, *Inscriptions from Mâghla.* Two inscriptions from Mûghla in Karia are given. Both mention τὸ κοινὸν τὸ Ταρμιανῶν. Both are votive inscriptions. No. 1 (like the inscription *Mitth. Ath.* 1886, p. 203) is offered for a Rhodian.—W. DÖRPFELD, *Excavations.* Reports of excavations at Eleusis, Oropos, Thorikos, Mykenai, Epidauros and Athens (see *News Department*).—LITERATURE.

HAROLD N. FOWLER.

REPERTORIUM FÜR KUNSTWISSENSCHAFT. 1887. Vol. X. No. 1.—R. v. EITELBERGER, I. *Posthumous essay on Animation in works of art.* The importance of animation or lifelikeness in its varied forms of manifestation amongst different races, schools and individuals is traced in the history of painting and sculpture. This quality is most evident in the works of Rembrandt.—HUGO TOMAN, *An enumeration of the collection of pictures of Count von Wrschowetz in Prague from a Catalogue of the year 1723.* This catalogue enumerates 373 pictures, chiefly with signatures, and is specially interesting as 21 of these pictures have found their way to the Dresden gallery.—COMMUNICATIONS ON COLLECTIONS, MUSEUMS, STATE PATRONAGE OF ART, RESTORATIONS AND DISCOVERIES. L. SCHEIBLER, *Old German pictures at the Suabian Exhibition at Augsburg in 1886.* At this exhibition were gathered about 150 Suabian pictures dating earlier than the middle of the

XVI century. Notice is here taken of such signed pictures as are deemed genuine.—W. BODE, *Exhibitions in Düsseldorf and Brussels, in the autumn of 1886, of old pictures from private collections.* These pictures belong mainly to the Flemish and Dutch schools of the XVII century. Of exceptional interest in the Düsseldorf exhibition was a composition by Rembrandt, belonging to Prince Solm in Anholt, representing Diana and Actæon, signed REMBRANDT FC. 1635; also a guardroom by Terborch, in the possession of W. Dahl. The most noteworthy painting in the Brussels exhibition was a rich composition by Rubens, representing the Miracle of St. Benedict.—W. v. SEIDLITZ, *The Berlin Jubilee-exhibition.* This exhibition was marked by careful selection, and by the large number of foreign contributors. In this notice, mention is made of historical paintings by Poynter, Makart, A. Wolff, Gebhardt and Uhde, and of genre paintings by Alma Tadema, Menzel, Werner and others.—W. B., *The Blenheim Gallery sale in London.*—H. THODE, *The sale of the collection of Eugen Felix at Köln.*—H. THODE, *The sale of the collection of pictures of Amand Kries and Hubert Düster at Köln.*—*The sale of the Heinrich Moll picture collection at Köln.*—**REVIEWS.** Under Art history and Archæology, **CARL BRUN** reviews J. HEIERLI, *Der Pfahlbau Wollishofen;* **A. SPRINGER** reviews HENRY THODE, *Franz von Assisi und die Anfänge der Renaissance in Italien:* under Architecture, **A. SCHRICKER** reviews RICHARD SCHADOW, *Daniel Specklin*, and RUDOLF REUSS, *Analecta Specklíniana:* under Sculpture, **C. v. FABRICZY** reviews A. DE CHAMPEAUX, *Dictionnaire des fondeurs, ciseleurs, etc.*, **CARL BRUN** notices BURCKHARDT, *Kirchliche Holzschnitzwerke*, and A. MELANI, *Scoltura italiana antica e moderna:* under Painting, **W. v. S.** reviews JULIUS SCHNORR VON CAROLSFELD, *Briefe aus Italien:* under the Graphic Arts, **MAX LEHRS** reviews the first year's publications of the INTERNATIONAL CHALCOGRAPHIC SOCIETY; and, under Industrial Art, **C. v. FABRICZY**, JULES GUIFFREY, *Histoire de la tapisserie depuis le moyen-âge, jusqu' à nos jours.*—NOTES.—CATALOGUE OF BOOK NOTICES.—BIBLIOGRAPHY.

No. 2.—R. v. EITELBERGER, II. *Posthumous essay on Truth to nature in works of art.* Works of art, being expressed in bodily forms, draw their inspiration from nature. The history of Greek Sculpture and Italian Painting, as well as the testimony of great artists, bears witness to the importance of truth to nature.—WILHELM SCHMIDT, *Contribution to the history of the earliest copperplate engraving.* A more thorough consideration of playing-cards and prints brings out the importance of Köln and Nürnberg in the early history of copperplate engraving.—DORIS SCHNITTGER, *Jürgen Ovens of Schleswig-Holstein, a pupil of Rembrandt.* A careful biographical study.—KARL WOERMANN, *The Pictures from the Wrschowetz collection in the Dresden Gallery.* The insufficiency of the 1723 catalogue for the purpose of identifying as many of the Wrschowetz pictures in the

Dresden Gallery as was attempted by Dr. Toman (*Repert.* x. pp. 14–24) is made evident: only 11 pictures may be clearly identified.—COMMUNICATIONS ON COLLECTIONS, MUSEUMS, ETC. W. v. SEIDLITZ, *The Berlin Jubilee-exhibition* (end). Notices of portrait and landscape paintings, engraving, sculpture, minor arts and architecture.—REVIEWS. Under Archæology and Art History, F. X. KRAUS gives an important summary of Christian Archæology for 1886. Special mention is made of DE ROSSI, *Musaici* (parts 13 and 14), of LE BLANT, *Les Sarcophages chrétiens de la Gaule*, BALDWIN BROWN, *From Schola to Cathedral*, and HASENCLEVER, *Der altchristliche Gräberschmuck*. A. SPRINGER reviews the *Jahrbuch der Kunsthistorischen Sammlungen des Allerhöchsten Kaiserhauses*, FABRICZY the *Gazette Archéologique*, and KRAUS the *Kunstdenkmäler im Grossherzogthum Hessen*. Under Architecture, SCHULTZ reviews CORNELIUS GURLITT, *Geschichte des Barochstiles, des Rococo und des Classicismus*. Under Painting, CARL BRUN reviews MELANI, *Pittura italiana*, and MICHEL, *François Boucher*. J. E. W. describes three new engravings, and A. SCHRICKER reviews HABERT-DYS, *Fantaisies décoratives* (pts. 1–7).—NOTES.—CATALOGUE OF BOOK NOTICES.—BIBLIOGRAPHY. ALLAN MARQUAND.

REVUE ARCHÉOLOGIQUE. **1886. Sept.-Oct.**—G. GOZZADINI, *The archæological excavations and the sepulchral stelae of Bologna* (4 plates). This paper begins with a summary of excavations in the province of Bologna, commencing with that at Villanova in 1853 which brought to light a necropolis of the first iron age whose name (Villanova) has been selected to typify this period and style. The author, followed in this by Helbig and Pigorini, considers this and other early necropoli to be Etruscan. After enumerating the numerous archaic and Etruscan bronzes and the pottery of the Villanova and Etruscan types, beginning with the rudest style and ending in an Attic elegance, the writer calls attention to a specialty of the necropolis of Felsina, the sepulchral stelae, which have no parallel, either in the other parts of Etruria, or in Greece, or elsewhere. More than a hundred are already placed in the *Museo Civico*. These are usually of sandstone and ornamented on one or both sides with basreliefs arranged in horizontal bands and surrounded by a framework decorated with spirals. The favorite subjects are a warrior armed with sword and shield, and the departure of the soul for the lower world, represented either by the scene of separation or by a warrior in a chariot with winged horses. Nine only have inscriptions: one of these, the recently acquired monument of Vetius Claudius, is more particularly described. Its inscription reads: *mi vetus* [*k*]*atles suthi*.—M. DELOCHE, *Seals and Rings of the Merovingian Period* (cont.). XXVII. A so-called seal of King Sigebert II (638–56). From the initials S. R. this ring has been attributed by De Longpérier

to S(*igibertus*) R(*ex*): from contemporary usage the initials should be read S(*ignum*) R(****), the ring belonging to some man whose name began with R. XXVIII. Ring with the bezil made from a gold coin of Chlotar II (584–613). It is stamped CHLOTARIVS REX, more probably the second than the first king of that name. XXIX. Seal-ring of Queen Bertilda (628–38). The inscription is read + BERTILDIS REGINA.—CLERMONT-GANNEAU, *Antiquities and inedited inscriptions from Palmyra* (fac-similes of inscriptions Nos. 2–15 and 1 fig.). Several inedited inscriptions are given, and a small glass object described which presents in relief the figure of a man and an inscription containing the name בידא, *Baïda*, already known in Palmyrene epigraphy.—ROBERT MOWAT, *Note on an engraved stone serving as a seal*.—R. DE LA BLANCHÈRE, *History of Roman Epigraphy, from the notes of Léon Renier* (cont.). This second article contains brief notices of the Roman epigraphists of the XVI, XVII and XVIII centuries, with more special mention of Gruter and Fabretti.—G. BAPST, *The Reliquary of Sainte Geneviève* (3 plates). This famous monument, destroyed under the Commune, has been wrongly attributed to S. Éloi, who merely decorated the ciborium: it was made by the goldsmith Bonnard in 1242. From XVII-century documents, which give its size and the subjects represented, it may now be reconstructed.—H. GAIDOZ, *A human sacrifice at Carthage*. The human sacrifice on launching a ship (Valer. Max. IX, c. II) explained as a religious ceremony.—DIEULAFOY, *Excavations at Susa*, season of 1885–86. The Director's report, after describing the difficulties of dealing with the native population and of transporting the heavy bull-headed capital, begins a summary of his discoveries with an account of the enamelled brick frieze of the archers. These are taken to represent the dark-skinned Susian contingent of the royal guards, the Immortals of Herodotos. The excavations at the palace of Darius also furnished quantities of inscribed bricks ornamented with basreliefs of Chaldæan and Assyrian motives. The excavations of the Apadâna of Artaxerxes revealed architectural ornament of Ionian character, and have led to a more complete knowledge of the structure than was gained by Loftus.—PAUL DU CHATELLIER, *Tumulus of Kerlan-en-Goulien* (Finistère). The Roman cinerary urn with its contents show it to have been the tomb of a lady, probably a native who availed herself of the advantages of Roman civilization without departing from the burial customs of her ancestors.—J. MÉNANT, *The Wolfe Expedition to Mesopotamia*.

NOV.-DEC.—HIPPOLYTE BAZIN, *The Artemis of Marseilles at the Museum of Avignon* (1 plate). A Roman copy of the archaic type of Artemis Diktynna, patroness of the Phokaian colony, in high relief on a marble stele.—DIEULAFOY, *Excavations at Susa, season of* 1885–86 (cont.). The ancient Persian temple, the character of which has hitherto been unknown,

may now be reconstructed. It contained Græco-Asiatic features, a surrounding court, external altar, portico and similarly related cella, combined with the Assyrian characteristics of a high base and ramp of approach. Further light has been thrown also upon the fortifications of Susa, which appear to unite Græco-Phœnician forms with Babylonian dimensions.—R. DE LA BLANCHÈRE, *History of Roman Epigraphy*, from the notes of Léon Renier (cont.). An account of the work of Count Borghesi (1781–1860), founder of the modern science of Epigraphy. The publication of the *Corpus inscriptionum latinarum*.—AUGUSTE BAILLET, *Hittite seals of the collection of M. G. Schlumberger*. Decipherment of a few inscriptions.—GERMAIN BAPST, *The Tomb of Saint Denis*. Described from Saint Ouen's *Vita Sancti Eligii* in D'Achery's *Spicilegium*, tom. II, p. 88, livre I, ch. XXXII. The baldachino covering the tomb was decorated in gold and precious stones by Saint Éloi. The new tomb erected in the XII century by Suger contained nothing of Saint Éloi's work.—M. DELOCHE, *Seals and Rings of the Merovingian period* (cont.). XXX. A seal with two faces, found at Vitry (Pas-de-Calais). The inscriptions taken together read

VOTA SCTO MAG+NO, or MAO+NO,

implying that the owner was a devotee of Saint Magnus.—EUGÈNE MÜNTZ, *Ancient Monuments of Rome at the time of the Renaissance. New Researches* (cont.). Documents are here presented concerning the works undertaken by the Popes of the XV and early XVI century upon the walls and gates of Rome.—LOUIS DUVAU, *The Irish Epic, story of the pig of Mac Dâthô*. Translation of a fragment from the cycle of Conchobar and Cûchulainn, earliest of Irish epics; published in 1880 for the first time without translation by Windisch, *Irische Texte*, vol. I, p. 96–106.

1887, Jan.-Feb.—DIEULAFOY, *Excavations at Susa, Season of 1885–86* (cont.) (2 plates). A summary of the results of both campaigns shows the acquisition of the following objects:—fragments of the lion-frieze in enamelled faïence, 4 m. high by 9 m. long; of the frieze of the royal guards 4.60 m. by 10 m.; other fragments of friezes, enamelled and plain; a bicephalous capitol; fine collection of 302 seals and cylinders from early to late period; large number of Susian and Akhæmenid inscriptions; bronze coins of Susiana; statuettes in bronze, terracotta, marble and ivory; bronze door-coverings; many glass lachrymary vases; more than 500 objects of minor importance, lamps, urns, toilet utensils, *etc.*; Susian skeletons; besides plaster casts, photographic negatives (more than 1000) and a plan in relief of the tumulus and the excavations. Materials have been gathered for new studies upon the external ornamentation of Akhæmenid and Susian palaces; the origin and development of faïence in antiquity; the Apadâna of Artaxerxes Mnemon; ancient Oriental fortification; Susian engraved stones and coins; Akhæmenid religious architecture; the early black races

of Asia; and the myth of Memnon.—BERTHELOT, *Some metals and minerals from ancient Chaldæa.* The analysis of four tablets from Khorsabad shows one to have been of pure gold; another of pure silver; a third of bronze, containing tin 10.04, copper 85.25, oxygen, *etc.*, 4.71; while the fourth was a crystallized carbonate of pure magnesia. The fragment of a vase from Telloh proved to be pure antimony, with only slight trace of iron; and a statuette of pure copper. The absence of tin in this statuette is noteworthy and is apparently an indication of great antiquity.—AUG. LEUGE, *The country-house of Armande Béjard at Meudon.*—PAUL TANNERY, *The names of the Attic months amongst the Byzantines.* It is here shown that for the purpose of translating the names of the Roman into Attic months in monuments of the XVI century the concordance given by Theodore Gaza is to be preferred.—ARY RENAN, *Letter to M. Perrot.*—R. CAGNAT, *The Phœnician necropolis of Vaga* (2 figs., 2 plates). At Béja in Tunisia, the site of the ancient Vaga, has been found a necropolis of more than 150 graves. They are of a peculiar rounded form, are arranged in groups and oriented. Beside human remains, they contained lamps, vases, and coins, but no jewelry.—M. DELOCHE, *Seals and Rings of the Merovingian period* (cont.). XXXI. Ring of Leodenus. A gold ring found in the bed of the Oise bears the inscription, + LEODENVS VIVĀ DO, *Leodenus vivat Deo* (for *in Deo*). Probably a gift to Leodenus in early part of the VII century. XXXII. Ring of Micaël. Gold ring, bearing the inscription, on one side of the bezil, MICAEL MECVM, on the other, VIVAS IN DEO. Probably the gift of a wife to her husband, or of a girl to her fiancé; the first instance known of the formula *vivas mecum in Deo.* XXXIII. Seal-ring, found near Amiens, bears a monogram, deciphered to be ƎƧPANVƧ (ESPANVS). A martyr-saint named Espanus lived in Touraine in the IV or V century.—EUGÈNE MÜNTZ, *The ancient Monuments of Rome at the time of the Renaissance. New Researches* (cont.). Documents of the XV and XVI centuries referring to work done upon the walls, gates and bridges of Rome.—S. REINACH, *Chronique of the East.* A summary of archæological news from Greece and Asia Minor during the year 1886. Special attention is given to the acquisitions of the Museum at Athens; the results of the excavations at Epidauros; the controversy concerning the palace at Tiryns; recent discoveries in Kypros; Prof. Ramsay's tour in Asia Minor; and to the Myrina terracottas in the museums of Germany.

ALLAN MARQUAND.

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G. B. de Rossi. La Basilica di S. Stefano Rotondo, il monastero di S. Erasmo, e la Casa dei Valerii sul Celio [estratto dal periodico *Studi e documenti di storia e diritto*, anno VII, 1886]. 4to, pp. 29. Roma, 1886; Tipografia Vaticana.

No. 7 (*fig.* 4). *No.* 9 (*fig.* 6). *No.* 11 (*fig.* 2). *No.* 8 (*fig.* 1). *No.* 10 (*fig.* 5). *No.* 6 (*fig.* 3).

LEKYTHOI IN METROPOLITAN MUSEUM OF ART, NEW YORK.

N. B. The *Nos.* correspond with vase-Nos. in descriptive text on pp. 397-399; the *figs.* with the scene-outline on Plate XII-XIII.

1 2 3

1. VENUS GENETRIX, LOUVRE, PARIS.
2. ORESTES AND ELEKTRA, MUSEUM, NAPLES.
3. VENUS OF THE ESQUILINE, CAPITOLINE MUSEUM, ROME.

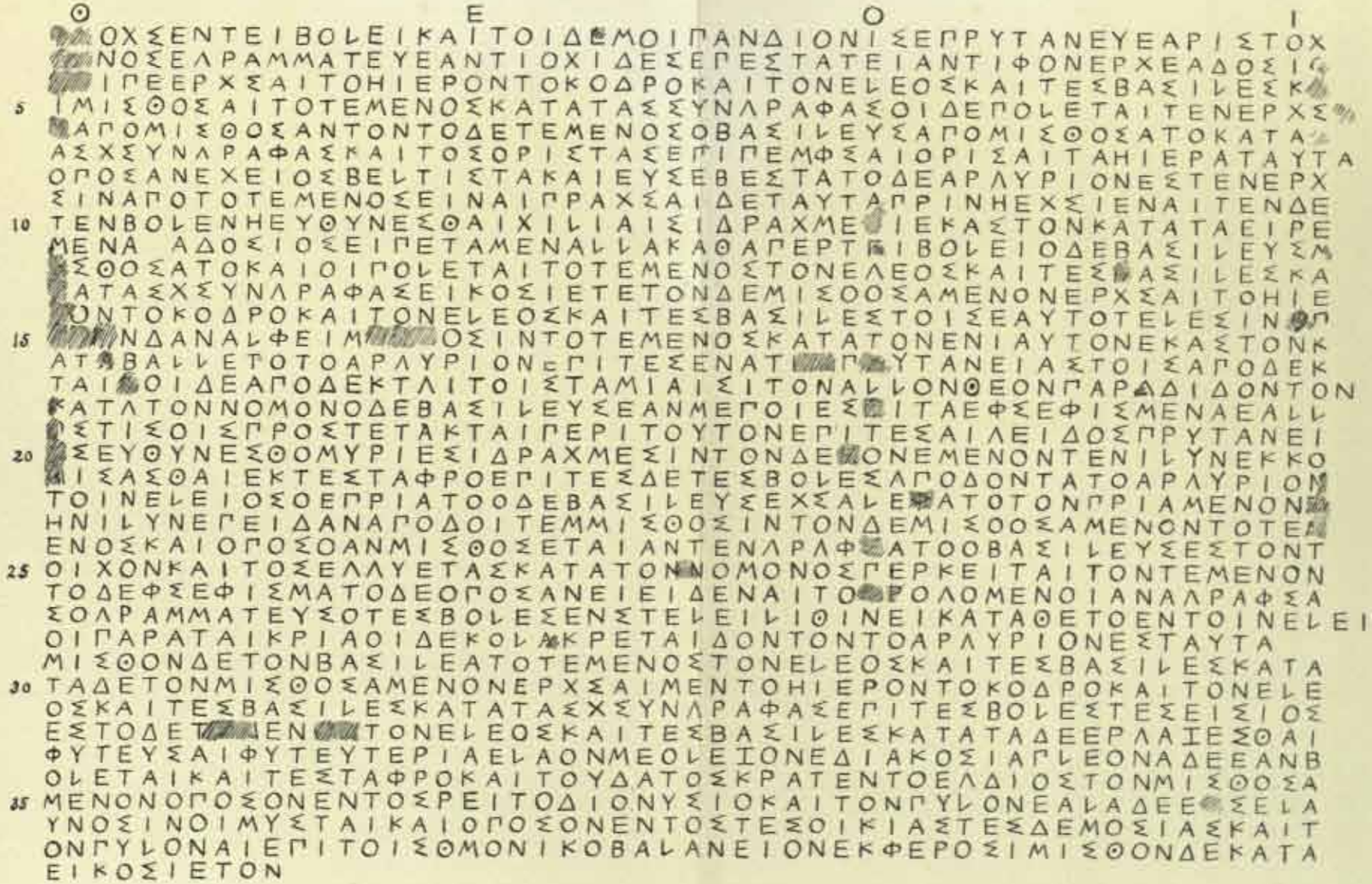
No. 1.

No. 2.

No. 3.

No. 4.

No. 5.



ΚΛΕΠΤΗΣ

AN ATTIC DECREE OF OLYMPIAD 90, 3 — 418 B. C.

FIG. 1.—*British Museum:* Material not specified.

FIG. 2.—*Cabinet Royal, La Haye:* Green jasper.

FIG. 3.—*The Louvre:* "Green marble" (Serpentine?).

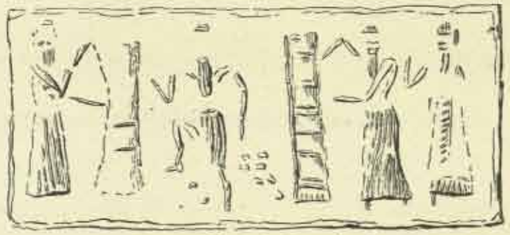


FIG. 4.—*Collection de Clercq:* Basalt.

FIG. 5.—*The Louvre:* Green jasper.

FIG. 8.—*Cabinet Royal, La Haye:* Basalt.

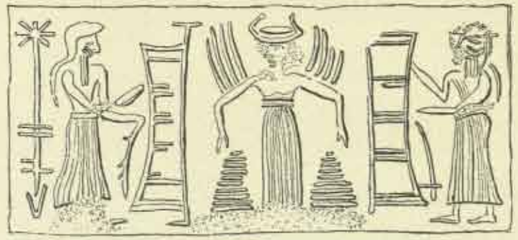


FIG. 6.—*Collection de Palin:* Serpentine.

FIG. 7.—*British Museum:* Serpentine.

FIG. 9.—*British Museum:* Basalt.

FIG. 11.—*The Louvre:* "Green marble" (Serpentine?) unfinished.

FIG. 10.—*Collection of W. H. Ward:* Basalt.

FIG. 13.—*Collection de Clercq:* Brown jasper.

FIG. 12.—*Collection of W. H. Ward:* Sienite.

1

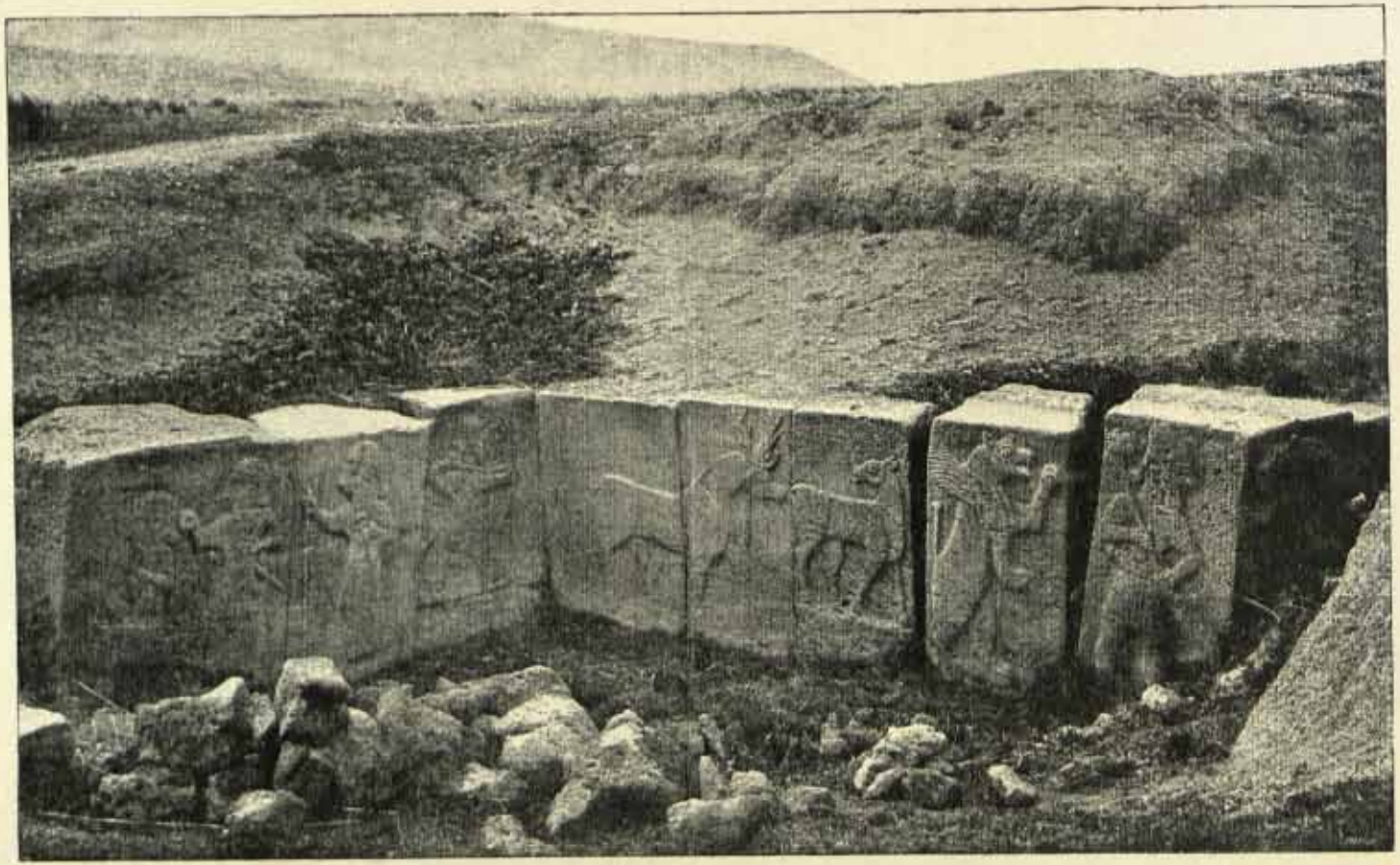
2

3

4

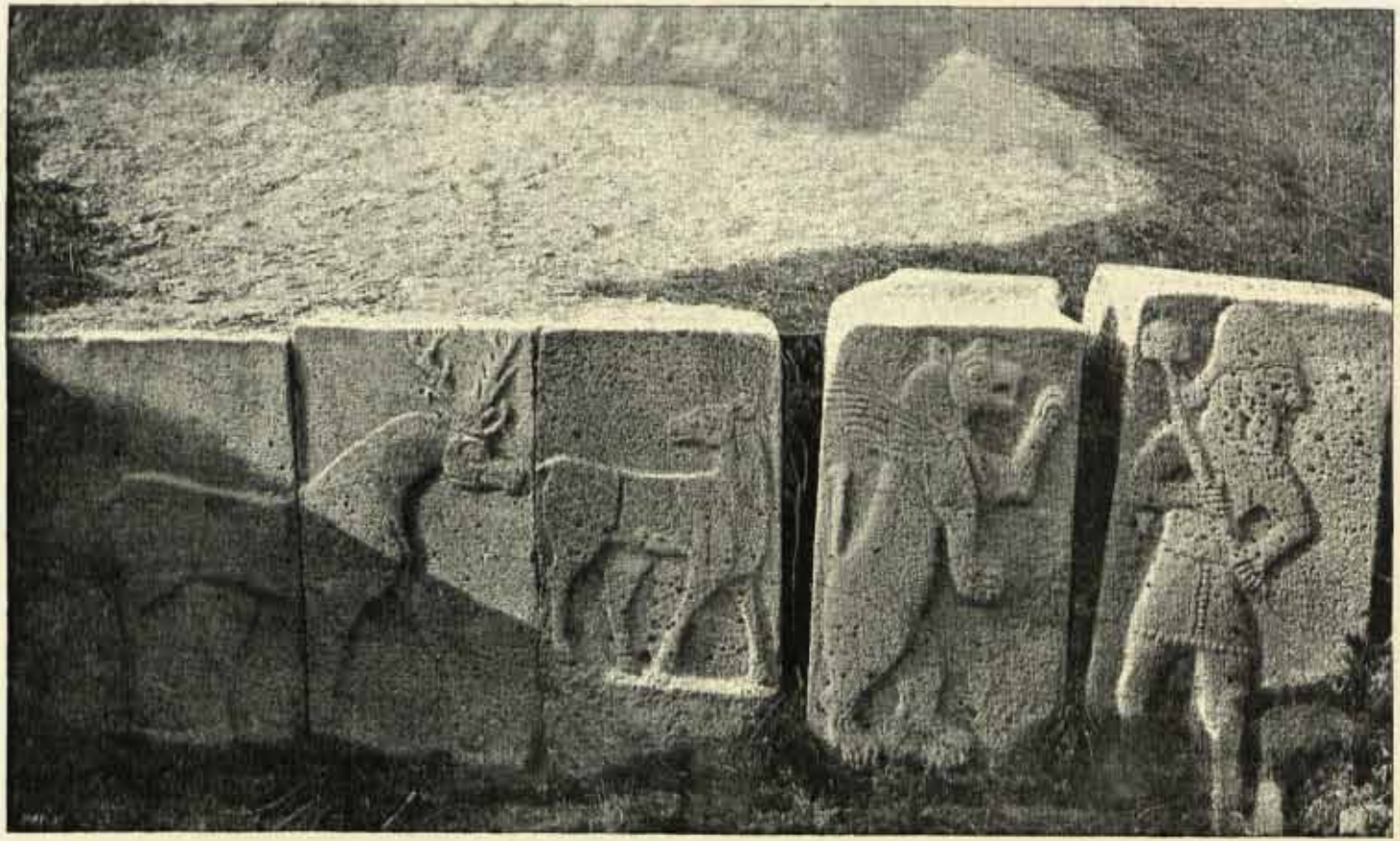
ORIENTAL SEAL-CYLINDERS.

1.—Oriental Seal; Metrop. Museum, N. York.
2.—Assyrian (?) Seal; Metrop. Museum, N. York.
3.—Syrian Seal; Metrop. Museum, N. York.
4.—Assyrian Seal; Bibliothèque Nationale, Paris.



HITTITE SCULPTURES NEAR SINDJIRLI.

HITTITE SCULPTURES NEAR SINDJIRLI.



HITTITE SCULPTURES NEAR SINDJIRLI.

HITTITE SCULPTURES NEAR SINDJIRLI.

1

2

HITTITE SCULPTURES NEAR SINDJIRLI.

ENAMELLED FRIEZE FROM THE PALACE AT SUSA.

Imp. Monrocq. Lemercier lith.

THE ARCHERS OF THE ROYAL GUARD.

AMERICAN
JOURNAL OF ARCHÆOLOGY.

VOL. III. Nos. 3 and 4.

THE PORTRAITURE OF ALEXANDER THE GREAT: A TERRACOTTA HEAD IN MUNICH.(*)

[PLATES XV, XVI.]

II.

The Alexandrian age was in love with allegories and assimilations in painting and sculpture. Lucian's charming account of Aëtion's epithalamium in colors on the wedding of Alexander and Roxana,—the same of which a thoughtful judge has observed, that it is one of the few descriptions of ancient paintings graphic enough to vivify the dryness of Pliny's short notices (Brunn, *Gr. Künst.* II, 247),—might apply almost as well to a mythological scene, with Ares and Aphrodite in the principal parts (Lucian, *Herod. sive Aetion*, 4; Pliny, *H. N.* XXXV, 78). Against so many pure portraitures and compositions of an allegorical cast, but one contemporary historical painting can be cited, the work of Helena, a female artist, whose home appears to have been Alexandria in Egypt. The great Pompeian mosaic known as the Battle of Alexander has often been considered a copy of the spirited brush of this artist, and it is quite certain that it was meant for the battle of Issos, which was that which Helena had rendered. Possibly, the claims of the Battle of Alexander and Dareios, which Philoxenos of Eretria executed about 306 B. C. by the commission of Kassandros (Plin. *H. N.* XXXV, 110), might be considered with those of Helena's contemporary

(*) Continued from vol. II, p. 413.

composition. But we know too little of either artist to judge with any competence.

The gold mummy-case in which the body of Alexander was transported to Egypt can hardly be styled an image, at least in an artistic sense; but we may note, in the elaborate description Diodoros gives of the magnificent funeral-car constructed by Arrhidaios, the fourfold painted frieze that was visible through the gilded Ionic columns and netting which decorated the mobile mausoleum. On three sides, were figured ships, cavalry, and elephants; on the fourth, which could only be the front, two groups of paladins, viz. Makedonians, and sceptred Persians with their armorers before them, surrounded their hero-king, sitting charioted, and holding the royal sceptre (Diod. Sic. XVIII, 26). In the end, Alexander's features, like Vergil's verse, became a charm for the superstitious to conjure with. A sacrificial patera with his effigy was a venerated heirloom in the family of Alexander Severus (Lampridius, *Vita Alex. Sev.* 29), and the *gens Macria* used the head as a talisman to wear embroidered on clothing, and carry on the person in a variety of other ways.

With all this wealth of portraiture, it was reserved for modern scientific archæology, starting from one authentic but indifferent marble head, to proceed from stray and dubious identifications towards the goal, not quite attained, of a reliable classification of the extant material. It was but natural to look for the lineaments which many literary allusions caused to seem almost familiar, for the "joyous eyes and brilliant" of Solinus; for the "arched nose," not aquiline, as Frenshemius calls it in his supplementations of Quintus Curtius, but more nicely termed ὑπόγρυπος by his Greek original; for the "leonine" eyes and mane of the always grandiloquent Plutarch; or the "bushy hair" of Ælian's homelier phrase. A number of more than dubious busts and statues, scattered through the museums, attest the activity of those early enthusiasts, for whom any casual resemblance or coincidence was sufficient justification for cataloguing a new portrait of the most popular historical personage of antiquity. One cause that helped to swell the number of false "Alexanders" must be recognized in the notorious fondness of some among his successors for imitating his appearance, his manners, and even his deformities. Another cause was the fortuitous circumstance, that a marked physiognomic similarity exists between heads of undoubted authenticity and certain ideal conceptions of a mythologic nature, as treated by the

leading artists of the Hellenistic age and their followers,—Helios, Herakles, Telephos, Giants, Tritons, Satyrs even.

For an authentic representation of Alexander's features, we naturally look to the gold and silver and bronze coinage issued from his own mint. An amusing blunder was that of the painter Lebrun who, endeavoring to grace his canvas with a correct likeness of his historic hero, imitated the handsome head in a Korinthian helmet which we find on the obverse of the gold staters that bear the legend ΑΛΕΞΑΝΔΡΟΥ ΒΑΣΙΛΕΩΣ—lending a more masculine quality, perhaps, to the delicate profile. In reality, the head on the coin is feminine, as an external sign, the distinct earring, sufficiently proves. The locks that escape under the rim of the helmet are those of the goddess Athena. The consideration occurs that no Greek sovereign before the epoch in question ventured to stamp his own effigy on the currency of his realm. The figures of gods, or national devices, were held a better decoration for such a purpose. Accordingly, the divinities preferred above others by Alexander are those which find a place on his coinage: Athena, on the obverse of the gold pieces; Nike bearing a wreath, palm, or trophy-cross, on the reverse of these coins; Zeus enthroned and facing to left, on the inscribed reverse of the silver pieces; the head of Herakles, apparently (wearing a lion's scalp for a hood), on the obverse, not only of the silver pieces, but also of the bronze, which have, on the other side, his attributes—club, bow, and quiver. Thus it seems but natural that, as a reaction from this too easy credulity, the careful author of the learned *Examen critique des historiens d'Alexandre*,[25] with Eckhel, Stieglitz, Arneth, and others,[26] should repudiate the notion that any portrait-lineaments can be found on the medals. Yet the evidence that they may be sought in the Herakleian profile just mentioned, which was long considered as feeble and suspicious in no ordinary degree, is rendered convincing by the latest numismatic and iconographic discoveries. It is true, the type occurs on contemporary Tarantine coins, and even on Makedonian pieces struck before the reign of Alexander. Also, the likeness of the features, as seen on different specimens, to other portraits or to each other, is often impossible to detect. In any event, it can only be supposed, with L. Müller our chief authority (*op. cit.*), that the die-engravers gradually gave a less or greater semblance of portrait-likeness to the

[25] Barthélemy-Figeac, p. 13.

[26] L. Muller, *Numismatique d'Alexandre le Grand:* Copenhague, 1855.

profile of what was originally a purely ideal head of the ancestor of the royal house of Makedonia.

That the later ancients, at least, recognized an effigy of Alexander on the coins of his reign, is quite certain; for St. John Chrysostom (*Ad illumin. cateches.* 2) deprecates the custom of wearing the same as amulets, as if some divine efficacy could reside in the likeness of a pagan prince. Diogenes Laërtios alludes to the beauty of Alexander's coinage in language which implies that it bore his effigy. The identical head and *coiffure* on a medal of Pisidian Apollonia with the circumscription ΚΤΙCΤ*ην* ΑΓΟΛΛΩΝ*ιάται* is sufficiently conclusive.[27] Medals struck in honor of a founder do not bear the image of an indifferent god. To the query how to account for royalty appearing in so unusual a garb, the defenders of the likeness[28] have a ready answer. Konstantinos Porphyrogenetos says that a lion's mask was a royal insignium with the kings of Makedonia, and is for this reason found on the coins.[29] And that this is no mere invention of the imperial publicist is shown by the statement of Athenaios, who says that these primitive regalia were actually worn by Alexander himself. The case rests here. The notion that the head on the tetradrachms was primarily intended for Alexander must certainly be dismissed. But Müller's conclusion, that he gradually usurped the accoutrements along with a share of the veneration due to his mythical ancestor and prototype, is not untenable, and will sufficiently account for the diversity in physiognomy on the different classes of coins which correspond to successive mintages; for the variations in the types are accompanied by alterations in size, *etc.*, such as justify Müller's chronological classification in at least seven distinct series. It was thus that Commodus assumed the title and garb of a *Hercules Romanus*.

After Alexander's death, coins with his effigy and superscription continued to be struck. A tetradrachm, for example,[30] which a dimin-

[27] Visconti, *Iconographie grecque*, s. v. *Alexandre*.

[28] Müller enumerates Visconti, Cadalvène, Cousinéry, Ch. Lenormant, Duchalais, Pinder, O. Müller, and Birch. Among the earliest was Le Blond, *Du vrai portrait d'Alexandre le Grand* (*Mém. de l'Acad. des Inscriptions*, an v).

[29] *De Thematibus*, II, 2 = διὸ καὶ ἀντὶ ταινίας, καὶ στέμματος, καὶ πορφύρας βασιλικῆς τῷ δέρματι τῆς κεφαλῆς τοῦ λέοντος ἑαυτοὺς ταινιοδοῦσι κτλ.

[30] In Müller's plate, the head of Alexander seems substituted for that of Zeus Aëtophoros on the reverse. The lineaments are unmistakable, diminutive as the figure is, and such an alteration would be after the analogy of the obverse; but Prof. Rhusopulos, of Athens, to whom the writer is greatly indebted for facilities accorded to study his

utive palm-tree and the monogram AP designate as having been struck at Phoinikian Arados, bears in its exergue the date "Year 40" in Phoinikian characters. The era is that of the conquest of the Phoinikian coast by Alexander, or 332 B. C. Year 40, then, is 292 B. C. The occurrence of such dated coins, in the early days of numismatic science, induced certain antiquarians to assume for Alexander's reign a length altogether at variance with literary tradition. Not only did autonomous states, like Kos, Arados, Odessos, the Aitolians, and Smyrna, Lemnos, Mitylene, Phokaia, Miletos, Chios, Rhodos and others, on the recovery of their autonomy in 190 B. C., continue to strike money of the Herakles-Alexander type, as that belonging to the principal circulating medium,[31] but the conqueror's princely successors also exercised extreme caution in substituting their own portraits for his. The personal coefficient, however, except when the old types remain unaltered, becomes more pronounced, whether it be found in feature or in attribute. A striking series is that in which the familiar profile looks forth from under the scalp of an elephant instead of a lion. Here a diadem confines the luxuriant locks that rise from an indented forehead, under the conventionalized trunk and tusk; a tiny ram's horn protrudes from beneath and shows itself under the shrivelled skin; like the scaled aegis and knotted serpents seen below, this is the distinctive attribute of the son of Zeus Ammon.[32] The reverse exhibits an Athena Promachos of archaistic design, in the field an eagle on a thunderbolt, the badge of Ptolemy I Soter, the same that will later occupy the whole reverse of his portrait-stamped medals. As long as Ptolemy governed in the name of Alexander IV, the son of Roxana, he seems to have coined money in the name of that prince. Accordingly, we read nothing but ΑΛΕΞΑΝΔΡΟΥ on these pieces. But there is one notable exception in the unique tetradrachm of the "Cabinet des médailles." On it we read the peculiar legend ΑΛΕΞΑΝΔΡΕΙΟΝ ΓΤΟΛΕΜΑΙΟΥ. Perhaps, then, after all, the Ἀλεξάνδρου of the others refers to *the* Alexander, whose name had become almost an inherent feature of the currency, and was so employed up to more than a hundred years later, as we have seen above. Ἀλεξάνδρειον would be simply the name of a coin, like *napo-*

rich numismatic collection, thinks that the engraver was misled by the abrasion of the beard on the specimen that served him for model.

[31] See Mr. HEAD'S observations in his *Guide to the Principal Gold and Silver Coins of the Ancients*, p. 87, and under pertinent numbers of the catalogue.

[32] A fine enlargement of this medal is given in Mr. STILLMAN'S article on *The Coinage of the Greeks*, in the *Century Magazine*, vol. XXXIII, p. 797.

léon or *louis d'or*. The piece of the "Cabinet des médailles" may have been struck in the interval between the death of Alexander Aigos (311 B. C.) and Ptolemy's assumption of the title and prerogatives of sovereignty (306 B. C.), but name and portrait belong to the great Alexander. With such a specimen in hand, it needs no attentive comparison of mint-marks to do away with the old idea that the elephant-scalp stater belonged to the coinage of some other Alexander, such as the contemporary king of Epeiros, or poor Ptolemy XI. Lysimachos, like Ptolemy, retained the portrait of Alexander, but with characteristic alterations: his are the staters and tetradrachms with the head of Alexander, deified, with diadem and horn of Ammon, and a seated Athena Nikephoros on the reverse.

Among other early royal portrait-medals of the Hellenistic age, those of Demetrios Poliorketes, diademed and with the bull's horn growing from his forehead, most closely attach themselves to those that bear the portrait of Alexander himself. Hieron II of Syracuse readily assimilated the innovation of the Makedonian princes, and the custom of putting forth currency under the likeness of the sovereign soon became traditional and general. Pyrrhos, in whom the Hellenic spirit lived on, was faithful to the Hellenic traditions in this respect. None of his coinage bears his likeness.

The beauty of the Hellenistic portrait-medals enables us to give but a passing notice to the use of Alexander's head as a monetary device by the Romans, on their Makedonian currency of the first century B. C., and under Alexander Severus.

III.

There is little difficulty in grouping most of the extant reproductions of Alexander's features according to their affinities with one or other of the celebrated portraits known to antiquity, or with the medals. The only one that has his name attached to it has served in some sort as a standard by which to try the authenticity of less certain busts and statues. This is the bust found at Tivoli in 1779, acquired by the Chevalier d'Azara, then Spanish Ambassador to Rome, and when he became ambassador of Spain at the court of France presented by him to Napoleon, and now in the Louvre. The character of its inscription,

ΑΛΕΞΑΝΔΡΟΣ
ΦΙΛΙΠΠΟΥ
ΜΑΚΕ////////

as also that of its technical execution, marks it as of the time of Augustus. All freshness and inspiration are absolutely wanting, and the piece is further defaced by restorations about the nose, mouth, and shoulders, and by the marks on the marble surface occasioned by a bath in sulfuric acid. Yet in its detail it tallies with the descriptions of the original physiognomy: in particular, the leftward turn of the head is there, with the enlargement of the side of the face opposite the affected muscle which frequently accompanies cases of *torticollis*. Perhaps it will be safe to credit the original of this bust to one of the unsuccessful rivals of Lysippos.[33]

The figure of Alexander in a relief of the Albani collection that represents his meeting with Diogenes the Cynic is as good as inscribed. He stands seminude, wearing a helmet, while the philosopher sits, disrespectfully, beside his cracked jar or tub. As the figure of the king is entirely due to a restorer's hand, it is without any archæological value.

Winckelmann was acquainted with a porphyry bust, not likely to offer any special interest, and further mentions two busts, about the character of which there has been much contention, and both of transcendent sculptural excellence: the once radiated head of the Capitoline Museum, otherwise known as a Sol Oriens,[34] and the "Dying Alexander" of the Uffizi Gallery at Firenze.[35] Two complete statues, replicas of one type,

[33] First published by VISCONTI, *Iconographie grecque*, under *Alexandre le Grand*. The most accessible cuts of the better-known portraits of it will be found in BAUMEISTER, *Denkmäler des klassischen Altertums*, s. v.

[34] *Stanza del gladiatore*, No. 3; I subjoin the catalogue notice from the official *Nuova descrizione del Museo Capitolino*: "Alexander the Great: head. The lineaments of the face correspond with the hermes in the Louvre Museum; but it has a considerably more ideal expression. The head is inclined a little to the left, and the gaze is directed upward as in a serene rapture. Its long hair rises above the forehead in a fashion resembling that of the images of Zeus. Seven drilled holes about the crown of the head probably served for the insertion of metal rays; hence it has been assumed that the king was represented with the attributes of the Sun-god. This and other analogous portraits of Alexander are considered copies after originals by Lysippos, inasmuch as we know him to have been variously portrayed by this famous Sikyonian master alone. Greek marble. Preservation excellent. Only the tip of the nose and the neck of the bust are restored. The back is left in the rough. Foot of *bigio bemacato*. Height 0.78 m." He has whiskers, and the characteristic tusk-shaped lock on the right cheek. What looks like a wart above his left eyebrow is the point of a lost curl. The marble-drill was much employed by the sculptor of this bust.

[35] On the connection of this piece with the Giant Frieze from Pergamon, now in Berlin, the reader is referred to a paper by the writer in the *American Journal of Philology*, vol. IV, pp. 204–7.

now respectively in Paris and München, were also known to him.[36] The treatment of the subject and figure is thoroughly Lysippian. Absolute nudity finds its occasion in preparation for athletic sport. The general has doffed his armor and clothing to anoint his body with oil, in accordance with the practice of the palaistra. His draped tunic is carelessly thrown over a cuirass stood beside him. Balancing the weight of a sturdy body on his left leg, he has set his right foot on a rock, the more easily to rub the bent leg above it with an unguent. A vessel from which this has been poured is held firmly in the left hand. Not quite absorbed in so mechanical an action, the hero is free to direct his interested gaze straight before him. Is he watching the play of athletic companions? Is he scanning the ground about him with the topographical eye of a soldier? Or is the external vision but the shadow of an inward visualization. Thus Poseidon leans and looks, on the coins of Demetrios; thus Demetrios himself gazes into the distance, in the bronze statuette from Herculaneum. These are closely related types. The like attitude of Herakles over the fallen lion on the first Olympian metope is more remotely kindred. There is a suggestion of the unrestful rest of Ares Ludovisi in the ethos of this only statue of the conqueror that has been preserved to us. Its portrait-value must be considerable. An uninjured nose—always a subject of congratulation in Greek or Roman statuary, as well as a great rarity in the small array of authentic Alexanders—is not the least interesting feature of the München replica; from it we learn the sense of that precising physiognomic definition of it as *ὑπόγρυπος*, or *subaquiline*. The hair falls backward and to the shoulders in customary leonine richness, with a depression all around the crown as from the constant wearing of a fillet.

The characteristic thus designated is distinctly absent in two busts recently coupled in a monograph by Bernhard Stark.[37] At the first blush, the head from Count Erbach's collection (found in Tivoli towards the close of the last century, like the Paris hermes) recalls the much-discussed *Spinario*.[38] Curls entirely conceal both ears, not being brushed back as in the majority of the heads; on the contrary, they cover the skull naturally without giving the face the mask-like appearance com-

[36] Identified as a portrait of him, through comparison with his medals, by Visconti. See BAUMEISTER, *Denkmäler*, *s. v. Demetrios*.

[37] *Zwei Alexanderköpfe, Festschrift der Universität Heidelberg zum 50 jährigen Jubiläum des deutschen archaeologischen Instituts in Rom:* Heidelberg, 1879.

[38] Both are given in BAUMEISTER, *Denkmäler*.

mon to many of the other portraits. Whatever individual features are there, are tempered by a youthful roundness and softness that imparts an unequalled charm to this novel rendering of Alexander's countenance. The faintest enlargement appears in the right sterno-cleido-mastoid, showing that the head was once turned leftward. A restorer has not noticed this. The eye-sockets are deep (τὸ λεοντῶδες τοῦ προσώπου). A thin upper lip is most delicately drawn up on both sides of a central point, exposing a portion of the teeth. This peculiarity is more marked than usual. Stark—who recognizes in this bust (which was originally, as shown by the iron dowel found planted in it, part of a complete statue) affinities to the Lysippian and Praxitelian types of Zeus, Eros, and Ares—is inclined to connect it with the chryselephantine statues dedicated in the Philippeion at Olympia, and consequently with the work of Leochares. The other is the well-known head in the British Museum. It has the arrangement of the hair, the peculiarity of the mouth, and the faint suggestion of the slight deformity in common with the other. A feature here alone given with such a degree of emphasis, is the overlapping of the *orbicularis superior palpebrarum* over the nether at the external commissure of the eyelids. The nose is conventionally straight; the cheeks hewn in larger and more vertical planes than customary. The trace of a metal diadem is visible in the hair. If the Erbach head gives us a purely Hellenic type of the μελλέφηβος, according to Stark's formulation, the progress achieved from that head to this older one is in the direction of mastery of the new elements introduced with a half or wholly barbarian type. The striking resemblance to the conquered German prince known as Thumelicus, the son of Arminius, in the British Museum, cannot be entirely fortuitous.[39] There is an unrecognized portrait-bust in the Capitoline Museum, once without reason held to represent Arminius himself, which strongly suggests another likeness of the youthful Alexander.[40] The same collection furnishes three more

[39] The head is given in BAUMEISTER, *Denkmäler*, s. v. *Barbarenbildungen*.

[40] "Stanza dei filosofi," No. 59. "Bust of an unknown personage. The long hair falls waving over forehead and ears, which last it entirely covers. The face is not absolutely beardless; a faint down is visible about the upper lip, the lower portion of the chin and cheeks. The eyes, with their pupils indicated, have an expression of passion and anger. The type of the countenance partakes of the barbaric nature, and led some archaeologists to recognize a portrait of Arminius, the famous conqueror of Varus, in this bust. Others have tried to recognize in it the rhetor Apuleius of Madaura in Numidia. The shoulders and bare breast are done in a picturesque style

examples either of portraiture, or of conscious imitation of the given portrait-type, all gathered, curiously enough, in the same "Stanza dei filosofi." The writer would severally designate them as a very inferior portrait,[41] as one of the Diadochi,[42] and as a princely or athletic type largely modelled on a recollection of some Lysippian head of Alexander.[43]

The probabilities are that numbers of sculptured heads of Alexander still await the observation of archaeologists in private collections. The writer was recently acquainted with the existence of one among a collection of antiques on its way from Rome to Frankfurt-am-Main, and learns of another of which he subjoins a description from a private letter.[44]

There is a certain affinity both in conception and circumstance between the principal figure in the great mosaic from the "Casa del Fauno" in Pompeii, now in the Museo Nazionale at Naples,[45] and the

full of effectiveness. Greek marble. Nothing restored but the tip of the nose. Height 0.73 m. Found in the vicinity of Naples." The eyes are directed to the right and upwards.

[41] "Stanza dei filosofi," No. 26. "Male hermes, once supposed to be the portrait of Apuleius of Madaura, but without reason. The beardless face presents a youthful aspect, the long and thick hair rises parting on the forehead and, covering the ears, altogether drops upon the neck. The lineaments are without semblance of portraiture, but rather suggest an ideal personage (Helios?). Greek marble. The nose is restored, the hermes foot is entirely modern. Height 0.59 m." To this add, that there is a channel for a fillet-diadem in the hair, and that the workmanship is execrably poor.

[42] "Stanza dei filosofi," No. 1. "Hermes of an ideal personage (Apollo?). Formerly this hermes was thought to represent the poet Vergil; but the ideal lines of the face, and the abundant hair that flows in ringlets that cover the temples and ears, have nothing in common with a Roman portrait. The head is bound with a fillet; cheeks and neck are sculptured with great elegance. Luna marble. The tip of the nose, the chin and some pieces of the neck are restored. The foot is put together and worked over, but antique." The familiar deformity is imitated in the neck. A head of similar character found during M. Homolle's excavation in Delos, was recently published in the *Bulletin de Correspondance Hellénique* as an example of the craze of the Diadochi for resembling the outward appearance of their great archetype, but M. Reinach, in a recent paper in the *Gazette Archéologique*, regards it as an Alexander.

[43] "Stanza dei filosofi," No. 28. "Colossal ideal head, once falsely thought to be the portrait of Alexander the Great. It inclines to the left. The half-open mouth and the upward gaze give much expression to the face, &c., &c. Height 0.81 m. Discovered at Priverno in 1839."

[44] "One of the finest things in Baron Baracco's superb collection of Greek sculpture in Rome is a colossal bust of Alexander, in marble and of fine art, probably of the III century before Christ. The head is bent to the side and slightly upward: the head is lion-like and the expression misty and far-reaching. It is a thorough chef-d'œuvre."

[45] Found 1831, and placed in the pavement of the fifth hall or "Stanza della Flora."

small bronze, early recognized by the learned academicians of Herculaneum for a copy from the equestrian battle group by Lysippos.[46] The mosaic is admittedly copied from Helena's contemporary picture of the battle of Issos. Alexander, mounted on a prancing charger, and in a general's panoply, but helmetless, has just transfixed a Persian noble with his long Makedonian spear, or sarissa. His countenance is viewed in profile, or nearly, the left eyelash appearing behind the high-bridged and straight nose. The brown hair is mane-like, the brow somewhat drawn, the eye brown and wide-open; mouth and chin recall the coins; the skin is not white, but quite sun-colored; the cheek is framed by a brownish whisker, as in the Capitoline bust. A tunic sleeve covers the right arm. A sword hangs by a short baldric on the left side of the cuirass.

The Herculanean bronze likewise represents the man on horseback and in armor. The helmet is again missing, this time perhaps in allusion to an incident in the fight on the Granikos. The King's helmet had been rendered useless by the stroke of a Persian scimitar. Instead of the spear he holds a short sword, using it not *punctim* but *caesim*, as a Vegetius would tell us—not thrusting but hewing with the edge. In this vigorous action of the right arm and reaching to rightward of the whole body, the rider being without stirrups, his left leg is well advanced, while his right swings back from the knee to a nearly horizontal position. Exactly the same position has been noted by M. Salomon Reinach in a terracotta replica found in a koroplastic collection from Smyrna;[47] the body of the rider is unfortunately destroyed in the replica he describes, but the circumstance is enough to show that this and the Neapolitan bronze are reduced copies from one and the same celebrated work. In still more reduced proportions a similar figure appears on the reverse sides of two magnificent gold medallions from Tarsos, among the treasures of the "Cabinet des médailles:" their technique assigns them to the domain of numismatic science, and the circumstances of their discovery to the age of Commodus. In this case the rider is attacking a lion with his spear. The writer is not aware that anyone has yet thought of connecting this figure with that other composition of Lysippos, the Lion-hunt. The central figure of the Hunt would then have been selected by the copyist from among

[46] Museo Nazionale, No. 4996. Found at Herculaneum 1761. A large engraving of the head is given in VISCONTI'S *Iconographie grecque*.

[47] Catalogued by M. REINACH in the *Mélanges Graux*.

its companions, just as the corresponding one was from the *turma equitum*. Other replicas exist to corroborate this view. The emperor Commodus himself is delineated in the same equestrian attitude, attacking a lion, on a cameo shown to the writer in the same collection, and on another observed by him in the Museo Nazionale at Naples.[48] Indeed, the celebrated Vatican statue of Commodus, which served as a model for Bernini's Constantine the Great in the portico of St. Peter's, is also an obvious imitation of the Lysippian original.

The gold medallions of Tarsos repeat another of the royal portraits already noticed, on not a reduced but an enlarged scale; this is the Herakles-Alexander of the tetradrachms. It is therefore but natural to suppose that a second splendid profile found on one of the medallions, and which needs no attributes to serve as the key to its evident individuality, is likewise derived from one of the notable contemporary likenesses. The lines and expression of the face, indeed, and also the pose of the head and neck as well, suggest the Lysippian type; but a certain radial rather than leonine disposition of the hair tempts to new conjecture. Few medallion-heads fit and fill the limits of a circle half so well. The analogy of the companion piece permits the supposition of enlargement from a small original, say a coin, or, since no coin of this type is known, an engraved gem. We know only one engraver whose work would have been likely to serve as a model for so costly a replica as the Tarsos medallion. But, waiving speculation as to the originator of this artistic type, which can in no case be entirely dissociated from the school of Lysippos, may it suffice to say that it is so worthy of the material in which it is embodied as to stand emphatically supreme among the extant portraits so far enumerated.

Could a higher iconic importance be assigned to any other, the special subject of this sketch, a small terracotta in the Royal "Antiquarium" at München, were the only rival with a claim to be considered. Its high excellence, indeed, is the justification of its presentation in this Journal, a careful collation with the original, by the writer, having satisfied him of the entire inadequacy of the copperplate outline in a previous publication.[49]

The Director of the Royal "Antiquarium" kindly permitted a photographic reproduction of the terracotta in question, from which the

[48] No. 58 among the precious stones; the same collection contains some unimportant engraved heads of Alexander—Nos. 121 and 1024. No. 155 is modern.

[49] Lützow, *Muenchener Antiken*, plate XXXI.

phototype plates that accompany this article were made. Unfortunately, the process has reciprocally changed the sides of the face, so that in both plates the reader will see rather a mirrored reflection, as it were, than the proper delineation of the original. The proportions are those of the antique itself. It measures 0.143 millimeters in height, including the restored plinth, or, excluding it, 0.131 m. The piece was acquired by King Louis I of Bavaria, along with a female head of the same character, and very probably by the same hand (No. 387 *a*), from the Roman sculptor Fogelberg, as stated by Lützow. No further information on their provenance can be elicited from the archives of the "Antiquarium." The Rhodian origin conjectured by Lützow rests on internal evidence. Both heads were modelled without bodies; for the bases of the necks are tooled, not broken, and it does not appear likely that they were ever attached. What seems part of a garment adhering to the back of the neck, in the one presented, is a portion of the cascade of unbroken locks that once covered this part. Both heads exhibit, with the same adherent particles of whitish calcareous substance, the same plentiful vestiges of a red pigment, not confined to any particular division of the surface, but such as to show that the entire head and face were colored bright red. Lützow made out a difference of light and darker hue, which the writer could no longer distinguish; but it is possible that the hair contrasted with the skin-surface, burnt sienna against vermilion, to suggest, heraldically, as it were (as the fashion of antique polychromy oftenest was), the proper tinges of chestnut and carnation. Both heads are of a like boldness of characterization, and a sketchiness of execution that carries with it a breath of moist studio air. On close examination it will be found that they are not retouched mouldings, like most antique terracottas, but original models, nor too carefully finished at that. It will be observed that no such threads disfigure the surface as remain on moulded specimens; that the hair abounds not only in undercut edges but also in aduncous or ansate locks: both of which features would greatly impede taking a cast from it, for example. Further, a trained eye will notice that a large portion of the hair is hardly more than thrown up; the furrows are made with a round-pointed stick, apparently the same whether for so small a scoop as that over the right eye, or for the long rill that runs entirely around the head as if to receive a fillet. One of the individualizing features consists in the parallel tusk-like locks that adorn the right cheek: the breakage shows that they were laid on after the

modelling of the face was completed to smoothness; a few scratches remain as traces of the erasure of such a lock deemed superfluous by the artist, and which would evidently have interfered with the outline of the face. Finally, we have the very touch of the sculptor's finger, or rather thumb, one dexterous twist of which was sufficient to shape the expressive forms of the eye. A diagonal striation across this organ and its socket, plain enough in the original, and observable even in the photograph, is imprinted by the pressure of the papillae.

All these particulars of technique, together with a most forceful boldness of conception and characterization, make us accept without hesitation what appeared certain to Lützow, viz.: that we have before us an original by a consummately skillful Greek sculptor of that Hellenistic age which attained to mastery in the expression of pathetic emotion. If Lützow goes further, and specifies the Rhodian school, we may suspect that nothing but the conspicuousness of a great masterpiece of that school suggested so confident a determination. We now know that Pergamon and other centres of Hellenistic art were fully capable of analogous successes, and the gradual rise of the pathetic element has been traced back to periods that were purely Hellenic.

We shall experience no hesitation, if its portrait character shall appear evident, in regarding a work of so pronounced an originality as having come from the studio of some master of the very first order of ability, a contemporary of Alexander. That it is an original sketch, or sculptor's first model, is the opinion of the Director of the Antiquarium, and this view has suggested itself spontaneously to almost every person of cultivated eye to whom I have shown the photograph.[50]

The identity of the subject admits of no question. We discover in the clay image every traditional physiognomic feature of the patron of Lysippos and Apelles: the leonine mane, the indented forehead which archæologists have denominated the Lysippian, the clear vision combined with a strange softness in the expression of the eyes, the terrible countenance whose anger quelled a mutiny, the subaquiline nose of a word-weighing biographer, the skyward glance of the epigrammatist, and its cause in the slight deformity of the neck. Yet, although we may recognize these features, although we may even detect such elusive

[50] The companion piece, the head of an elderly woman wearing a bitter expression (Olympias?), belongs to the same category, not unexampled, I think, among extant antiques. I have learned of but one other terracotta Alexander, a small head in the possession of Prof. A. L. Frothingham, jr.

resemblances to the best among the known portraits as, *e. g.*, the curious overlap of the superior orbital *orbicularis palpebrarum* above the same muscle's lower segment, which is apparent to an exaggerated degree in one of the youthful heads published by Stark, the mind still requires some intentional indication by the sculptor of the nature of his subject. Nor is such an indication wanting. To some it may perhaps appear rather conventional and external, being no other than the semicircular groove or channel about the hair, roughly imaging a fillet. A fillet is the distinctive feature, in like manner, of the d'Azara bust, and is rendered also, as a groove, in a small glass one at Florence.[51] In the numismatic domain, we first find it on the Ἀλεξάνδρεια with elephant-scalp struck by Ptolemy Soter, and afterwards on that coined in his own effigy, and on the tetradrachms of Hieron II of Syracuse. Alexander was the first occidental prince to employ the fillet as an emblem of royalty; for the διάδημα he used was but of woollen woof. If the essential simplicity of this insignium was congenial to Hellenic taste, its origin was Oriental, and its use the legacy of the Persian Dareios to his successor. It was a marvel of textile art from the loom of a cunning Babylonian artificer. Alexander wore it habitually. One day as he was boating on the waters of Babylon, a gust of wind took off this priceless fillet with his hat, which presently sank. But the riband, floating lightly on the air, stuck among the reeds that grew close to an island shrine. A sailor swam for it and placed it on his head to keep it dry until he reached the royal barge again. Arrian tells of how the Babylonian soothsayers advised the bloody removal of one who had worn Alexander's diadem, and of the princely reward that the King

[51] This head lies in one of the cases of the "Museo Etrusco." It bears the number 3984. I was not able to ascertain its provenance, or whether it has been recognized for what it is. Its dimensions are quite small (h. 0.065 m.), and the material may possibly be rock-crystal, although the breaks show no lamination. The main fracture is at the junction of neck and shoulders. The surface is polished. The nose is partly broken off, but not so as not to leave its outline sufficiently certain. The forehead is indented, the brows drawn, the eyes raised, the mouth half-open with sunk corners, the chin round but prominent, the throat full, the muscles of the neck uneven, the whole head a little awry. The hair rises from the forehead and falls down at the sides like a mane, covering the ears. Three tusk-locks line the left cheek. The fillet-cincture of the head was double, two grooves running round at a slight interval from each other. Altogether the head resembles our terracotta most closely, even to the roughness of finish in its detail. The general effect differs as one expects a work in hard material to differ from one in soft material.

gave him instead.[52] The equestrian statue at Naples exhibits this arrangement of the hair, then, only by an historical prolepsis.

Of a more intrinsic and puzzling nature than this external attribute is the sorrowful expression in connection with the upward and slanting direction of the eyes, in the drawn brows and the falling corners of the mouth. The fallen Giants of the Pergamene altar-frieze wear the same expression as indicative of physical agony. In the famous head of the Uffizi gallery, copied from one of the figures in that composition,[53] the same sets of muscles are drawn and relaxed. The difference is one of degree. What in the marble proceeds from bodily suffering, in the terracotta assumes a milder character. It is indeed known that Alexander's latter days were disturbed by a thorn in the flesh, a constant pain in the back of the head such as is known to accompany or to precede paranoia in certain cases. This is the explanation suggested by Lützow. But it is not necessary to resort to it. The insatiable, restless passion of conquest was enough to color the whole expression at times. The artist has seized on such a moment. Emphasis of the emotional aspects of the human countenance was the phase sculpture was passing through. The prominence of such a work as the Laokoön group, at a period not long subsequent, is what led Lützow to think of a Rhodian origin for our little bust.

Brunn has selected and analyzed the famous Vatican bust of Glaukos as a characteristic specimen of this tendency.[54] The aimless sadness, which finds expression in that splendid piece of sculpture, accentuates itself in less contained works, as in this Alexander, to a tension of the features sufficient to be taken as an indication of great physical suffering. From the extraordinary and unexplained resemblance of its features to those we have learned to recognize in the portraits of Alexander, a large triton's torso from Tivoli, in the Vatican Museum, the better serves to prove this thesis. But for its animal ears, the head of this piece might well be taken for the royal portrait itself. The expression of the triton's countenance is that of our bust. Less absolute, but nevertheless highly remarkable, is the portrait-resemblance noticed by Lützow in the sea-centaur carrying off a nymph, in the "Sala degli animali." Here, where an earlier age of art would have given the features an expression of coarse and triumphant hilarity more obvi-

[52] *Anabasis Alexandri*, I, 44.
[53] BLUEMNER, *Archaeologische Zeitung*, 1880, p. 162.
[54] Westermann's *Monatshefte*, 1885.

ously consonant with the situation, we have in the triton the same appearance of distressful suffering. In this case it obviously results, not from bodily pain, but from the straining spiritual tension of an unsatisfied, craving sentiment. Both tritons have, with the features of the royal portrait, the sorrowful upward cast of the eyes so noticeable in our terracotta, and observable, as Brunn has shown, in the Glaukos. The sentiment that pervades the mild features of the marine deity is the tender melancholy of an unobjective yearning. One can only suspect its amorous quality. Such an emotion would be too divorced from reality, perhaps, for such rude fellows as tritons, who are but marine satyrs, to experience. The emotion is occasioned in one by the inattainability, it would appear, of the object of his desire, in the other, by the unresponsiveness to his rough affection of that object, the struggling nymph in his arms.

The solution I would offer, to account for the strange resemblance between the actual likenesses and ideal embodiments of mythological conceptions, is the simplest possible. The individual type, once firmly grasped, became a common artistic property, which could be used to embody any idea that could be made to find expression through it. One of the prime achievements of Greek sculpture, in the age of the successors of Alexander, was the intelligent portrayal of barbarian ethnic types. The portraiture of Alexander himself, as of a prince of barbarian race, and of a conformation of skull very different, without loss of beauty, from the traditional straight-nosed pure Hellenic type, offered the same problem. Once solved, the type was employed for such subjects as the foregoing, where a certain un-Hellenic rudeness belonged to the nature of the conception: this rudeness belongs likewise to the Giants of the great Pergamene altar-frieze, many of which are so many posed Alexanders, and a copy of one of which has long been taken for the royal likeness it at once is and is not. Whether the large torso in the Louvre until recently known as Inachos[86] be really that river-god, or an unrecognized portrait of Alexander, as M. Reinach has endeavored to show, it gives us a good example of the actual or possible interdependency of the individual and the ideal in a similar field. This strange phenomenon, the reiterated employment of individual features in ideal creations, has sometimes been traced in the work of single artists. Its

[85] No. 253; in the "Galleria delle statue." No. 228.

[86] *Gazette Archéologique*, 1886, Nos. 7–8, pl. 22.

form in this case, the reappearance of a subject fairly exhausted by the portraitists in the undreamt disguise of a river-god, a sea-centaur, or the like, is unique in the history of art. After all, however, it is but a manifestation of the surviving force of that earlier artistic spirit which Alexander personally did much to break. To lend a prince the attributes of deity, the bolt of Zeus or the nimbus of Helios, was cheap flattery and weakness of imagination. The passing of Alexander's personality into the domain of the mythology of art is a process diametrically opposed to this, and purely Hellenic.

I desire to express my grateful obligation, for the facilitation of researches required in the preparation of this article, to the authorities of the Royal Bavarian *Antiquarium*, of the Paris *Cabinet des médailles*, and of the Italian museums in general, and my thanks in particular, for valuable assistance and suggestions, to Professors W. von Christ, F. von Reber, H. von Brunn, of München, to MM. E. Babelon and M. Prou, of the *Cabinet des médailles*, finally, not least, to Professor A. L. Frothingham, jr., the Managing Editor of this JOURNAL, and to my brother, Mr. George H. Emerson, who superintended the work of photographic reproduction.

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PAINTED SEPULCHRAL STELAI FROM ALEXANDRIA.

[PLATE XVII.]

Sepulchral stelai with various representations sculptured in relief have been recovered from ancient sites in such numbers that there is scarcely a collection of importance which does not possess examples: but, from the nature of the case, it is hardly to be expected that similar painted representations would descend to us in equal numbers, even if they had ever been employed with the same frequency. Painting is too evanescent to become a favorite where a lasting memorial is desired, unless it be used as mere decoration for sculpture, as we know was often the case. It is conjectured that the Attic stele of Aristion originally had a scene painted below the carved figure of the warrior; but the conjecture rests wholly upon the similarity presented by the Lyseas stele, found in its immediate neighborhood, upon which both the standing figure and the galloping horse below were simply painted: their presence was not even suspected till some time after the stele had been unearthed, when they gradually made their appearance under Loeschcke's persistent and well-directed efforts. The rarity of these paintings from Attika may be seen from the fact that in 1884 M. Pottier could refer to no more than 18 upon stelai and funerary urns (*Bull. Cor. Hellén.* No. 8, p. 459; *cf. Mitth. des arch. Inst. Athen.* IV, p. 36 *seq.*; V, p. 164 *seq.*; X, pp. 238–50, 328–33). Of these, only two or three belonged to the sixth century, the others to the fourth, or later.

The interest that is naturally excited by objects so few of which are known, has led me to make known to archæologists a series of stelai which do not possess the value of Attic origin, it is true, but are, nevertheless, of considerable importance from the place and period to which they belong, and from the nature of their discovery.

In an article published in the first number of this Journal (vol. 1, p. 18), under the title of *Inscribed Sepulchral Vases from Alexandria*, I described a tomb found among others at a depth of twenty to thirty

feet beneath the surface, near the sea, about a mile east of the present limits of Alexandria, Egypt. These tombs were "partly cut in the solid rock, partly built up. One that was discovered about a year ago had a rock-chamber 12 to 14 feet square, and contained as many as fifty vases, about thirty of which were in a good state of preservation and bore a few inscriptions. Beside the vases, this tomb contained also 'a number of tablets, with paintings badly preserved, and a few inscriptions.' These inscriptions are Greek. Nothing was found in the vases but ashes and small pieces of charred bones, and they were all tightly sealed with plaster when found. These vases are said to be of a poorer quality than those of the Pugioli collection. They are in this country, but still unpacked and I have not been able to see them. In July, 1883, in another tomb at the distance of a few rods from this tomb a vase was found containing a hoard of over 200 silver coins, all of which are declared to belong to the period of Ptolemy Soter and the early part of the reign of Philadelphos, according to the classification made by Mr. R. S. Poole of the British Museum."

A large number of these coins, as well as the contents of the tomb described, were secured at the time by Hon. E. E. Farman, for several years American Consul-General in Egypt, who visited the tomb, saw many of the objects removed, and brought the most important of them to this country. His large collection of coins, Egyptian bronzes and scarabs, together with six of the painted tablets above referred to, have been loaned to the Metropolitan Museum of Art in New York, and have been on exhibition there for some time. Other painted stelai, beside these six, were found disposed about the wall of the tomb, but their condition was so bad that it was thought not worth while to transport them hither. The six are of a lightish-yellow, fine-grained, calcareous stone, closely resembling that from Kypros. Their front surfaces are rather carefully smoothed, but all the others are roughly chiselled into shape, as if they were intended to be set against a wall, as they were found. In shape they resemble the ordinary sepulchral stelai, that of the Attic Hegeso for instance, with pillared front, architrave, pediment and three akroteria. Five out of the six bear inscriptions; one shows no trace of any. Of three of these inscriptions enough remains to show that there were apparently buried here at least three members of a corps of Galatian mercenaries, in the service of the Ptolemies, who occupied, with their families, a part of this Eastern nekropolis, which was devoted to them and similar military corps.

The names would indicate a mixed origin. The period to which the tomb belongs should not be far from that of its near neighbor where the hoard of coins was found; it probably was of the first half of the third century B. C., an attribution sustained by the forms of the letters (*A. J. A.*, vol. I, p. 31). Whatever Egyptian element there may have been in this group, the art and accessories of the stelai are Greek. It is not high art, it is true, and the general effect is greatly marred by time and accident; but there are some evidences of good drawing and fine characterization. The colors are in part fairly preserved, with some evident fading in the lighter shades, especially the blues. As in the case of the painted vases described in the article referred to above (*A. J. A.*, vol. I, p. 19), the colors are laid on a stucco-ground with which the stone is covered for the purpose, and in general the same methods may be said to have been employed in both. The stelai may be described as follows:—

I.—(PL. XVII) The outside measurements are,—width, 10 ins.; height, 15; thickness, about 3; panel within, 8 to 7¼ by 10, sunk ½ in. The space at top between the akroteria is sunk ½ in., the rest is left uncut. The pediment is painted red, the geison with a rough ornament of red and chocolate. The architrave bears a single line of inscription in red:

.....ΛΑ⁻ΗC

Within the panel (whose whole field is painted a dark lead color), to the right, stands a man, 8¾ ins. high, clothed in a chlamys of bright blue fastened on his right shoulder and falling below the knees. The exposed parts of the body, face, neck, right shoulder and arm, left hand, portion of right side and leg below knee, are painted a lightish-brown or flesh color; the eyes and mustache are black, as is also the hair. Paint about the head has disappeared in spots, especially in the hair, leaving bad outlines. The right hand is outstretched to receive a cup presented by a young warrior to left, 7½ ins. high, standing with spear reaching to top of field to left, partly concealed by body. The spear is black, as likewise the hair and eyes of the warrior, whose pure Greek forehead and nose are admirably executed: the eye deserves the same encomium. The hair is short and, in the main, well defined. The exposed parts of his body are of a dark brown, many shades deeper than that of the other figure. He is clad in a chiton which appears only by a corner above and behind the knee, all the front of the body being covered by a huge oval shield resting on the ground, before his right

foot, while the upper part rests against his chest. The main body of the shield is painted a dull blue, decorated toward the upper part by three more than semicircular lines of red, and the same on the corresponding part below. The centre of the shield was yellow, and there are remains of what was probably a Gorgon-head in black. The outstretched forearm of the warrior projects beyond the edge of the shield, as he offers to the deceased a two-handled black cup with a very long stem. That the first figure is the deceased is shown by his greater stature, in accordance with the usual custom of heroising the dead, and also by the presentation of the wine-cup as an offering to the hero. The old Spartan reliefs and the Lyseas stele represent the deceased as holding the cup, with the libation just received or to be received; typical, it would seem, of the yearly offerings to the dead (*cf.* Isaios, 2.46–7, 9.36; Gardner, "A Sepulchral Relief from Tarentum," *Journ. Hel. St.* 1884, pp. 105–42). In some of the Boiotian reliefs the libation is being poured into the cup (*op. cit.*, p. 119). It is interesting to see the present stage of the scene coming to us from Alexandria.

II.—Outside measurements, 16½ ins. by 10; panel, sunk ½ in., 7 to 6½ by 7. The akroteria are cut free and painted blue; the pediment is red; the geison has a coarse ornament, as in No. I. The architrave bears two lines of inscription in red:

..... ΙCΙΔΩΡΟC
..... ΓΑΛΑΤΗC

The field of the panel is painted yellow, and bears, to the right, the deceased, 6 ins. high, with reddish-black hair, habited in blue chlamys, as in No. I, with flesh tint of about the same shade. He reaches out his right hand and clasps that of a woman, 4½ ins. high, whose hair and eyes are reddish-black, the hair reaching to her shoulders. The front of her garment is of a dark brown, but on her right the arm and garment to feet are of a roseate pink. Behind her is a woman, of nearly the same height, extending her right hand upward toward the deceased, in farewell. Her hair and eyes resemble those of the first woman, her dress from neck to feet is pink, with a wide stripe of light blue from the girdled waist to the knees, and with brown stripes below and in front. Some long lines in blue and brown, above the heads of the women, may be shaped, dubiously, into ΙΑΙ, the barbarous exclamation of sorrow in Soph. Fr. 54. The whole work is coarse and careless, but there is some spirit and even expression in the face of the second woman, while the faces of the others are badly injured.

III.—This measures, outside, 16 ins. by 11¼ to 10¾: the akroteria are merely blocked out, as in No. I, and painted blue; the pediment is red. The architrave bears one line of inscription in red, completely preserved:

ΒΙΤΟϹ ΛΟϹΤΟΙΕΚΟΓΑΛΑΤΗϹ

Βίτος Λόστοιεκ ὁ Γαλάτης

Upon the yellow ground of the panel is represented the single figure of a warrior, so badly preserved that it is difficult to make out all the details, but he seems to be standing "at rest," holding erect, in his right hand, a long spear, resting it on the ground, and with his left hand his oval shield in like position, upright and free from his body, with the edge toward the spectator. The shield, as in No. I, reaches as high as his neck. The size of these shields is noticeable. The head of the warrior is badly injured, but there are some remains of brownish hair. His chlamys is blue, and the flesh is rather brown.

IV.—This stele measures 16 by 10½ ins.: its pediment has a cornice and mouldings wider than the preceding, but otherwise is similar in form and decoration. The architrave exhibits some faint traces of letters, but not enough to form into words. The main part of the pinkish ground of the panel is occupied to the left by a reddish-brown unbridled horse, which has thrown up its head and the fore part of its body, as if to free itself from the grasp of a man in front who has his left arm thrown around the neck of the horse, and his right hand lifted to seize him by the nostril. The horse stands 4¾ ins. high at hip, and is 7½ long to tip of nose. The man, 6¾ ins. high, is youthful, clad in a short chiton of yellowish-white material, girded with a dark sash in which is stuck what appears to be a knife or stick, and on his head, over reddish-brown hair, he wears a rounded conical hat. His flesh tint is swarthy, but not so dark as that of the cup-bearer in No. I. His profile, neck, and general attitude are excellent. Behind him stands a smaller male figure, 5½ ins. high, clad in a similar chiton, looking at the scene before him: his hair is blacker than that of the other. The attitude of the horse is very lifelike, and the head is drawn with much spirit: the ears are laid back, and the eye shoots out a vicious fire. One is reminded of the Alexandrian horse described by Theokritos in the *Adoniazousai* (xv. 53), *ὀρθὸς ἀνέστα ὁ πυῤῥός· ἴδ' ὡς ἄγριος.*

V.—The measurements are 29½ ins. by 19, and 5 ins. thick. This stele differs from all the others in having 4 ins. of the lower end cut down to fit into some support which should hold it upright. The colors

of the upper parts resemble those of the other stelai. On the architrave the remains of an inscription are still visible:

..... ΘΑΥ ....

The panel presents a scene of δεξίωσις including three persons. On the right stands a woman, 11⅜ ins. high, whose hair is black and short, but whose skin is of a light lemon color—lighter than any others in the series. A white garment falls with graceful sweep from shoulder to ankle, leaving the right arm bare, as also the left from the elbow, which rests in the folds of the mantle: her shoes are red. She extends her right hand and clasps that of a person seated on a chair without a back, whose height, as seated, is 10 ins. The hair of this second figure (or rather the space where the hair was) is a bright blue, the lips and ears red, the skin a light brown. A straw-colored garment covers the body from the neck to below the knee. The feet rest on a stool decorated with red, and some pink appears on the seat, behind which stands a third figure, 11½ ins. high, with right hand resting on the side of the sitting figure. The head has been badly rubbed away, and the surface of the stone destroyed. The right arm, much of the shoulder and breast, and the lower legs are exposed, showing a brownish skin: the garment is dark purple. In this stele alone does the ground of the panel exhibit two colors: all about the first figure, as far out as her extended arm reaches, it is of a deep lilac tint; the rest is very much lighter. From their garments, figures 2 and 3 would seem to be men.

VI.—This stele is 29 ins. by 16½. It has no inscription visible, and is the only one in which the columns have any capitals: they are here painted red, with a band of blue, an inch wide, below. The background of the panel is of a bluish tint. The scene consists of three figures. The central figure is apparently a woman, 10½ ins. high, as seated, facing to the left. Her body is wholly supported by an attendant, who stands behind, and her left arm hangs limp and powerless by her side, as if in the throes of death, with only enough strength remaining to clasp the hand of a figure standing before her. Her proportions are full and massive, and her body, naked to the groin, has indications of full breasts. Much of the scene is sadly blurred, but it appears to me to represent death in childbirth. Her skin is of a lightish flesh tint: about her hips rests a light lilac garment, and over her knees a reddish one: her shoes are black. Only dim features of the head can be distinguished. The attendant behind her, 10 ins. high,

has black hair, and a dark garment extending to the waist: below the girdle the white chiton is disclosed in a broad stripe, like an apron. The third figure, in front, 11 ins. high, is too badly injured to be described further than as wearing a light-brown garment.

The Museum of the Louvre contains three similar stelai, in the room devoted to Pompeian frescos. They are from Sidon, and have been described by Clermont-Ganneau, *Stèles peintes de Sidon* (*Gazette Archéologique*, III. 1877, pp. 102–115). In all the technique of manufacture they resemble ours closely, but they are coarser and less Greek, especially in the pedimental structure. They are supposed to belong to the Roman period. A few others found at Sidon are figured by Renan, *Mission de Phénicie* (p. 380, pl. XLIII).

Of the vases above mentioned as belonging to the Alexandrian tomb, those that were inscribed appear to have been broken into fragments, and I can only give the following as copied by Signor Pugioli in Alexandria:

ΘΗΡΑΙΔΑΣ
ΘΗΡΑΙΟΣ

ΦΙΛΙΠΠΟΣ
ΜΑΚΕΔΩΝ

ΑΠΟΛ
ΛΩΝ

ΠΕΡΙΣΤΕΡΑ

It is easy to see that the tombs in which these stelai were found are those of Greek mercenaries in the service of the Ptolemies, and their families. The men represented in the paintings are warriors, and the tombs are to the east of the city, where the foreign garrison was placed. In this case, the deceased were Galatians, as we see from the inscriptions, and, as the Galatian corps was especially numerous in the reign of Ptolemy Philadelphos, this fact would seem to confirm the inference drawn from the coins as to the age of the tombs. This group would then be slightly earlier than the hypogeum whose inscriptions are given in the last number of the *Revue Archéologique*[1] by Neroutsos-Bey: the latter belong also to the Greek mercenaries, especially Kretans, and date from the close of the third and the first half of the second century B. C. From the slight indications in the *Revue Archéologique*, it would seem that several of the stelai, on which are the inscriptions there published, were painted like those here illustrated.

[1] Mai-Juin, 1887: M. NEROUTSOS-BEY, *Inscriptions Grecques et Latines recueillies dans la ville d'Alexandrie et aux environs.*

NOTE.—I take advantage of the opportunity to correct a statement made in the article on *Inscribed Sepulchral Vases from Alexandria* in this Journal (vol. I, p. 19). In speaking of the painted vases, I said, "Another bears a Medusa's head with wriggling snakes, supported on the left by a helmet with eagle's head as crest, on the right by a cuirass." For "eagle's" head, read *griffin's*, which it undoubtedly is. In this respect, the helmet resembles that of the tetradrachms of Philip V of Makedon (Baumeister, *Denkmäler*, p. 952, *Abb.* 1102), but otherwise it is differently shaped and is not winged. The Medusa-head and griffin doubtless refer to the descent from Perseus, claimed by the Makedonian royal family. I observe that Mr. Head, in his *Historia Numorum* (London, 1887, p. 205), describes the helmet of the Philippian coin as "ending at top in eagle's head." But the hornlike projections of the head, on the coin as well as the vase, are too prominent for the eagle.

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THE BOSTON CUBIT.

In the Way Collection of Egyptian Antiquities, Museum of Fine Arts, Boston, Mass., is an old cubit measure of the XVIII dynasty. It is a scribe's or artist's pallette of wood, length 15 inches, width $1\frac{1}{8}$, thickness $\frac{1}{2}$ inch. On the face, at one end, are three incisions for paints about one inch square. In the middle is a slot, undercut for the brushes. The edges of the paint-cups show much wear from use. Unlike some half a dozen others which lie beside it, one edge is scored with lines running crosswise at irregular intervals, apparently cut for the artist's convenience in measuring his work. I have carefully compared these intervals with the standard cubit as determined by Sir G. Wilkinson and Mr. W. M. F. Petrie, and the double-line scored cubits preserved in the Turin and Louvre Museums.

The Turin cubit is	20.611	inches.
The Louvre cubit is	20.591	"
The Nilometer cubit (Wilkinson) is . .	20.625	"
The Gizeh cubit (Petrie) is	$20.632 \pm .01$	"

The Turin and Louvre cubits are divided into 28 digits numbered from right to left. At the 15th digit a single line extends across the face of the rule, at the 24th digit a double line; thus dividing the rule into three unequal parts, a right hand section of 15 digits, a middle section of 9 digits, and a left hand section of 4 digits. But each of these 4 is longer than a digit at the right of the double line; strictly speaking, these 4 are not digits, but make the palm or hand-breadth of the cubit.

The value of the Boston cubit as a witness of the Egyptian standard of measures rests in the fact that its scored lines give the three principal divisions of the Turin and Louvre rules: viz. the hand-breadth, the middle or 9 digit section, and the right hand or 15 digit section. The first scored line on the Boston rule, at the handle end, is $3\frac{1}{8}$ inches from the end and marks the hand-breadth. The second scored line is $6\frac{9}{16}$ inches from the end and marks the 9 digit section. The space between these two lines is 55–16ths or $\frac{1}{8}$ of 20.625 inches. On the opposite end

of the palette a 2 digit space is scored off, also a 6 digit space. Three times the 2 digit space equals the 6 digit space, and one and one half times the 6 digit space equals the 9 digit space. The 9 and the 6 combined make the 15 digit measure of the Turin and Louvre rules. The 6 and 9 digit measures give a standard digit .72916 + inch. The full cubit 20.625, less the hand-breadth 3.125, gives a standard digit .72916+, for the 24 digit section. A standard cubit constructed by the divisions scored on the Boston rule would be:

The hand-breadth	3.125	inches.	}	
24 { 9 digit section . . .	6.5625	"		
24 { 9 " " . . .	6.5625	"	}	20.625
24 { 6 " " . . .	4.375	"		

The actual length of the Boston rule is $15\frac{1}{32} \pm .01$. Taking .72916 as a standard digit, the palette is equal to 20.625 digits, that is, it represents by its full length the standard cubit on the scale of one digit to an inch, while by its scored lines it gives the standard divisions of the full cubit, viz., the hand-breadth, the middle or 9 digit measure, and a 6 digit measure or one quarter of the 24 digit section. One other scored line marks a quarter digit.

The evidence is decidedly in favor of the opinion that the scored lines on the Boston rule are exact, according to the standard cubit of Gizeh as determined from actual measurement by Mr. Petrie, and the Nilometer cubit as measured by Sir G. Wilkinson. Although the scored lines may have been cut by the scribe or artist who used the pallette, the harmony of the divisions indicates that they were cut by the standard cubit. It may justly be inferred from these facts that the Boston rule, being in exact agreement with the cubit of Gizeh and the Nilometer, is older than the rule of Turin or of the Louvre, if indeed it be not the oldest known cubit measure in existence.

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EGYPTIAN ORIGIN OF THE IONIC CAPITAL AND OF THE ANTHEMION.

[PLATES XVIII–XXIX.]

THESIS.—I. The Ionic capital is of Egyptian origin, being derived from a conventional form of lotus. Lotus forms on Kypriote vases, compared with Kypriote Ionic steles and capitals, offer the related demonstration. The Assyrian Proto-Ionic is derived from Egypt.

II. The anthemion and the Greek palmette are developments from Egyptian lotus motives. Demonstration from vases of Rhodos and Melos.

III. The Rosette is a distinctively Egyptian lotus motive. Demonstration from the monuments and from botanic forms. The Assyrian rosette is derived from it.

IV. An Egyptian lotus-palmette precedes the Assyrian palmette, which is derived from it. The original form is a combination of a voluted lotus with the lotus-rosette. Demonstration from Egyptian transition motives.

V. The Assyrian "Sacred Tree" belongs to a cult in which the lotus plays a part, and is a lotus "tree."

VI. The "egg and dart" and "egg and leaf" mouldings are derived from an Egyptian lotus border. Demonstration from Kypros and Naukratis.

VII. The geometric triangle motives of the archaic Greek vases, and of their Phœnician predecessors, are lotus derivatives. The geometric quadrangular designs of Kypriote vases are sometimes rhomboids derived from geometric aspects of the lotus, and sometimes are formed by various combinations of lotus triangles. With rare exceptions, if any, all floral forms of the early Greek vases are lotus derivatives, and the Mykenai spirals are probably of the same origin.

I was led to the results announced in this paper, some of which are probably novel, by Mr. Clarke's essay on "A Proto-Ionic Capital from

the site of Neandreia" in Vol. II, No. 1, of the *American Journal of Archæology*. This essay contains an exhaustive review of the literature of the Ionic Capital up to date, and offers a valuable basis and starting point for observations throwing new light on the origin of the Ionic Order. The authorities there summarized unite in considering certain Assyrian reliefs as pointing to an Assyrian origin of the Greek Ionic capital. The view, held by Semper, which considers the volutes of the Assyrian palmette to be the starting point of the volutes of the Ionic, seemed ultimately confirmed by the capital from the site of Neandreia, and by its connection with the palmette-volute designs of the ivories from Nineveh, illustrated by Mr. Clarke. The observations which I have to offer do not antagonize an influence on Greek art of the Assyrian Proto-Ionic, but they lead us to consider its influence as purely secondary and reactive, and oblige us to look to Egypt for the origin of both Greek and Assyrian Proto-Ionic forms.[1]

For many years I had been familiar with forms of the lotus-flower (PL. I, Nos. 1–5) on certain Kypriote vases which offered such striking analogies with the outlines of the Ionic capital that I could but suspect a connection between the two. Mr. Clarke's essay led me to examine the relation more closely.[2] In the necessary examination of the literature on Kypriote art I found that, without reference to these vase designs, Georges Colonna-Ceccaldi had already suggested that the Ionic capital was derived from the lotus. The suggestion occurs in relation to a Kypriote stele (PL. I, 11) in an article of the *Revue Archéologique* (vol. XXIX, p. 24, 1875) on the sarcophagus of Athienau republished in Colonna-Ceccaldi's collected essays—*Monuments de Chypre*—a posthumous publication. He suggests that the volutes of this stele found with the sarcophagus represent petals of the lotus, and that the introrse scrolls represent the stamens.[3] In a subsequent

[1] It is possible, however, that Syria developed that particular transitional form of the original Egyptian motive which has left its mark on the triangle or triangles placed between the volutes of certain Kypriote steles and capitals: this will be presently specified and considered.

[2] It was not however till the close of July, 1887, that I began the observations recorded; the necessary and related studies have been made in the following two months. Doubtless many references have escaped me, and observations in works not accessible till the moment of going to press show that abundant additional demonstration of the positions taken may be offered.

[3] "Un motif de chapiteau qu'on retrouve bien souvent et qui n'est autre que la traduction architecturale de la fleur de lotus. Ici, les pétales sont representées par

article of the *Revue Archéologique* (vol. XXXIII, p. 176, 1877), *Une patère de Curium*, he suggests that the intermediate triangle of this stele represents the ovary, but that triangles in other capitals may represent petals. In this latter case he does not say what the volutes would represent.[4] These suggestions of Colonna–Ceccaldi, made in a discussion about the bark of Isis, attracted no notice even from authors who have frequently quoted his writings, like Chipiez, *Origines des Ordres Grecs*, Perrot and Chipiez, *Chypre, etc.*, who are among the authorities quoted by Mr. Clarke.[5] Colonna–Ceccaldi's erudition and conscientious exactitude of description have made his writings quoted authority, but his results in matters of interpretation have never made their way into standard works. Hence we understand the indifference of the authors noted to these suggestions, made casually without elaboration and without proof, in essays devoted to other subjects. His intuition was correct, in the present instance, as to the connection between the Ionic capital and the lotus, but his interpretations were erroneous, except in the point relating to triangles and the petals, and here by the suggestion that one triangle represents the ovary, and that the volutes also represent petals, he had weakened his case by supposing that similar forms might represent dissimilar things.[6] We shall see that the volutes of the Ionic are derived from the down-turned leaves of the lotus calyx

les volutes, les étamines s'élancent jusqu'à l'abaque, et le pistil est remplacé par deux Sphinx affrontés, mis là sans doute pour symboliser la double énigme de la fécondité et de la conception.

"L'ordre ionique, l'ordre aproditique par excellence, dérive de là très probablement—Cf. les chapiteaux Chypriotes du Louvre."

[4] "Par exemple on voit que la barque, recroquevillée aux deux bouts, n'est en somme que la réunion de deux étamines de lotus à grandes volutes . . . ; l'ovaire est figuré sous forme de chevrons superposés, la pointe en haut, deux, quatre ou six, et refermant dans leur sinus un bouton de fleur renversé (?) (*sic*) seul ou accompagné du croissant, aussi renversé et dans la cavité duquel est le disque solaire. Sur six chapiteaux de Golgos toute-fois, des chevrons gravés au trait et divisés par couples me paraissent représenter les pétales de la fleur de lotus."

[5] For those who are familiar with Colonna–Ceccaldi's writings it is not necessary to observe that his Oriental studies and sympathies prompted him to a systematic use of symbolical interpretations in matters of Kypriote art which are quite at variance with the tendencies of Greek art, as well as sometimes at variance with the rather mercantile mythology of Phœnician traders, and consequently unavailable at the points where Greek art touches the Oriental.

[6] Colonna–Ceccaldi's symbolizing methods are characterized by his suggestion as to the concentric rings on Kypriote vases, which he considers designs in perspective of a female breast: *Monuments de Chypre*, p. 279.

(*fig.* 1), and that the petals do not curl downward like the calyx leaves. In the stele noted and in similar steles there is no evidence to connect the upper portion with the stamens of the flower, and there is considerable evidence to the contrary. This upper portion of several Kypriote steles is a late Phœnician modification of a form subsequently to be explained. At all events these steles are only a Kypriote survival of Proto-Ionic forms subsequent to the actual development of the Ionic capital. The sarcophagus of Athienau with which *fig.* 11 was found is not earlier than 500 B. C.

A much more formal, explicit, and extended announcement of the Egyptian and lotiform origin of the Ionic Capital was made by M. Marcel Dieulafoy in his work *L'Art Antique de la Perse*, (III^ième^ partie, *La Sculpture Persepolitaine*, pp. 34–55). This work, which appeared in 1885, is more recent than anything published on the Ionic Capital, excepting Mr. Clarke's essay, and preceded it so directly that his failure to refer to it is easily explained. I am not aware that the views of M. Dieulafoy on the Ionic Capital were made known by reviews of his book: they did not come to my notice until my paper was ready for the press. M. Dieulafoy takes for his starting point that form of Egyptian Capital which is figured at PL. IX–4. He supposes the volutes of the Ionic to be developments from lotus petals represented as curling downward under pressure from above. The central portion of the design is interpreted to represent the ovary.[7]

The view taken corresponds in elementary points to that announced by Colonna-Ceccaldi. After the lotiform origin of the Ionic Capital is universally accepted, the interpretation of individual details would probably not be considered a matter of vital importance. Pending this universal acceptance, it is desirable to present an interpretation which compels it and makes it necessary. On this account, I shall return briefly to M. Dieulafoy's interpretation after my own has been offered. These scholars were led intuitively to a correct result and, starting from this result, they offered the most available interpretation of an ultimate conventional form. On the other hand, if we start from the natural form of the flower itself, as it is represented on Kypriote vases, it appears as if a more convincing demonstration can be obtained

[7] "En posant au-dessus de la fleur un abaque rectangulaire les pétales s'écrasèrent, se retournèrent légèrement sur eux-mêmes et laissèrent apercevoir, en s'ouvrant, l'ovaire placé au centre de leur corolle. Entre la corolle et la tige se distinguaient les enveloppes foliacées du calice;" p. 39.

—one which defines the result not only as a fair probability but also as an unquestionable fact.

The actual relations of the lotus flower to the Ionic capital are indicated by designs on certain Kypriote vases in the Metropolitan Museum of Art, which are said by the Museum catalogue of pottery to come, generally, from the neighborhood of Ormidia (PL.* I, 1–5), and by others in the Lawrence-Cesnola Collection, published by Alexander di Cesnola (*Cyprus Antiquities*, photos. 10 and 11): see also his *Salaminia*, p. 255, fig. 242. Certain Kypriote vases, on which the lotuses with volutes appear, have been published, turned in such a way as to conceal the flower on the neck of the vase (Perrot and Chipiez, *Cypre*, p. 699). Aspects of the down-turned and downward curling calyx leaves are seen on the Kypriote vase published by Ohnefalsch-Richter (*Jahrbuch d. arch. Inst.*, 1886, pl. 8). I do not know what the European Museums may offer, but the similarity of the vases with designs showing the curled calyx leaves to the rest of the Græco-Phœnician pottery of the New York Museum makes it probable that any collection of Kypriote vases might exhibit similar examples.[8]

For students to whom the lotus flower in actual growth is not available for comparison the easiest reference is to the design in the French *Description de l'Égypte; Botanique*, pl. 61, but this design, republished in Perrot's *Égypte*, p. 577, does not show the down-turned calyx leaves, as I have been able to observe them in all varieties of the Egyptian lotus—white, blue, and rose-colored,[9] which are cultivated in

[8] Two vases showing the lotus flowers with calyx-leaves in volutes, were roughly and inaccurately published in colored drawings by LENORMANT (*Gazette Arch.*, vol. VIII, pl. 14, p. 97), as being in the New York Museum. It does not appear that Lenormant had seen the originals. Two of the New York vases published by DUMONT et CHAPLAIN show the lotus volutes (*Les Céramiques de la Grèce propre*, p. 200, fig. 42, p. 203, fig. 45). The lotuses of these are better figured in this paper, PL. I–1, 5. The text of Lenormant's notice, about half a page in length, does not specify the designs as being of the lotus; he says "Les ornaments consistent en fleurons d'un style tout asiatique." The related text of Dumont et Chaplain uses the words "decor floral" (p. 201) and "décoration qui est melée d'éléments végétaux et géométriques" (p. 202), but does not specify the flowers as lotuses. The wonderful examples of the "Sacred Tree" on the vase published by OHNEFALSCH-RICHTER in the *Journal of Hellenic Studies*, vol. v, p. 102, will come under later consideration (PL. XI–16).

[9] The rose-colored lotus is now extinct in Africa. It continues to be found in Asia.

* *N. B. The references made, in the text, to the* PLATES *illustrating this article are to the number* within *the* PLATE, *which is that of the* article-series, *viz.*, I–XII: *the numbers* over *the* PLATE, *which are those of the* Journal-series, XVIII–XXIX, *are not referred to in the text.*

the fountain-basin of the park in Union Square, New York (*fig.* 13).[10] In the examples I have observed, which show this peculiarity, these calyx leaves are well separated from the petals of the flower when in vigorous bloom but have frequently only a slight downward curve in strong flowers, and they do not generally appear in those partly open, which is the usual Egyptian aspect on the monuments.[11]

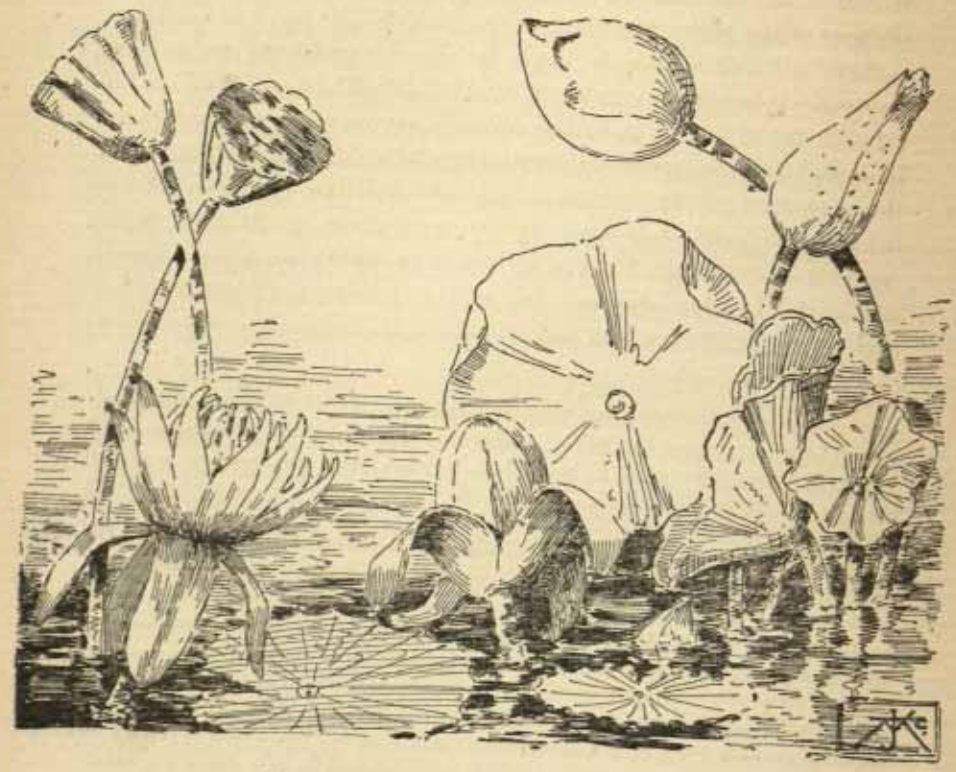

FIG. 13.—*Lotuses in Union Square, New York.*

[10] The common white pond-lily, which offers a close resemblance to the lotus flower, does not, like the Oriental and Egyptian varieties, rise above the surface of the water on an erect stem, and consequently in resting on the water does not show the down-turned calyx leaves.

[11] A few rapid examinations have convinced me that the phases of the down-turned calyx leaves are numerous. My impression is that all lotuses show this aspect in the later stages of bloom. On two occasions, when I observed the lotuses in Union Square, several flowers showed the calyx leaves in horizontal projection, clearly separate from the flower, as seen on the vase of the Lawrence-Cesnola Collection, in the eleventh plate, 2d vase, 3d line, without quite as much curl at the tips: they might

In the Kypriote designs (PL. I) the central petal is emphatically larger than the others in the open flowers, undoubtedly for decorative reasons or as the result of decorative habit. In some cases, for instance PL. II–5, the form is so schematic and the petals are so reduced in number that, observing the volutes and the enlarged central triangle as the most obvious features of the design, we have no great difficulty in connecting the form with certain Kypriote steles and capitals filling the rest of the plate.

Some allowance must be made for the extra conventional quality naturally belonging to forms in stone. It will be observed in the lotus flower of PL. II, as in the related form of PL. I–4, that the oblong shape of the panel on the vase from which it is taken has caused the expansion of the volutes on the sides and the depression of the intermediate petal triangles. The same tendency would exist in using this aspect of the lotus as a decorative motive for a capital used as a support under pressure. PL. II–1 will then be obviously an aspect of No. 11, if the upper part be removed. Fortunately we are not

be defined, also, as corresponding to those shown on the right hand flower published by OHNEFALSCH-RICHTER in the *Jahrbuch d. arch. Inst., loc. cit.* On the first day of our artist's visit he could find no flower showing this appearance, except the one on the left of the illustration (*fig.* 13) as drawn. When I went with him, on a second occasion, the only flower showing the phenomenon was the one in the centre of the plate, of a white European variety. In *fig.* 13 the leaves of the rose-colored variety, rising above the water, are drawn in smaller proportions and on shorter stems than in nature—in order not to increase the size of the cut. The leaves of the white and blue Egyptian variety float on the water. The seed-pods of the rose-colored variety, on the left of the cut, offer the true explanation of many so-called papyrus designs. The lines seen on the pod correspond to those of PL. VI–14, supporting a lotus bud. Variant forms of VI–14, are seen on Egyptian paintings, dotted on top with spots to represent the seeds and their cup-shaped receptacles. This observation has been made by Prisse d'Avennes, who seems, however, to accept forms corresponding to VI–14, as papyrus. Another series of forms commonly mistaken for papyrus are simply lotus flowers in conventional outline. Compare VI–5 with VI–4. It is well known that the natural papyrus is not to be studied in Egypt except in the gardens of one or two private cultivators, which are not open to travellers. A natural example seen in Bordentown, New Jersey, where the Egyptian lotuses also grow, shows the papyrus to be a feathery broom plant (see also cut in PERROT, I, 579). Prof. Allan Marquand, who has been in Egypt, and has visited the papyrus stream near Syracuse, generally quoted as the only spot where the Egyptian papyrus can be now seen, shares my skepticism as to the supposed papyrus capital, and his convictions on this point anticipated my own. PERROT, *Égypte*, p. 582, abandons the hypothesis of Mariette as to the papyrus and the campaniform capital, but does not concede it to be a lotus form. The campaniform capital is proved to be a lotus form by the lotus stele supporting a Horus in ROSELLINI, vol. III, pl. XXI. See also the lotuses of the lotus

obliged to depend on the external resemblance between the more simplified lotus form in the capital No. 1 and stele No. 11 and the pictures of the vases. Two intermediate connecting links are also links in the chain of proof. One of these is a Kypriote stele in the New York Museum, where the large volutes and intermediate lotus petals are associated in the stone carving (No. 2). The other is a stone capital, figured in Colonna-Ceccaldi's *Monuments de Chypre* as a "Dessin inédit" found among his papers after his death. It is indexed with the single word "Dali," followed by a mark of interrogation (No. 8). As the measurements are marked on the original drawing we must presume this capital to have an actual existence, but its present location does not appear. It may be in the Louvre. A Kypriote capital analogous to No. 1 is illustrated in Mr. Clarke's essay (also in Perrot, III, p. 116), and in connection (p. 17) he speaks of the "disturbing triangle" eliminated by the Greek development. There is another stele like No. 11 in the New York Museum and two related ones in the Louvre (Longperier, *Musée Nap. III*, pl. XXXIII; Perrot, III, p. 116).

"tree" with Horus hawk at VIII–3. For Egyptologists it is impossible to associate Horus with the papyrus. A similar association (Isis and Horus in the lotus "tree") defines the plant form of the Palestrina patera; PERROT, III, p. 97; and this is a conclusive demonstration for the form on the Mykenai sword. Both probably represent the seed-capsule with row of seeds above. The campaniform capital is also fully explained by VI–5, as related to VI–4. The supposition of OWEN JONES (*Grammar of Ornament*, pls. for Egyptian ornament), that the overlapping leaves at the base of the papyrus stalks are represented by the decoration at the base of Egyptian columns, is rendered completely improbable and unnecessary by the fact that overlapping triangular lotus petals are a constant feature of Egyptian decoration; and his illustration of the typical "papyrus" colonette (pl. X, Nos. 10, 11) is borrowed, as regards the capital, from a representation of the seed-capsule of the rose-colored lotus.

This digression on the papyrus is important as connected with the evidence that early Greek decoration is mainly based on the lotus. If Egyptian decoration were even more generally based on the lotus than is usually supposed, the explanation is simple for this peculiar aspect of Greek art. The plants on the Mykenai sword are lotuses, and not papyrus as suggested by ULRICH KÖHLER in the *Mittheilungen Athen. Abtheil.*, vol. VII, p. 241.

Mr. Charles Edwin Wilbour, whose wide knowledge of hieroglyphics and long personal intercourse with Professor Maspéro made his opinion of peculiar value to me, was somewhat startled by the view taken of the form VI–5, but on consideration could not think of any hieroglyphic matter to the contrary. The fact that the seed-pod of the rose-colored lotus is never seen by Egyptian travellers has caused mistaken views as to many forms in color, which mistake has then extended to the forms in stone. Probably all forms like VI–14, which have rayed lines not terminating in petals, represent the seed-pod. Those with dots appearing on a rounded top certainly do.

Perrot (III, p. 116) speaks of this triangle in the Kypriote capitals as a provincial irregularity or debasement.[12] Longperier, who publishes No. 1 in *Musée Napoleon III, ibid.*, also alludes particularly to the "chevron." As a reminiscence of the lotus petals, and as connected with the large central triangle of the Kypriote lotuses of PL. I, it assumes a new and decisive significance. Although, as observed already, it continues in steles and capitals which are subsequent to the beginnings of the Greek Ionic, it should serve as a warning not to ignore a progressive movement and development through Kypros of Greek forms in the VIII and VII centuries. The art of Kypros was provincial in the V century, and subject to the reaction of the developed Greek art; but history is full of cases in which a province, once the centre of an active and progressive life, falls behind, and perpetuates only survivals of its earlier art, or yields to later or reacting influences of the art it has helped to create. In this point of view, the history of the Ionic capital, as demonstrated through Kypriote forms, may be considered a finger-post for the study of Kypriote sculpture.

I am far from assuming an exact and direct connection between the specified vase designs, or others like them, and the capitals or steles of Kypros. The study of Egyptian lotus designs shows them to exhibit at one and the same time all possible varieties and combinations of conventional and unconventional treatment, like those on Kypriote vases.[13] In view of the many instances of Phœnician or Syrian Ionic capitals, some undoubtedly of early date (for instance in Prof. Frothingham's essay *A. J. A.*, III, 1–2, p. 57, PL. VII), we cannot avoid considering Syria as one spot where a Phœnician architectural lotus design of related aspect was used before it passed to Kypros. The exact relations of such a Phœnician design to Egyptian originals have still to be determined. But when the Ionic volutes are once seen to be lotus volutes (compare PL. IX–3, 4 with PL. X–1, 2), the abundance of Egyptian Proto-Ionic forms becomes immeasureably great. Syrian

[12] "Ce qui est moins heureux, ce sont les lignes aigües du triangle, qui separent a leur naissance les deux volutes inférieures."

[13] For instance, we have in IX–1 a conventional lotus bud supporting a naturalistic flower and two naturalistic buds; above these is a highly conventional form marked by the triangle between volutes and overlaid *at the base* with lotus petals independent of the conventional form. Above this again is a capital whose upper part shows an aspect approaching the Greek Ionic and devoid of intermediate triangle, while the lower part is covered with overlaid lotus petals and decorated with asps at the sides. The varieties of similar combinations are almost innumerable.

and Phœnician Ionic forms are common, and Oriental fixity of habit makes any anxiety as to dates of individual examples quite needless.

We come now to the Assyrian Proto-Ionic, which is clearly of Egyptian origin by Syrian and Phœnician transmission. I recall the fact that only one actual Assyrian capital has been published (Place, III, 35; Perrot, II, 216); and that the forms so frequently illustrated and quoted are imitative, and in relief decoration. In the case of the Sippara-tablet capital (PL. II–4) we find the tell-tale triangle. Mr. Clarke, misled by his Greek vase design, where a rounded connection appears between the volutes (*ibid.* p. 16), assumes that this has a rounded top, "a bud of semi-circular outline" (*A. J. A.*, II, p. 13), but his own design from the tablet shows the triangle, as does the heliogravure in Ménant, *Cylindres de la Chaldée*, p. 243. On the other hand, we are now prepared to understand that the rounded form connecting the volutes on the capital of Mr. Clarke's vase is nothing but an abbreviated triangle, as we observe it to be between the petals of the "Dessin inédit" of Colonna-Ceccaldi, PL. II–8. Some instances of the triangles connected with Greek Ionic volutes may best be quoted here as called up by the vase illustrated by Mr. Clarke: for instance; the handle of a bronze mirror from Olympia given on PL. II–7 (*Olympia*, pl. XXII, vol. IV); Ionic temple on a late Græco-Etruscan relief found near Perugia, PL. II–6 (Conestabile, *Monumenti di Perugia*, LXVI, XCII).

We have still to deal with the ivories quoted and illustrated by Mr. Clarke (*ibid.* p. 10). Many ivories of the series to which these belong are well known to be of pronounced Egyptian character—possibly or probably of Phœnician manufacture. Among these ivories we find two of special interest, both of Egyptian character (Perrot and Chipiez, II, pp. 222, 535): in one of these an Egyptian figure holds a lotus stalk rising from the lotus volutes, with intermediate petal triangle (PL. II–10); in the other, we see another form of the lotus volutes and petal triangle (detail on PL. II–3), surrounded in the original by stems of the lotus bearing abbreviated lotus palmettes.[14] If these scrolls be connected with those on the steles of the Louvre (Perrot, III, p. 116), we have the upper portion of Kypriote stele PL. II–11. These figures in Perrot explain the so-called "Phœnician palmette," *i. e.*, the upper part of the form II–9. This is an abbreviation of the upper part of

[14] Compare forms on curling stems at base of II–9 with later palmette explanation.

Perrot, III, fig. 52. This again is an abbreviation of the upper part of Perrot, III, fig. 53.[15]

II.

What relation do the capital from Neandreia and the ivories illustrated by Dr. Clarke bear to the observations presented? Though it be admitted that the ivories are under Egyptian influence and of Phœnician manufacture, the palmette over the volutes must still be explained. It might be supposed that, under Phœnician or Assyro-Phœnician mediation, the "Assyrian palmette" and the Egyptian lotus volutes had been combined, and that the capital from Neandreia was to be regarded as an ultimate form of a really Assyrian Proto-Ionic, which had grown out of the Egyptian, and had then independently reacted on Greek art. But there are aspects of the lotus on Greek vases from Rhodos and Melos which show this supposition to be untenable. Before comparing the lotus forms of Melos and Rhodos it may be remembered that these two islands were the most important seats of Phœnician settlements next to Kypros, after the time when the Phœnicians had been otherwise generally expelled from their settlements in Greek territories. However, many of the Rhodian vases so clearly resemble Greek pottery from Naukratis[16] that the Rhodian specimens in question cannot well be dated, on this and other grounds, before the middle of the VIII century B. C., from which time[17] Greek colonies in the Nile Delta, if not at Naukratis, may be presumed to have exercised an influence on the Greek pottery of Rhodos, and to have exported to other Greek settlements their own vases.[18] Let

[15] M. DIEULAFOY, in his lotus Ionic theory, has exactly reversed the true state of the case as regards the Egyptian capital, IX–4, by considering the volutes as petals and the triangles as calyx leaves. In this case, the triangles are an independent decoration of conventional lotus petals, without any relation to the appearance of the entire natural form. M. DIEULAFOY says of II–1 (p. 44): "Dans les enroulements du chapiteau phénicien on retrouve les pétales de la fleur de lotus; dans le triangle placé a sa base, les envelopes foliacées du calice que des imitateurs maladroits prirent à tort pour le prolongement des volutes." At page 39 he says of II–3: "Au nombre des ivoires d'origine Egyptienne retrouvées à Nimroud se trouve une plaque où sont reproduits à la fois la fleur de lotus avec ses pétales droits et retournés, c'est-à dire sous les deux aspects où elle se présente séparément dans la plupart des monuments." The two sentences affirm contradictory views of the central triangle.

[16] GARDNER in *Journal of Hellenic Studies*, VIII, I, p. 119, pl. LXXIX: and the fragments in *Naukratis I*, published by the Egypt Exploration Fund.

[17] See KROKER's paper in *Jahrbuch d. k. deutschen Archäologischen Instituts*, 1886. All of Kroker's results point in the direction of this essay.

[18] Probably this entire subject may appear in much clearer light after the publica-

it be admitted that the vases in question from Melos are earlier than this time, as their date is not yet fixed (Conze, *Thongefässe*); and the progressive relation from Kypros to Rhodos and from Rhodos to Melos (we shall see also from Melos to Attika) is not disturbed.[19] It is a matter of general knowledge that, in the progressive action of Egyptian and Oriental art upon the Greek, there was a development of various local schools of art, and that these, subsequently to their development, sometimes maintained the local character corresponding to an earlier style, after this had reached a higher stage in quarters more closely connected with the final centres of Greek art. Thus the Kypriote Greek pottery apparently never lost its relations to the early stage of Græco-Phœnician development. So much is this the case that Duemmler (*Mittheilungen, Athen. Abth.*, 1886, p. 259), who has given, with Ohnefalsch-Richter, most exact attention to the questions raised by Kypriote pottery, does not seek to distinguish the Kypriote-Phœnician pottery from the Kypriote-Greek. He assumes that a Greek population originally settled Kypros, when it had no fixed art types of its own, and then adopted and continued those of its Phœnician neighbors. A parallel state of affairs as regards a continuation of local styles may be assumed for Rhodos and for Melos with the following distinction. The more closely we approach the mother country, or the Greek element proper, in geographical relation, the more defined will be the Greek transformation toward the tendencies of independent Greek art in the Egyptian or Oriental form. The less the local population is subject to contact by residence with masses of foreign settlers, the less will its local art-forms show a foreign element. In the case of early Greek vases, wherever found, there are two possibilities—importation or local manufacture. It is generally admitted that the Melos vases belong to a local centre (Conze). The Rhodian vases undeniably represent, as regards the lotus flower, a more immediate relation to an original lotus form, as found on Kypriote vases, than do those of Melos.[20]

tion of *Naukratis II*, soon to appear. A letter from Gen. C. G. Loring, Director of the Boston Museum of Fine Arts, makes it appear that certain results offered in this paper relating to the Egyptian origin of the Greek palmette have already been reached by him from the study of the Naukratic vase fragments in Boston.

[19] They are presumed to be of the VII cent., as appears by reference in DUMONT et CHAPLAIN, p. 220; to articles by CONZE, *Bullettino*, 1861, p. 9; and by DE WITTE, *Rev. Arch.*, 1862, t. VI, p. 403.

[20] The reasons are apparent why the forms are less Grecianized; for the Greeks both of Egypt and Rhodos were more permanently subject to foreign influence at a later

In considering the various aspects of the lotus designs of Kypros, and before making comparative observations for Rhodos, Melos and Attika, we are not to forget the much earlier Egyptian lotus motives abundantly illustrated by Prisse d'Avennes (*Hist. de l' Art Égyptien*).

It has been already observed that we find in the Egyptian examples, for instance in PL. IX–1, 2, just as in PL. I, a mixture of conventional with naturalistic aspects—the same connection of more or less naturalistic designs with conventional motives which originally must have been developed after the first naturalistic designs—and we have exposed in the subsequent Kypriote, Rhodian and Melian development the method by which the lotus spirals of Egypt (PL. X–1, 2) must have originally been developed. In the same way the heart-shaped ("herz-blatt") lotus motive of the vases from Melos (PL. IV–15) occurs, in more conventional form, on the ceiling of a tomb of the XII dynasty at Beni Hassan (PL. X–7). On the other hand, the lotus designs of Kypros do not exactly resemble any published from Egypt, unless it may be in lotus borders, and there is no reason why they should. They are pictures made by local potters and are interesting in the evidence they offer as to the general methods by which a conventional design develops. The tri-triangles (I–14, 15, 16; X–15, 16, 17; XI–20-25; XII–6, 10), with and without the little knob-shaped appendages which are ultimate rudiments of a lotus spiral (I–8-12) and which are then reapplied to designs having

time than those of Melos. The Greeks of Kypros had been permanently exposed to Oriental influences for many centuries. The native Greek element rose one point higher than the Oriental, in assertion of an independent character, but this Greek element undoubtedly exerted more influence toward the development of native Greek art, than a purely foreign influence could have done on Greek territories farther West. On this account, the Oriental Greek art of Kypros, however wanting in appearance of independent character, deserves an important place in the history of archaic Greek art. At the opening of the V century it may be conceded to have had already not only a provincial character, but also one without influence on the at that time more highly, or differently developed, art of the more western Greek territories. In the VI, VII and VIII centuries, the times of greatest prosperity and activity among the Greeks of Kypros, we have no right to consider them as we do the Kypriote Greeks of the V century when overpowered by Phœnician influences, and under sway of hostile Persians. As well judge Venice of the XVI by Venice under Austrian domination in the XIX century.

In the early part of the VI century Nebuchadnezzar's partial destruction of Tyre, at that time the dominant Phœnician city of the mother country for Kyriote Phœnicians, gave a remarkable impulse to the prosperity of the Kypriote Greeks (DUNCKER, *Geschichte des Alterthums*), which ceased with the Ionic revolt, about 500 B. C., in which they were concerned.

the independant spiral (I–1, 4), are most interesting;[21] so are the little flowers, with stems hanging from above the volutes, of I–1. The stems of similar lotuses appear as filaments in another design, I–4, and would be otherwise inexplicable if we had not this evidence.

In both Egyptian and Assyrian sculpture we have now the evidence that in natural progress the conventional form is later than the naturalistic, and this rule appears here to hold also in the history of ornament as applying to certain geometric patterns.

For the general possibilities of lotus development in almost any direction these comparisons are important; but in the comparison with Rhodian and Melian lotus patterns we have only to consider the Kypriote forms used already to demonstrate the origins of the Ionic capital (PL. I–1-5). Compare with these the lotus patterns, PL. III–1, 2, 3 (two from vases, of related character, in Salzmann's *Nécropole de Camire*; and one from a vase in the *Monumenti inediti*);[22] all of which vases I am inclined to designate as of Naukratic or Græco-Egyptian style, after comparisons with fragments of pottery in *Naukratis* and with colored fragments given by Ernest Gardner (*Jour. Hellenic Studies*,

[21] Transitions to the rounded appendages of PL. I–9 are seen at 6, 7. I–10 shows the step to the knob of I–4 by "action in return." The knobs and the rounding lines about them of I–14 elsewhere disappear, leaving a geometrical triangle, as in X–17. PL. I–15, a lotus upside down, forming part of a border of the neck of a vase, is a step toward X–15, 16. PL. I–20 shows a phase of triangular decoration of the last stage but one from a lotus design. There is only one more stage; it may be observed in the Lawrence-Cesnola photographs and is very common in the Metropolitan Museum, namely, bands of lines, as seen in XI–20, XII–9, having knobs on the outer sides which are borrowed from knobbed lotuses. For instance, in XII–7 there is the reminiscence of the lotus volute (as derived from XII–5, for example) at once on the lotus and on the triglyph like bands on either side of the bird. At XII–8, the knob has left the flower and is only seen on the bands. XII–9 is from a vase on which it is the only decoration. PL. I–8 is a lotus tree, *i. e.*, a "Sacred Tree," as will subsequently appear. I–11 shows buds, attached above and below the knobs. At I–17 we see buds growing from a flower. I–12, 18 are partially opened flowers, having petals rounded at the top, an important point in connection with the position hereafter taken that the Greek palmette may be derived from the lotus form alone rather than from the lotus-rosette (palmette) combination found in Egypt. At I–19 we see the calyx leaves about to fall from the flower. I–21 is a highly typical lotus form which assists to specify forms found elsewhere which, from floral appearances or on botanical grounds, might be almost anything else. Compared with I–15, turned upside down, the transition is clear, the triangles intermediate between centre and sides being omitted.

[22] References are entered as far as possible directly on the plates, and where this is done are not repeated in the text.

loc. cit.). For convenience of comparison a Kypriote lotus is figured at PL. III–4. It is clear that the patterns of Nos. 1, 2, 3 are a more stylistic and a more Grecianized expression of the Kypriote lotus patterns. Turning to the lotus patterns on vases from Melos on PL. IV, and in the first instance to Nos. 1, 2, 3, these are again related to those from Rhodos, as those from Rhodos are related to those from Kypros. The first three patterns of PL. IV are still more stylistic, still more Grecianized, expressions of the Rhodian forms. In PL. IV–1 the petals are triangular; in 2 they assume the palmette aspect; in 3 the palmette aspect is fully developed.[23] No. 11 contains the elements of the anthemion in a form related directly to No. 3. No. 16 is an elementary expression of all Greek scroll designs, and may be compared with X–1, 2. It leads us back to the variant III–8, which is simply a refined expression, at a later date, of IV–11. It is clear that IV–15 is a variant of IV–3 (middle portion) and of IV–11. From IV–15 we pass without difficulty to V–6, hitherto considered a form of ivy. V–11 is another variant. The *herzblatt* ("heart-shaped leaf"), V–6, appears reversed in IV–9, which also thus becomes a lotus derivative.[24] IV–5, 7 and 8 are from early Attic vases, and exhibit rude imitations of Melian or similar forms.[25] Phases

[23] Whether the palmette of IV–2 develops directly from a form like III–1 and 2, or whether it comes from an overlaying influence of the Egyptian and Egypto-Phœnician palmette, subsequently to be explained, is possibly a debatable question. Prof. Allan Marquand has suggested the latter hypothesis and, as it may occur to others, I will consider it here and recur to the question again. There is no doubt that rounded petals appear in Kypriote lotuses, I–12, 18, which do not offer any suggestion of a palmette influence and I presume that the aspects of later Greek decoration in vases are explained, in the rapid execution of decorative borders, *etc.*, by a brush stroke which was naturally heavy at the start and narrowed to a point as it closed, producing the rounded petal form. We have, in III–1, 2, aspects of a lotus pure and simple, produced evidently by a symmetrical filling in of intermediate spaces of a form like III–4, simplified like I–21, but retaining the volutes. No palmette intermixture need be assumed between III–4 and III–1 and I do not see why any is required between IV–1 and IV–2. Of course the way is perfectly clear from IV–2 to IV–3 and from IV–3 to IV–11. As it will appear that the original palmette is also a lotus the question is not one of great importance.

[24] This design appears on a vase, published with others, by BÖHLAU in the *Jahrbuch d. Archäolog. Instituts*, 1887, pls. 3, 4. From these plates are taken IV–5, 7, and 8 (all marked "B." 1887.) Motives like IV–9, on objects from Spata will be familar to students (*Bull. de Corr. Hellén.* vol. 2, pl. XV–1, 3). See also the familiar Mykenaian motives on plates X–6, 10. Compare the Stele from the Sanctuary of Artemis Limnatis, in SEMPER, *Der Stil*, II, 421. One of the borders of the Amathus sarcophagus relates to IV–15 (*Descriptive Atlas of Cypriote Antiquities in the Metropolitan Museum*, I, pl. CXLIX).

[25] Nos. 5 and 8 are related to 11; No. 7 is an aspect of 14. Patterns similar to 14

of the Proto-Ionic appear in IV–10 and 13, and these again are derivatives of such forms as are seen on the shield, III–6. These latter forms become lotus derivatives by the relation to the Kypriote II–5.[26] III–5 is from the same vase as III–6, and shows an exaggerated phase of the triangle of III–4, combined with the lotus spiral IV–16. IV–17 is a reminder of the constant appearance of ordinary lotus borders and lotus forms in connection with those which are more remote, and it will presently be observed that the constant presence of "rosettes" with these patterns is an allied lotus phenomenon.

A curious aspect of the lotus triangle and volutes is offered by the funeral stele on a vase published by Benndorf, V–8, which may be compared with X–12.[27] The designs of PLATE V have been generally chosen to exhibit in developed Greek art the more palpable reminiscences of its lotus origins. Nos. 2 and 4 are terracotta motives of a late period; 2 is a palpable lotus-anthemion; 4 has the Proto-Ionic triangle in two aspects; 5 is a palpably reminiscent form, or combination, of the lotus-palmette; 9 is a reminder of the constant association, in later art, of lotuses with developed palmettes, but with a form of the anthemion which is partially archaic. In the Græco-Etruscan art, to which this design belongs, the reminiscent archaic aspect of lotus derivatives will be found on examination to be very general. An instance is offered by VII–11, the foot of an Etruscan cist of the III century B. C., or later. I presume that V–4, of Græco-Roman art, is to be explained through this Græco-Etruscan characteristic.[28] VII–11 shows a reversed form of lotus volutes as compared with VII–12, from the Grotta Campana, which ranks in antiquity with the Regulini-Galassi tomb: compare the lotus on the sphinx head, VII–6, from the Regulini-Galassi tomb. The reversed aspects of lotus volutes, where both turn inward toward a common centre, is remark-

have already been designated by BIRCH as "a sort of trefoil lotus" (*Pottery*, p. 184), but he did not advance otherwise in the direction which this observation might have suggested.

[26] III–7 becomes intelligible when turned upside down. The elemental form then appears as that of IV–11, with the outward curving lower lines produced in curve till they meet one another over the palmette. Again, looking at the design III–7, held upright, the intervening palmettes resemble those in III–8. It is only a question of scale.

[27] An unbroken example is given by FURTWÄNGLER and LOESCHCKE in *Mykenische Vasen*, pl. XXXVI–364, where the streamers of the stele are conceived as serpents.

[28] A related fact is the aspect of the Tuscan Doric, noted by Mr. CLARKE (*A. J. A.*, II, 3, p. 267) as a Proto-Doric survival.

ably illustrated by the Kypriote vase published by Ohnefalsch-Richter in the *Journal of Hellenic Studies*, v, p. 103. It also appears in early Egyptian examples like VII–8.[29] The introrse scrolls of the so-called Phœnician palmette (*e.g.*, upper part of II–9) are hence derived. To return to other illustrations of PLATE V: the vase motive, V–7, is chosen as a general type of the connections between the Greek anthemion and the lotus, leaving the architectural examples to suggest themselves.[30]

It is clear from the foregoing that the capital from Neandreia does not belong to a necessarily or probably Assyrian Proto-Ionic. Lotus triangles and lotus palmettes are interchangeable. Both apparently represent the petals, or rather are derived from them. An aspect of the Neandreian capital appears IX–3 (XVIII dynasty), and may be frequently noticed on Greek vases.[31] As regards the Egyptian Proto-Ionic form just quoted, and many others, it is to be presumed that the Egyptians had originally developed their lotus spirals, as the relation of Kypriote, Rhodian, Naukratic, and Melian forms shows that the Greeks subsequently did: compare X–1, 2 with IX–3. The direct influence of the pure Egyptian motives and of the Phœnicianized Egyptian motives was evidently strongest in the earliest periods of Greek history, as shown by the Mykenai spirals and other decorative aspects of the "Mykenai culture."[32] Two things are clear: Greek ornamental art developed from the lotus motive: Egyptian art shows parallel results as regards the lotus spiral, at much earlier dates.

It should be observed that the detail represented by IX-3 appears, inside a spiral motive (in outlines like the Ionic of Bassai), and that, on the same page of Prisse d'Avennes, an exactly similar spiral design exhibits the spirals starting from lotuses as in X–1, 2.

III, IV.

The query, What has become of the "Assyrian" palmette and of its supposed influence on Greek art? must now be met. Is it not possible

[29] PRISSE D'AVENNES, "Choix de Bijoux," XVIII dynasty (?), and "Ornam. des Plafonds; Legendes et Symboles," XVIII dynasty.

[30] V–10 appears to show the anthemion rounded petals on a palpable lotus, but it may be a case of rosette association to be presently explained.

[31] Notably GENICK and FURTWÄNGLER, *Griechische Keramik*, XVII, and ZANNONI, *Scavi della Certosa di Bologna*, LXXIX.

[32] The independent Greek art development, beginning in the VIII and VII centuries, appears to have travelled a road which the Egyptians had apparently left before the evidence of their monuments begins, but Egyptian pottery may yet be found showing the curled calyx leaves.

that it reacted on and over-lapped the lotus palmette and mixed with it in such a way that the two cannot be separated? I answer that the so-called "Assyrian" palmette (VII–9, 13, 14) does not appear on any archaic vase in the large New York collection. It does not appear elsewhere on any published vases showing the archaic lotus palmettes. This is one answer.[33] Another requires more space, but is quite definite. There is an Egyptian lotus palmette of obviously Egyptian origin, and antedating the known Assyrian palmettes by at least one thousand years. This Egyptian motive is found in numerous Phœnician examples and it appears to be the original form of the so-called Assyrian palmette. There is scarcely any evidence, on the other hand, in favor of the natural and general presumption, which gave the Assyrian motive its name, that the Assyrian palmette is a conventional form of the palm-tree and that its volutes are derived from the pendent bunches of dates (as explained for instance by Mr. Clarke). If the supposed Assyrian form, which so constantly appears in Assyrian art in combination with lotus designs of admitted Egyptian origin, is a Phœnician modification of the Egyptian lotus palmette—if, in other words, lotuses and palmettes are one and the same thing in origin—it is easy to understand why the Assyrian derivative did not react with much vigor on its Phœnician counterparts and originals. A direct Egyptian influence on Assyria must also be assumed since the XVIII dynasty, when Nineveh was inside the Egyptian frontier and Chaldæa was an Egyptian tributary.

The question of Assyrian influences on Greek art largely turns on the Phœnicians, for if these had more influence on Assyria than has been commonly supposed, and more than Assyria had on them, the reaction of Assyria through Asia Minor only repeated an influence which came to the Greeks more directly and in stronger ways. In Dumont et Chaplain, *Céramiques de la Grèce propre* (pp. 133 and 136), there is a very fair admission of the unknown quantity which lies in debate between Phœnician influence on Assyria and the counter hypothesis. It is admitted that the earliest remains of Assyrian decorative art are strongly Egypto-Phœnician. That Hittite and Phœnician architect-

[33] The Egyptian lotus palmette (and its Phœnician copy) appears to have been mainly confined to metal, or to relief designs based on metal originals. These do not seem to have been directly imitated by the Greek vase painters, but it is more than likely that their influence promoted the development of the Greek palmette from the lotus motives of the vases.

ure was carefully studied by the Assyrians is proved by a number of royal inscriptions, especially those of Sargon, which state expressly that, in building the royal palaces at Khorsabad and Kouyundjik, the Hittite palaces were imitated. Such facts do not minimize the Chaldæan element in Assyrian civilization, which, of course, was fundamental and far more powerful than any other; and the relative barbarism of the Assyrians in relation to the older Chaldæan culture is generally admitted. The real civilization of the Tigris-Euphrates valley had long preceded the period of Assyrian military power, and long outlived it. It is not detracting from this civilization to acknowledge Phœnician influence on Assyria. The view that the rosette is an Egyptian lotus motive gives new importance to the action of Syria on Assyrian art.

In the lotus motives so constantly repeated in Egyptian decoration there are a number in which lotus flowers and lotus buds support a rosette form (PL. VI–2, 6, 17,), just as in other cases a lotus flower supports a lotus bud or a lotus leaf (PL. VI–1, 10). These rosettes are likewise constantly found in association with lotus motives on the ceiling decorations (X–1, 5). In Egyptian representations of vases we also find cases where stalks supporting rosettes alternate with others supporting lotus flowers or lotus buds, and in some *not* "brought as tribute by the Kefa."[34] Examples of these various appearances are as common for the XVIII and XIX dynasties as for any period: that is, they antedate the Assyrian related motive by at least seven hundred years. It may be observed, here, that rosettes constantly accompany the lotus motives of the Kypriote, Rhodian, Melian and Naukratic vases, but they have been generally considered as an indication of Asiatic style. Notwithstanding the constant appearance of these ornaments in Egyptian decoration (X–1, 3, 4), so long antedating anything known of Assyrian art, the presumption that they are a distinctly Assyrian motive is strangely fixed in current archæology. Longperier (*Musée Napoléon III*, in text for pl. XXIX) remarks that the rosette appears as a decoration on certain vases offered by Asiatic tributaries (the Kefa, supposed to be Phœnicians) in reliefs at Karnak; with the direct and purposed implication that it is not a native form in Egyptian art, but a Phœnician derivation from Assyrian art.[35]

[34] PRISSE D'AVENNES, "Vases en or emaillé:" two plates, and several other cases.

[35] Only one explanation of this suggestion can be offered, viz. that the publication of Prisse d'Avennes dates from 1879. It should be noted that in the published architectural reliefs, the rosette is rarely found in Egyptian decoration. In the

What is the connection between the rosette and the lotus? There is no difficulty in answering this question. An examination, in the *Description de l'Egypte, Botanique*, pl. 60, of the ray-shaped stigma which, in different aspects, crowns the ovary of the blue and of the white lotus, *figs.* 14, 15, furnishes the answer.[36] The ovaries or seed-capsules of all varieties of the lotus contain seeds which were made into flour for food by the Egyptians: to this end, the lotus was sowed as a crop during the inundation.[37] This use of the lotus seeds for

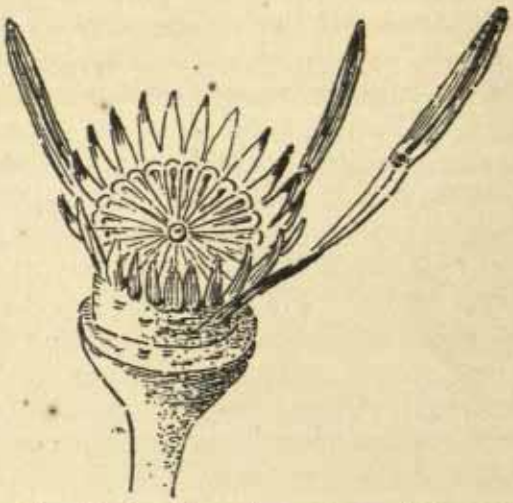

FIG. 14.—*Egyptian Lotus: stigma and ovary (white variety).*

painted decorations, for the first time abundantly illustrated by Prisse d'Avennes, it occurs constantly, and almost invariably in connection with lotus motives or with spirals which derived from them. The contrary holds of Assyrian art, where it is in carved reliefs but also with lotus motives that the rosette is a familiar decoration. The Assyrian carved reliefs have always been the most abundantly illustrated department of Assyrian art, and Egyptian decorative motives in wall painting were generally unfamiliar to untravelled students before the publication of Prisse d'Avennes. Some writers assume that works of art imported into Egypt by Phœnicians must demonstrate that the art which was imported was foreign to Egypt. On the same principle if a king of France presented a work of French Renaissance art to an Italian dignitary of the XVI century, this work of art would show that the forms of Renaissance art were derived from France and not from Italy. The earliest remains of Assyrian ornamental art date from the IX century. The earliest instance of a Babylonian rosette appears to be that of the XII century—on the garments and mitre of Merodach-idin-akhi (DIEULAFOY, *L'Art Antique de la Perse*, I, pl. IX).

[36] These two distinct aspects are also exactly represented by a large number of the gold objects from Mykenai, as shown by Dr. Schliemann's illustrations.

[37] The picture designated as a "Joute des Mariniers" in Prisse d'Avennes shows

food makes it clear why the top of the ovary was a familiar aspect of the flower; which was frequently, in Egyptian symbolizing fashion, represented at once in a double aspect. Thus we understand the bud or the flower which supports a picture of the ovary stigma. Let us observe in the next place certain lotus borders where the flower supports an object shaped like a half-moon (VI–9, 12). This is a portion of the top of the ovary shown "in plan," rising above the flower. In this particular case, as no rays appear, it may be the circular top of the seed-capsule of the rose-colored lotus. The yellow color of the original corresponds to the color of this seed-capsule when the flower is in bloom. It is now possible to understand the Egyptian lotus-palmette, VI–15, 16, 18, *etc.*—which is simply a combination of the voluted form

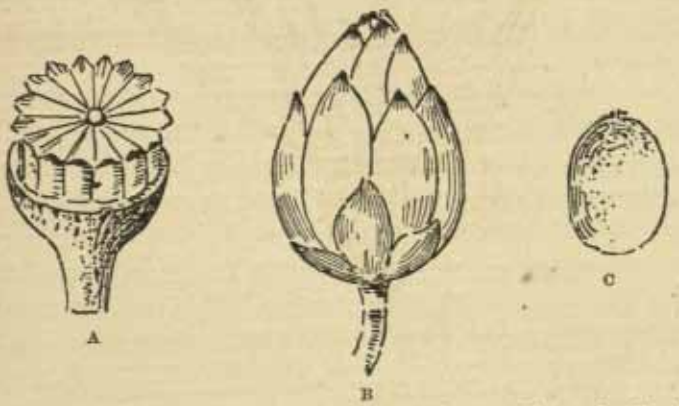

FIG. 15.—A. *Stigma of blue lotus:* B. *Lotus bud:* C. *Lotus seed (rose-colored variety).*

of lotus flower with the ray-shaped ovary stigma. The various aspects of lotus volutes and lotus spirals in these designs (PL. VI–1, 15, 16, 17, 18, *etc.*), are made comprehensible by the development of lotus spirals and volutes already considered: compare II–3, 9. No doubt many rosette designs may be explained as views of a flower with expanded petals seen from above, but these are not the clues to the lotus-

in reality a quarrel between the boatmen of craft loaded with baskets of seeds of the rose-colored lotus (*fig.* 15–C). Lotuses are also piled on the boats and surround them. Seeds of the rose-colored lotus observed in the lotus ponds of Mr. E. D. Sturtevant, at Bordentown, N. J., were about as large as small filberts. The taste is agreeable in the raw state, not as raw as the taste of a chestnut but something like it. The nurseryman in charge said that boys of the neighborhood ate them as they did chestnuts, as the plant has been naturalized and grows quite plentifully in ponds of considerable size.

palmette combination. The rosettes of petals have pointed rays and these are never found in the palmette.

Other phases of lotus combination may be noticed in this connection. A lotus supporting the seed of the rose-colored variety, No. 7: a bud supporting a bud, No. 8; a rosette supporting a leaf and bud, Nos. 11, 13; a seed capsule supporting a bud, No. 14. PL. VI–1, 20, giving voluted lotuses supporting a bud, explain IX–4 and many similar forms. This bud is assumed, by M. Dieulafoy, to be the ovary or seed capsule, in his theory of the Ionic capital, in which he considers IX–4, to be the normal form. He does not specify which variety of ovary is intended, and *figs.* 13, 14, 15–A show that there are three varieties. The monuments show that the Egyptians did not represent a conventional botanical section of the lotus but that they distinguished accurately the three varieties of seed capsule, pictured as seen from above, *i. e.*, the ovary stigmas.

It is now clear why the Kypriote lotuses I–2, 3, exhibit rosettes figured on the central petal triangle. In the "Lawrence-Cesnola Collection," phot. 11, a flower generally resembling I–1, 2, 3, has rosettes within the volutes which entirely surround them—a prototype of the rosettes originally decorating the centre of the Erechtheion volutes or of the Sicilian capital V–1. In *Salaminia*, p. 255, there are lotus rosettes in the lotus volutes. The rosettes within the Ionic volutes of the capitals of Susa and Persepolis are also a case in point.

The remarkable palmette in gold, originally enamelled, from Tell Defenneh (Mr. Petrie's excavations) in the Boston Museum of Fine Arts, is roughly figured, at VI–21, by the kind consent of Gen. Loring.[38] The date is presumably that of the XXVI dynasty, but there is no question of the independently Egyptian character of the palmette form, here elongated for decorative reasons. The Egyptian character is determined here by the voluted lotus support. The two amulets in blue porcelain of the Boston Museum of Fine Arts, 22 and 23, also figured under disadvantageous circumstances, are substantially accurate as showing that the palmette, derived from the voluted lotus, is an original Egyptian form.[39] As regards the amulets, the objection based on

[38] I regret very much that, on account of hasty publication, I have been obliged to depend on a memorandum sketch, not intended, when made, for use in publication.

[39] In MARIETTE's selection of typical sepulchral amulets (*Album du Musée de Boulaq*, photo. 17) there are three palmettes like VI–23, and five "rosettes," figured as ordinary and characteristic Egyptian forms.

uncertainty of dates and the natural objection of an Assyrian derivation during the VIII and VII centuries, still has to be met, but this is easily done, and the point which answers this objection also determines the Egyptian character of the Phœnician palmette motives of PL. VII–1, 2, 3 (bronze) and 10 (silver), from the Regulini-Galassi tomb (*Museo Etrusco Vaticano*, I, XVII). In VI–1, 3, 15, 16, 17, 18, 19, 22 and in IX–1, little tabs or streamers are seen under the volutes, as also seen in II–9. These may be originally lotus buds, judging by a reversed arrangement in IX–2, where buds are clearly represented. These distinctively Egyptian tabs are not found in Assyrian palmettes except in bronzes (one only known to me[40]) of a class which are conceded to be Phœnician. In this case the palmette is the same, as regards the tabs, as that of the Regulini-Galassi tomb. This tomb and the Grotta Campana belong to the earliest period of Etruscan tombs, and the former has well-defined relations in construction with those of Mykenai and Tiryns. There can hardly be a doubt, therefore, that the Phœnician palmettes VII–1, 2, 3, defined by the tabs or streamers as being of Egyptian derivation, precede the Assyrian examples. The resemblance between these Nos. and VII–9, 13, 14 is so close that there can be no difficulty in admitting an Egypto-Phœnician derivation for the "Assyrian" palmette. Nos. VII–6, 10 and IV–12 are from the same tomb. Comparing IV–12 with IV–5, we have a new demonstration that the latter is a lotus form; while a comparison of IV–6, from an Etruscan vase, with VII–12, from the Grotta Campana, gives a new demonstration that IV–6 is a lotus form.[41]

VII–15, from an Etrusco-Phœnician cist, shows the reaction of a voluted lotus derivative, like IV–6, on an independent lotus flower, which is supported by it. By comparing the palmettes and other lotus decorations on this cist, in the *Monumenti inediti*, VIII, PL. XXVI, the unity of the motives will again militate against the Assyrian origin of the "Assyrian" palmette.[42] The curious forms on an archaic Etruscan vase published by Lenormant (*Gaz. Arch.*, VII, 32), which look

[40] LAYARD, *op. cit.*, plates for bronzes: not clearly shown, in fact not shown at all, in the same pattern, PERROT, II, 736.

[41] PL. VII–5, from the Amathus shield (COLONNA-CECCALDI, *Monuments*, pl. IX), is a very common Phœnician lotus palmette, especially on the pateræ. It relates to VII–4 from Persepolis (OWEN JONES, XIV–4). VII–7, from Susiana, a tile decoration discovered by M. Dieulafoy (*Revue Arch.*, July-Aug., 1885, and *Harper's Mag.*, June, 1887), also showing the Egyptian tabs, relates to VI–21.

[42] This cist dates from the VI or VII century, but the style of the motives is earlier.

like representations of a rising sun or moon are proved to be lotuses by comparison with V–10.

M. Dieulafoy has asserted decisively the precedence of the Egyptian palmette as against the Assyrian, and the derivation of the latter from it (*op. cit.*, III, 61). He assumes that the elemental form of the Egyptian palmette is the *flabellum*—the semi-circular ensign frequently seen in the reliefs and paintings. This is, in reality, a half section of a rosette form composed of rayed lotus petals.

V.

If the Assyrian palmette is a lotus it is necessary to face the problem of the "Sacred Tree." Hence the designs of PL. VIII. No. 1, a detail of an Assyrian relief in the Metropolitan Museum of Art, shows the hatched incised lines by which the lotus-bud is often covered in Assyrian reliefs. Compare VIII–2, the object held by the divinity facing the "Sacred Tree," with the bulbous bud of the rose-colored lotus, in *fig.* 13. I have no argument to offer about this object, aside from the mention of certain apparently related facts. The advice of a competent Assyriologist is to the effect that the texts throw no light upon the subject of the origin of the Assyrian "Sacred Tree,"[43] and that no hypothesis on the subject is extant. *Fig.* 15–B is a sketch from nature (the lotus-pond mentioned at Bordentown, N. J.) of that aspect of the rose-colored lotus which appears to have been indicated—in accordance with the naturalistic tendencies of Assyrian art—by the hatched incised lines, producing that resemblance to a fir-cone which has caused this designation to be accepted in default of a better one.[44] In *fig.* 15–B may be observed, in the overlapping leaves of the bud, an effect resembling that of the scaly surface of a fir-cone. The following facts are related to this observation. In the tile decoration, Place, III, 15; Perrot, II, 308; two winged divinities holding bud-shaped objects, not detailed, face the lotus rosette. In the relief figured by Perrot, II, 108, the divinity introduces the bud-shaped object into a lotus palmette. A divinity holding the bud-shaped object described above is associated with an adorer facing him, bearing an antelope and a branch of ordinary

[43] That is, there seem to be no traces of it in early Babylonian mythology.

[44] The introduction of this effect in the buds of *figure* 13 would have contradicted, by its detail, the general treatment of the cut, and it was therefore avoided in that illustration.

lotuses: Perrot, II, 108. At VIII–5, 6, 7, 8, are hands of similar Assyrian worshippers, from designs in Layard, holding lotus emblems.[45]

The observation as to the hatched incised lines of the lotus bud VIII–1 defines as lotus "trees" all "Sacred Trees" which correspond to VIII–4. The "Sacred Tree" of the Kypriote vases in Perrot (III, figs. 518, 521) is a lotus tree. The "Sacred Trees" of the vase published by Ohnefalsch-Richter (*Journ. Hell. St.*, V, p. 103) are a remarkable illustration, PL. XI–16 (one of the lotus rosettes is not illustrated), but scarcely less so are the steles supporting lotus triangles with knob-shaped appendages as in PL. I, XI–22, 24 in the Lawrence Cesnola Collection (phot. 13). Lotus "trees" are frequently found in Egyptian design, as is shown, for example, in VIII–3. Compare Horus as a hawk within a lotus tree, *Description de l'Égypte*, III, 60.[46]

I am informed by Mr. Ch. E. Wilbour that, in Egyptian worship, the lotus represents the reproductive aspect of Osiris: hence the Horus-child rising from the lotus, or the Horus hawk in the lotus tree. The Phœnicians, those cosmopolite worshippers, may have transferred to Assyria an aspect of this cult.[47] It is quite clear that II–10 of this paper represents an adorer and a lotus tree, and in this connection

[45] 5, hand with branch of lotus rosettes; 6, hand with branch of lotuses having rosettes at the base; 7, hand with branch of lotuses and buds detailed as in VIII–2; 8, hand bearing a branch of lotus palmettes. This association is significant. PL. VIII–9 shows the lotus buds, as explained by VIII–1, rising from the rays of a lotus palmette—on an embroidery with ostriches. This combination is also significant. Another phase of the branch, not illustrated, is seen in PERROT, II, 513, where the worshipper faces a "Sacred Tree" of lotus buds which rise from a lotus form of the same aspect as that seen at the bases of the flower and buds of VIII–1. This is an aspect generally recognized, and very common. It appears, for instance, in the capitals of the terracotta ædicule, PERROT, III, 277; on several colonettes figured on the Balawat Gates, *etc.* The branch here in question shows a vegetable form usually classed as a pomegranate. It appears very often in lotus and lotus-palmette borders—on the ivory, PERROT, II, 730; in the "Sacred Tree," PERROT, II, 685; in the border of embroidery, PERROT, II, 774; and in the enamelled brick fragments, PERROT, II, 311. From these last illustrations, of considerable size in the detail (the latter with a border of lotus palmettes), it may be concluded that the object represents a lotus, of the simplified form noted at the base of buds and flower in VIII–1, or resembling V–9, supported by a magnified seed, a disk, or a conventional rosette. This so-called pomegranate is very common on the borders of the vases from Kyrene.

[46] Also the "Genii of Amenti" on the lotus, *ibid.*, II, 72.

[47] It will occur to persons not versed in Assyriology that the "eagle-headed" divinity who frequently faces the lotus tree may be an Assyrianized Horus, who constantly appears in Egyptian art as a hawk-headed human figure. In the British Museum photo. 355 the head appears to be more that of a hawk than of an eagle.

attention may be directed to the vase published by Ohnefalsch-Richter (*Jahrb. arch. Inst.* 1886, pl. VIII) representing a man in front of two large lotus flowers, one of a conventional the other of naturalistic design.[48]

VI.

It is singular that the Egyptian Proto-Ionic forms, such as IX–1, 3, 4, have attracted little attention from students, but the demonstration of the derivation of one form of Ionic capital, as offered by Kypriote monuments, must draw new attention to the possibility that Proto-Ionic forms, as they appear in Egypt, may also have exercised a direct influence on Greek Ionic. This suggestion has been formally made by Auer in the *Zeitschrift für bildende Kunst*, 1880, No. 10, in a series of three papers devoted to the Egyptian Proto-Doric triglyphs.[49] It is apparent that the lotus volutes of Kypriote vases and the lotus spirals of Rhodos and Melos, throw a new light on the way in which the Egyptian volutes and spirals must have developed, and on their connection with lotus forms, with which in Egypt they are constantly associated. From this point of view it is an obvious conclusion, though it may not be superfluous to state it once more, that Greek and Græco-Phœnician vases repeat an evolution of lotus spirals and volutes which must have taken place in Egypt several thousand years before. The spirals of Mykenai, and the ceilings at Orchomenos and Tiryns, are sufficient reminders that the ultimate results of Egyptian lotus development were also directly transferred to Greek decorative art in the earliest, as well as in later, times. It is not to be overlooked, on the other hand, that naturalistic lotus motives are combined with the extreme conventional developments at all times in Egypt, just as they are combined in the same Kypriote designs. We cannot be certain, simply on account of the lack of remains, that Egypt and Egyptian-

[48] Figured also by REINACH, *Revue Arch.*, 1885, II, p. 360; and PERROT, IV, p. 564. Reinach has already related the design to the Assyrian "Sacred Tree." Compare the lotus and solar disk, PERROT, III, fig. 234 and LAJARD, *Culte de Mithra*, XXXI–3, with various associations of the Assyrian sacred tree and solar disk.

[49] My reference was obtained from DURM, *Die Baukunst der Griechen*, p. 11. Durm's own reference to Ionic forms as derived from Egypt—"die aus dem heissen Aegypten entnommenen ionischen und dorischen Bauformen"—must refer to the construction, as he cites Semper on the Ionic capital. DE SAULCY in his *Voyage autour de la Mer Morte*, sustained the view that the Ionic of the tomb of Absalom at Jerusalem, generally ascribed to a late period, is of a date corresponding to the traditional designation. Auer makes no reference to the lotiform origin of the Ionic capital.

ized Syria did not exhibit designs—in pottery, for example—contemporary with those in Kypros of a more or less related character. But, as far as remains are concerned, the Kypriote lotuses are the only ones whose naturalistic forms directly relate their volutes to the downturned calyx leaves of the natural flower, and consequently they are the only forms which give a clue to more highly conventional phases of the Egyptian volutes and spirals. The comparative study of Kypriote lotus forms shows that the lotus was in Kypros, as in Egypt, a decorative fund, of which various conventional aspects were combined, separated, or reunited, while the natural flower was still observed and copied and also made a basis of decoration. In accepting the possibility of a direct transmission of the Egyptian ornamental Proto-Ionic forms to Greek art, a question already suggested may also be discussed: Did not the Egyptian or Egypto-Phœnician lotus palmette directly produce the Greek? On this head exact conclusions must come from Naukratis. The necessary dependence of this paper on published illustration, aside from Kypriote vases, and a want of acquaintance with the Naukratic pottery discovered since the publication of *Naukratis I*, make any pretence to positive conclusions impossible. As a matter of provisional suggestion, this may be said. Evidences on PL. VI derived from ornamental details mainly on ceilings of the XVIII–XX dynasties, and from a few ornamental remains, do not themselves demonstrate that the palmette, which the Phœnicians evidently took from Egypt, was as controlling an ornamental fashion there as it became in Assyria. Regarding the Phœnicians and their influence on the Greeks in the matter of transmitting the palmette, let it be remembered that this influence must be conceived as entirely and absolutely subordinate to that exercised by the Egyptians themselves after the foundation of the Greek colonies in Egypt. Since the discovery of the scarab factory of Naukratis, and the obvious identity proven by Naukratic fragments to exist between the Græco-Egyptian style and that hitherto presumed to be Asiatic, the theory as to the Asiatic aspects of Greek and Italic art, in the VII and VI centuries, falls to the ground.[50]

I do not myself think that Greek decorative art experienced much influence from the combined lotus-rosette form, *i. e.*, the Oriental pal-

[50] W. FROEHNER's demonstration (*Collection Charvet*) that the polychromatic opaque glass, so long considered Greek, because so constantly found in Greek tombs, is Egyptian, points now to the direct Græco-Egyptian export of these pieces.

mette. It appears, on the evidence of vases from Rhodos and Melos as related to Kypriote, to have developed a palmette form of its own from the lotus itself. As far as pottery is concerned, the fact that the Egypto-Phœnician palmette does not appear on the Kypriote vases in the Metropolitan Museum, or on those of Rhodos which bear the lotuses necessary, as a connecting link, for the comprehension of the Melian style, points to this conclusion. In Melos also the decorative style points less to a mixed form like the lotus-rosette combination than to an independent development of the lotus flower motive into palmettes and volutes of its own device. Although, on this supposition, Phœnician influence loses its importance for the Naukratic time, it gains for that of the Mykenai culture. The comparisons of PLS. X and XI give but a slight indication of the overwhelming evidence for the dominance of lotus derivative forms in the Mykenai period. Before briefly considering these, the lotus origins of the egg and dart moulding may be pointed out.

The demonstration of an Egyptian origin for the Ionic capital and for the Greek anthemion is curiously corroborated by the fact that the egg and dart, or egg and tongue, moulding is derived from a form of Egyptian lotus border. The juxtaposition in illustration of the Naukratic architectural relief designs (IX–9, 10) with lotus borders from Kypriote vases and with a *repoussé* bronze relief from Olympia (IX–8) will make all argument on this head unnecessary. The relation between the egg and dart moulding and the lotus border was published, in 1856, by Owen Jones, and in 1870, by M. Léon de Vesly,[51] but in a somewhat cumbrous and unnecessary way. The observation, with both these writers, refers to a border of lotuses with intervening bunches of grapes.[52] The egg between the darts is supposed, by them, to have grown from the bunch of grapes, and M. de Vesly also supposes that the "fir-cone" between lotuses in Egyptian borders has also been the starting point of the egg portion of the egg and dart. This mistake about the "fir-cone" was probably caused by the bulbous form of the lotus buds represented. The lotus border IX–6 shows the alternating buds and lotuses, but it is not the bud which grew into the "egg." This bud is still represented on the "egg" of one line of the Erechtheion moulding and appears also on the "egg" in IX–9. If we reverse

[51] *Société centrale des Architectes: Annales*, 1871.

[52] OWEN JONES, *Grammar of Ornament*, notes to plate VII "Egyptian Ornament": PRISSE D'AVENNES, *op. cit.*, "Frises Fleuronnées."

the border IX–6, it appears that the "egg" is simply the rounded relief which results from cutting the flowers into relief by incision. This appears more clearly by reversing the *repoussé* bronze from Olympia IX–8, where the outlines of the lotus assume the form of I–21. Nos. 9 and 10 are also perhaps more evidently at once egg and dart mouldings and lotus borders, when they are reversed.[53] The supposed leaf decoration painted on the Doric capitals will appear also, if closely observed, as a lotus border of "egg and dart" type. IX–5 has been noted by Mr. Petrie, in *Naukratis I*, as corresponding with the necking ornament on the columns of the Erechtheion, and is illustrated as corroborative.

VII.

PL. X is designed to associate the Egyptian lotus spirals and "rosettes" with Mykenaian art forms. It also serves to present a suggestion hardly susceptible of demonstration, viz., that the so-called "Greek" fret is a derivative of the lotus spiral.[54]

The ceiling from Orchomenos, X–5, shows a design which has been

[53] It is clear that the bud itself which remains on X–9 has nothing to do with the development of the "egg" form. No. IX–7 was the lotus border which first struck me as being an egg and dart moulding. It represents two lines of border like IX–6 turned in opposite directions and placed together. It is a well-known law of Greek architectural decoration that its movement was one from colored decoration in flat to carving in low relief. The carving becomes deeper and the relief higher as time advances. The absence of projected lotus borders in Egyptian art and the fact that the egg and dart moulding first appears in projection in Greek use does not contradict this. The projected egg moulding alone appears during the V dynasty (DIEULAFOY, *op. cit.*, III, 62).

[54] PL. X–4 is mentioned as a lotus spiral on account of the constant association which may be observed with lotus rosettes and on account also of the constant association of the spiral and the lotus, as observation of the Egyptian motives in Prisse d'Avennes will show. The usual association of lotus rosettes with the "Greek" fret in Egyptian decoration is significant in this connection. In Prisse d'Avennes there are six instances where the spiral starts from the lotus and where the design includes the rosette; four instances of the spiral and rosette; five of the fret and rosette; five of the motive like X–7 from Beni Hassan, which has been proved a lotus derivative; and two cases of the Ionic spiral which must be included in the lotus motives. There are only two additional cases of spiral motives; *i. e.*, there are only two cases where some relation to a lotus derivation does not appear in the design itself. The "Greek fret" is now well known to be an early Egyptian motive. The suggestion that the Egyptian spirals like X–3 are variants of X–2 has already been made, by Prisse d'Avennes among others. The counter hypothesis is the more probable of the two.

already recognized as Egyptian, and Schliemann's *Tiryns* offers another example. I am not aware whether the lotiform character of the motive has been recognized.[55]

PL. XI is devoted mainly to designs taken from Furtwängler and Loeschcke's *Mykenische Vasen*.[56] Under this heading are included vases from all parts of the Eastern Mediterranean which belong to the epoch of art and culture first revealed by Dr. Schliemann's excavations at Mykenai. The vases of the "Mykenai culture" evidently belong to a centre of manufacture quite distinct from that of Kypros. A certain number have been found in Kypriote tombs, as importations. They may be easily distinguished, for instance in the New York Collection, from the Kypriote examples, but the juxtaposition with Kypriote pottery offers valuable assistance in fixing some points as to dates of types in the latter. The Mykenaian pottery has the characteristics of a thoroughly independent art as to details, but its motives, at least in plant life, appear to show the same curious relation, which is exhibited by later Greek art, with the one type of floral decoration to which hieratic and national predisposition confined the Egyptians. The authors of this publication have clearly seen that the most conventional types of this pottery decoration are the latest; that natural forms are the starting point, gradually modified by habits of current repetition, careless execution, or abbreviating methods, until in the course of centuries all conception of the original starting point has disappeared. The lotus motives here selected for illustration will probably in the main speak for themselves.[57]

[55] PL. X–6 relates to the lotus derivatives IV–9, V–6, V–11. Related form at X–10. Both relate to *Mittheil. d. deut. Instituts: Athen. Abth.*, XI, pl. III, 135, lowest design but one on the left. This motive appears constantly in the Mykenai period. PL. X–7 from Beni-Hassan. This spiral derivative is explained by X–8. This scheme was suggested by Mr. C. Harriman, of the Columbia College School of Architecture, from observation of the lotus borders 1, 2. A related lotus form on the vase at p. 160 of *Mycenae* leads me to suppose that the design of X–11 may also indicate lotus forms although it appears to be a lily. Nos. 9, 13, 14 are easily understood by recurring to preceding illustrations. Nos. 9 and 14 recall IV–7. The triangles of X–17 are probably derived from the lotus triangles on 15 and 16. Compare I–14, 15.

[56] Nos. 1–19, excluding 16, have generally the lettering "F and L", and all are marked with the plate numbers of the original publication.

[57] PL. XI–1, 2, 3 are motives not farther removed from the outlines of VI–5 and VI–14 than Phœnician transmission or departures in Greek imitation would naturally explain. As for the volutes of XI–1 and XI–2, they are infallible "ear-marks" of a lotus, however transformed or deformed. XI–5 is the hasty outline of a lotus palmette corresponding to VII–5; XI–4 is probably a variant of the same, *cf.* I–21; XI–6 is kin-

XI–14 shows two adjacent spiral designs, as on the original vase. The left hand pattern is an abbreviated form of a familiar motive, like IV–10. The evolution of the right hand pattern gives the clue to a large number of vase spirals. Here a third spiral takes the place of the abbreviated triangle, which is pushed to one side.[58]

XI–20-26 are geometric patterns from the Lawrence-Cesnola photographs which are explained by the following plate.

XII–2 is derived from the lotus form XII–1, reversed and stripped of the volutes and upper projections. The same form is turned sideways in XII–3, 4. XII–6 is derived from a form like XII–5 reversed, stripped of volutes and intermediate petals. XII–7 shows the reminiscent volutes already explained, both on the lotus and on the upright bands, to which they have passed from the lotus motive. In XII–8 these rudimentary volutes have left the lotus and are seen on the bands only. In XII–9 the band with knobs has become an independent motive. The triangle XII–10 is defined as a lotus by these knobs (compare XI–20, 22, 24 and I–15).[59]

Without reference to the dates of individual vases it is clear that the Kypriote geometric style as a whole must be later than the first lotus patterns which grew into it, and it is clear that there are no Kypriote-Phœnician vases earlier than those which show the lotus motives. We have here a curious parallel to the position reached as to the Egyptian Ionic volute and the Egyptian lotus spiral.[60]

dred with VII–15; XI–7 is a conventional voluted lotus with lotus rosettes inside the volutes; *cf.* the Kypriote counterpart in the Lawrence-Cesnola Collection (*Salaminia*, p. 255) already quoted. XI–9 is clearly a later conventional stage of XI–7; *cf.* XI–13. XI–8 is referred without difficulty to I–15; XI–10 is a barbaric version of V–10; XI–11 relates to XI–6; XI–12 to X–1, 2.

[58] XI–15 is a phase of XI–3. XI–17, 18 are geometric patterns derived from XI–1 or 2. XI–19 is a decorative pattern derived from the outlines of the lotus-border which produced the egg and dart moulding.

[59] In XII–11, 12, 13, 14, we see associated four triangles like XII–10. Each one has driven its knobs inside the adjacent triangles. Hence a triangle motive with interior knobs, as seen in the triangles of XII–3, 4 and 15 and XI–26: *cf.* PERROT, III, fig. 507.

[60] I am able to announce that the *ankh* is also a lotus, although the illustration cannot be offered with this paper. The relations of the *ankh* to the triangle have already been suggested by Mr. PINCHES (*Babylonian Record*, August, 1887). These relations can be demonstrated. The lotus triangle with disk, as in the Phœnician "Sacred triangle," is the counterpart of the lotus amulet which forms the basis of the *ankh*. The "Genii of Amenti" stand on the lotus triangle in the relief shown by MARIETTE, *Album du Musée de Boulaq*, photo. 13.

According to Pierret[61] the lotus was a symbol of the Resurrection. To Maspéro (*Hist. d. Peuples Anc.*, p. 42) the lotus, in Egyptian belief, was one of the mystic habitations of the departed spirit. It is as symbol of the Resurrection that the Genii of Amenti stand upon the lotus. According to Prisse d'Avennes the lotus was a symbol of life and of immortality. The starting point of Colonna-Ceccaldi's suggestion for the Ionic capital was a sepulchral lotus stele. The most beautiful examples of the Athenian anthemion are tombstones. The triangle stele in Benndorf (v–8) is a sepulchral monument. The triangle steles xi–22, 24, are on sepulchral vases and it may be that the entire lotus decoration of the Kypriote vases has a mortuary significance. In late Græco-Roman antiquity the lotus still retained its significance as a mortuary emblem.[62] At Egyptian funerals the guests were given bouquets of lotus flowers.[63]

The Gorgon-head in *figure* 16 is from a Rhodian vase which has been lately published by Mr. J. Six, at the suggestion of Prof. Loeschcke.[64] Mr. Six observes that the nose is an inorganic ornamental form but he and Prof. Loeschcke have not noticed that it is a Proto-Ionic stele turned upside down. If any one should conceive that this is pushing one's case too far I further observe that the ears are Ionic capitals and that they help us to understand the nose. This Proto-Ionic joke of a Rhodian potter has not entirely lost its savor. It is a very interesting point about this vase that Mr. Six, who has devoted much study to the Gorgon type, believes it to be derived from Kypros.

W. H. Goodyear.

Fig. 16.—*Gorgon-head from a Rhodian vase.*

[61] *Panthéon égyptien*, p. 62.
[62] *Annali*, 1843, "Ornamenti funebri."
[63] Osburn, *Monumental History of Egypt*, vol. i, p. 43.
[64] *Journal of Hellenic Studies*, vi, p. 275, pl. lix.

GREEK INSCRIPTIONS PUBLISHED IN 1886–87.

The most important of the inscriptions published during the past year fall within the domain of the history of the Greek alphabet. Two great branches of that alphabet have added such rich stores to their stock of materials, that S. Reinach does not hesitate to declare that the history of the Greek alphabet must now be rewritten. However that may be, it is certain that a distinct and substantial advance has been made in our knowledge of the archaic alphabets, of that of the fatherland, Krete, on the one hand, and, on the other, of the Ionic, from the distant Milesian colony of Naukratis.

The excavations carried on at Naukratis by the Egypt Exploration Fund under the direction of Mr. Petrie have been prosecuted with so much care and scientific accuracy that we may rely upon their results with great confidence. Accepting the statement of Polycharmos, that a temple of Aphrodite existed at Naukratis in 688 B. C., as proof merely that its inhabitants believed the town to be a very ancient one, Mr. Petrie judges, from the evidence of the remains, that its foundation occurred about 670 B. C.,[1] during the disruptions caused by the Assyrian invasion and the wars of Taharka. A scarab-factory furnished scarabs belonging to the reigns of Psamtik I and II, 664–589 B. C.; and two feet below this general level was a stratum of burnt material extending over a considerable space in the southern part of the town, which proves a still earlier occupation. From this, and also from the style of the pottery, the foundation of the temple of the Milesian Apollo mentioned by Herodotos is placed at about 650 B. C. Close behind this temple was found a trench in which it is evident that the remains of broken pottery dedicated in the temple were deposited, as the greatest number of inscribed fragments were found here, mixed with earth and sand, at various depths; showing in general an advance upward from coarse and archaic to more regular and familiar forms. The inscriptions are mostly simple dedications to Apollo, or Apollo the Milesian, and they

[1] HIRSCHFELD's arguments to prove that Naukratis was founded about 590 B. C. (*Rhein. Mus.*, 1887, pp. 209 ff.) fail to convince me.

have been discussed by Mr. E. A. Gardner both in the volume on Naukratis published by the Egypt Exploration Fund, and in the *Journal of Hellenic Studies* (1886, pp. 220–39).[2] The oldest dedications are assumed to be those upon two heavy, coarse fragments, found in a well, but in style similar to an amphora discovered under the burnt stratum of the town. These are assigned to about 650 B. C., and are read 'Ωπόλλω σô ἐμι, . . . λλω σô ἐμ. The writing is retrograde and clumsy, and certain of the characters admit of some difference of opinion as to the letters they represent. The M has three bars in one inscription, four in the other; the supposed *sigma* is irregular and curved. The strangeness of the dedication and of the vocative 'Απόλλω, has led me to query if this *sigma* may not be read as a N, and the E as a *sigma* of a form similar to that which appears at the end of the word 'Ιαλύσιος on the inscription of the mercenaries at Abu Simbel, and upon the well-known Halikarnassian inscription of Mr. Newton, and elsewhere (ⲙ, ⲭ, ⲯ, ⲧ, ⲩ). If this conjecture be accepted, the language becomes normal ("Of the Milesian Apollo"), and the other dedications cited in its support follow suit. No. 68 shows N turned at an angle of 90 degrees from its usual position, and a distinct N it must be: with this in use a horizontal three-barred *sigma* would be natural. It is evident, at a glance, that there is much fluctuation in the form of these as well as some other letters, and in their position in relation to the horizontal; as indeed is not uncommon in archaic inscriptions. The real point of importance, however, and the distinct contribution toward the history of the Greek alphabet is, that the majority of these inscriptions represent the Milesian alphabet at an earlier stage than has heretofore been known, and that in the oldest examples the Ω occurs in regular use. Much of the argument for establishing the dates of documents in the Ionic alphabet has turned upon the fact that this letter was supposed to have come into use about 550 B. C. At Naukratis, however, it is found one hundred years earlier. This and some other reasons have led Mr. Gardner, with others, to set off the Abu Simbel inscriptions, with their O for Ω, as Rhodian, doubtless allied to the Ionian, and to assign them, with Wiedemann and others, to the reign of Psamtik II instead of Psamtik I. Some inscriptions of this class were discovered among the

[2] [Opposition to Mr. Gardner's conclusions, as well as to those of Mr. Petrie, has been made by Professors HIRSCHFELD and KIRCHHOFF (*Studien*), and arguments on both sides have been brought forward in *The Academy* (1887, May 14, July 9, 16, Aug. 20, 27). The German critics diminish the age of the oldest inscriptions by about a century.]

dedications at Naukratis, as well as some belonging to the Melian alphabet; and No. 2 presents a case where, in a dedication to the Milesian Apollo, there occur together, in the boustrophedon order, Ω, O for Ω at least once, the open H and the four-barred *sigma*. Closed H is found but once, and Gardner places some cases of the open form still earlier, in the seventh century. The closed H at Abu Simbel was used as the vowel, and also as an aspirate. Neither form is employed as aspirate at Naukratis. F does not belie previous experience by appearing, but Ϙ (*κόππα*) presents itself occasionally before O till about 530 B. C.

Two dedications are of especial interest. The first is upon a large krater of Rhodian ware, assigned to 600 B. C., and reads: *Polemarchos consecrated me to Apollo, together with the prochoos and the stand* (Πολέμαρχός [*με ἀνέθηκε τ*]*ῶπόλωνι καὶ τὴν π*[*ρ*]*όχουν καὶ τὸ ὑπο*[*κρητή*]*ριον*). The language recalls at once the famous Sigeian inscription, and the krater wrought by Glaukos the Chian, dedicated by Alyattes at Delphi (Herod., i. 25). The British Museum contains a vase, rather badly reproduced in the *Archäol. Zeitung* for 1881 (pl. 13), in whose interior is depicted precisely such a scene of dedication. Upon a stand about three feet high, decorated at the corners with birds, rests the krater, out of which rises a prochoos as if set upon an interior lid of the krater. On one side stands a player on the double pipes accompanying the ceremony; on the other, the dedicator or priest, with bowl in one hand and rhyton in the other, offering the libations. In the field, above, a bird is seen flying down on the right of the dedicator. This bowl is believed to be of Kyrenaian or Naukratian manufacture.

The second dedication that attracts attention is that of Phanes the son of Glauqos,[3] of which the style, place of find, and forms of the letters combine to bring it down to about 530 B. C.; so that the dedicator is very reasonably identified with the Halikarnassian of that name whom Herodotos mentions as in high favor at the court of Amasis till he proved traitor and deserted to Cambyses. The tragic scene of the deliberate slaughter of his children before the father's eyes on the battlefield of Pelousion by the enraged Greek and Karian mercenaries, will ever remain one of the great pictures drawn by the Father of History. The widely scattered positions in which the fragments of the vase were found seem to reflect something of the same spirit at the temple in Naukratis.

After the discovery by Dr. Halbherr of the archaic Code-inscription on the site of the ancient city of Gortyna in Krete, nearly three years

[3] GARDNER'S *Naukratis*, I, p. 55.

ago, the Italian Government granted to the discoverer means to carry on excavations in the immediate vicinity of the wall on which the inscription had been discovered, with the hope of finding additional remains of the same body of laws. This hope has proved fruitless, but the explorer has reaped a considerable harvest elsewhere. At a place called Vigle, about a mile distant from where the Code-inscription was found (but still within the limits of the old town of Gortyna), a peasant, while digging for building-stones, came upon a series of walls. These walls had formed part of a structure, probably a temple, erected at some time posterior, it would seem, to the Roman conquest, but they were composed of large blocks bearing archaic inscriptions, laid up in the wall without any regard to the continuity of the inscriptions. This fact shows that some building of far earlier construction must have been despoiled to furnish material for the one whose remains were now found. The walls of the earlier building were inscribed with a series of public decrees; but, unlike those upon which the Code was written, there is no indication of arrangement in parallel columns, or of grouping as if by stelai. On the contrary, the tendency seems to have been, with few exceptions, to extend the lines to indefinite length, horizontally, for in some cases the letters are about eight inches high and cover only two-thirds of the surface of the stone. It is impossible to suppose that, if the writing had been disposed in vertical columns instead of continuous lines, it would have been inscribed with such prodigality of space, but would have had at least two lines on a block: nor do examples occur where the letters bestride the horizontal joinings of the blocks, as in the writing of the Code. Some of the lines may thus have traversed the whole length of a façade, and even turned the angle, to be continued on the adjacent face, as seems to follow from finding three blocks each bearing an inscription in smaller letters upon which is superposed an inscription in the eight-inch characters. Even where boustrophedon inscriptions occur, they rarely occupy the entire vertical space of the stone. Hence we may certainly assume that we have a varied mass of separate decrees and laws, promulgated on various occasions, and sculptured on the walls of a state edifice in order to perpetuate them publicly; and that they are anterior, in whole or in part, to the formation of a regular code like that previously discovered near the river Lethaios. This seniority will be proved further on, though it would hardly be inferred if rudeness in sculpturing the letters (which occurs in many early inscriptions) were made the standard of judgment. The elegance

and comparative regularity of the Code-inscription has led many to date it as low as the end of the fifth century. But we must distinguish between the rudeness of an untrained hand working upon a mortuary or other comparatively insignificant monument, and the work of an artist who would naturally be selected to perpetuate public enactments on the walls of a stately building where the inscription in bold deep characters would prove a disfiguring or an ornamental addition. Certain it is that the most of these Vigle inscriptions are remarkable for the regularity and neatness of the letters and of their arrangement, which reveal a tendency to the artistic, and the use of an already advanced monumental writing. Few indeed are the technical errors, oversights or corrections of the workman; on the contrary, the writing would for the most part be an ornament to the building. And yet its priority, in the main, to the Code-inscription follows from many considerations. In the first place, the alphabet differs considerably from that of the Code; but here the Vigle inscriptions must be divided into two classes, as Comparetti has clearly shown in his publication of and comment on them in the *Museo Italiano* (vol. II, pp. 181–252). Nos. 82–3–4, forming two inscriptions of eight and six lines each, closely resemble the Code-inscription in the form of the letters, and are identical with it in the letters employed. The others, numbered up to 81, and unfortunately in an extremely fragmentary state, have three additional letters, but all these have their Phoinikian prototypes, namely I, 日, Φ (Ϙ). Beside this, some of the characters are more closely allied to the Phoinikian in form than are those of the Code. And in this formation we must distinguish two general classes, the angular and the curved, in the following letters, F, K, Γ, P. By comparison with the oldest Phoinikian, we should expect the angular forms to be anterior to the curved. In the case of the three blocks already mentioned, in which the large letters are superposed on the smaller, P, K are angular in the smaller, while K is curved in the larger. Elsewhere we find the two classes employed indiscriminately in the same inscription. I is always curved (S), not angular as in early Phoinikian, at Thera and elsewhere. This is also the case with Γ, which is angular on the Moabite Stone, but curved at Nineveh and Abu Simbel (Phoinikian), at Thera, Amorgos, *etc.* In all these instances the curve is at the top, ⌝, but in the Code-inscription it has become an arc of a circle, ↄ. *Digamma* has four different forms, three angular and one curved: ⅁, ⅁, ⅁, ⅁. The curved form in this series is regarded by Comparetti as

offering the solution of the problem of the derivation of this letter, it being made, he thinks, from the curved ⅂ (π) by the addition of a stroke for purposes of differentiation. On the contrary, I incline to believe that the angular form, ⅄, is the more ancient, being derived from a Phoinikian prototype resembling that seen in the Siloam inscription, ⅄, the outside stroke falling away in course of time as ⅄ might arise by a similar disappearance of the interior stroke, if the differentiation was not deliberately adopted at the outset. There is nothing more striking, on glancing over the table of Vigle inscriptions in which the letters are the largest and most regular, than the uniformity and regularity with which not only ⅂ and Ƨ, but also B, ⅄, H, ϥ, are modelled upon the same curvature. This is carried out to an extent so unprecedented that it seems to me the riot-fancy of some artist imbued with a spirit like that exhibited in the Mykenai productions (and perhaps starting from the common ⅂, S), rather than a natural growth.[4] In a modified degree this tendency is prevalent in all alphabets, although the curve is more difficult to engrave than the angle. The curved Ϝ, found once at Thera and often read P, can now be accepted as *digamma* without hesitation. This effort to please the eye with curves readily accounts, also, for the peculiar form of *beta* at Vigle, namely, ϥ, in which it differs from ⅂ only in the greater length of the curve, which is sometimes continued until it forms a curl, ϥ. Its derivation from the more angular Phoinikian, ϥ, is easily seen, and it forms the intermediate link between that and the crescent B of the Kyklades, ☽. Indeed, our own form of B, which also occurs twice in the Vigle inscriptions, is due to the prolongation and curvature of the lower part till it is brought round to meet the curve of the upper, probably to differentiate it from P.

The H of this class of Vigle inscriptions is uniformly of the closed type, ⊟, and is used for the vowel. In fact, its employment as an aspirate has not yet been discovered in Krete, and this accords with the fact that the archaic alphabet there served its purpose without any of the rough mutes except Θ, and Θ it sometimes neglected, as in *κατιστάμεν, ἄντρωπον, etc.* In the Code-inscription the *ε*-sound is represented by E alone, ⊟ having been discarded, perhaps in the interest of simplicity; although it is found in the open form (H) in some inscriptions of the immediate vicinity which are otherwise identical

[4] We may compare the sudden change from the angular forms in the Athenian Tribute Lists of the year 450 B.C. to the curved forms in 449 B.C.

with the Code in their characters. The alphabets of the Kyklades, with their varied use of H, throw some light upon this point. Φ (Ϙ) before O is uniform in the Vigle inscriptions, even where it stands for X, except in Nos. 82–4, in which the desire for simplification has yielded the whole field to K, as in the Code.

As other points of difference between the two classes, we may mention that the elder employs the perpendicular straight line as a division mark for words or phrases, as also found elsewhere in Krete, Lakonika, Thera, Kypros, and on the Mesa-Stone. This is abandoned in the Code group, which is written in a rigorous boustrophedon order: this also occurs in the Vigle group, though the dominant order is the retrograde. These facts point to a greater antiquity: but the weightiest argument adduced by Comparetti to fix the relative and approximate age of the two groups is, that the elder Vigle group belongs to a period which precedes the use of coined money. Many of the fragments treat of the payment of fines, and these are expressed not in staters, drachmas, and obols, as in the Code, but in *lebetes*, and once, by a reasonable conjecture in supplying part of a word, in tripods (. . . *οδα ἔναδ* . .). Beside small numbers, we find the *lebetes* running as high as 20, 50, and even 100; so that they correspond to the staters of the Code, and evidently represent some measure of value. One is at once reminded of the *lebetes* (*λέβητες*) and *tripodes* (*τρίποδες*) so common among the lists of gifts in Homer, where the tripod is of greater value than the lebes. These are of copper or bronze, and, arguing from this, Comparetti concludes that we have here large pieces of bronze of definite weight, like the *aes rude* of the Romans, but not yet stamped with an official device that constitutes a coin, and having their names as well as material handed down from the earlier use of actual caldrons. Against the objection that they may have their name from a stamp impressed upon them, Comparetti urges that, while on existing coins we do sometimes find the imprint of a tripod, that of a caldron never occurs; and furthermore that, although the coins of Athens were sometimes called "owls" and "girls," those of Aigina "tortoises," and those of Korinth "colts," these are comic or playful designations, not the official appellation such as would be implied by their use in a public decree, as at Gortyna. Beside this, the oldest known coins of Krete are those of Gortyna, and they present no hint of tripods and caldrons, but Europa riding on a bull, with a lion's head on the reverse, surrounded by an inscription which accords fairly

with that of the Code. Numismatists incline to place this coin at the beginning of the fifth century B. C., but with the acknowledgment that this assignment is made upon very uncertain grounds, namely, artistic style, while we as yet know almost nothing of the development of art in Krete, except from tradition, which habitually represents the island as a very early centre, and as the teacher of continental Hellas.

What then was the period at which coined money was introduced into Krete? Numismatic authorities are quite generally agreed that Herodotos was right, in saying that the Lydians were the inventors of coinage, and place this invention at about 700 B. C. Its introduction into the Peloponnesos by Pheidon is therefore assigned to the first half of the seventh century B. C., instead of the eighth as would follow from the date of Pheidon given by Pausanias. Certain it is that the invention spread rapidly westward from Asia Minor, and was caught up quickly by the Islanders; and it is incredible, from what we know of the advancement of Krete in the seventh century, that she should have been far behind the other Greeks in welcoming this boon to commerce. Her standard was the Aiginetan, and, if she obtained it after the Pheidonian regulations in the Peloponnesos had made it famous, the older Vigle inscriptions would naturally fall within the second half of the seventh century, when, as we have seen, the Ionic alphabet in its fullest development was in use at Naukratis. Comparetti maintains that the Code-inscription is naturally coeval with the change to a fixed coinage; that the new relations required much readjustment; that the official introduction of the new terms—staters, drachmas, obols—with possibly some alteration in the standards of weight, would have demanded a revision of the laws to introduce the new nomenclature, and a restatement of the fines; and that, consequently, advantage was taken of the opportunity to gather up the various enactments already written on the building at Vigle, to reduce them to a systematic form, with a simplified alphabet, uniform boustrophedon order, and to record them all within a definite space. Most of the Vigle inscriptions are so fragmentary that it is impossible to determine their substance, but we can see that the subjects of adoption and of succession to property form a part, as in the Code. Comparetti well compares the lawgiver's task here with that of Solon in relation to the laws of Drako. Solon introduced coinage, which before had not existed in Attika, and altered the fines, which had been expressed by Drako in oxen and sheep, into the denominations of the new coinage; and it is to about this time that

Comparetti would assign the Code in Krete. One objection, which he did not perceive, may be urged to Comparetti's argument. He assumes that the current money at the introduction of the Code was bronze: but the Code speaks only of silver, and the language used intimates that silver had been in regular use in transactions which preceded the adoption of the Code. But, as the numismatists believe that Aiginetan money had been employed at Athens as a currency for a considerable period before Solon began to issue a native coinage, so we may readily account for the expressions of the Code by supposing a similar use of Aiginetan coins, gradually introduced for a generation or more prior to the establishment of a mint at Gortyna.

Inscriptions so fragmentary as these must necessarily be interesting mainly to the student of language; but the two which have the same alphabet as the Code are complete enough to yield some sense. One is a decree relating to freedmen, who are granted permission to settle in Latosion upon an equality of rights with its inhabitants. Latosion therefore would seem to be some suburb of the town given up to resident strangers, or metics, in the vicinity of a temple of Leto. No one shall reënslave one of these freedmen, and, if the attempt should be made, it shall be the duty of his bondsmen to rescue him, and the *praetor peregrinus* (*τὸν κσένιον κόσμον*) shall not have power to release him from their custody. If the bondsmen do not perform their duty of rescue, they shall each atone to the freedman in one hundred staters and double the amount paid for his freedom. In case they do not fulfil these provisions, they shall be subjected to a double fine, which shall go to the informer and to the city. It is noticeable that the word, here, for bondsman is *τίται*, which has heretofore been known only from Aischylos (*Choeph*., 67) as "the avengers," and so corresponds closely to the Latin *Vindices*. No punishment falls on the one who seeks to reënslave: it is the bondsman who is held responsible, and this is a general principle in Greek law. The second decree grants immunities to a certain Dionysos for services to the city.

These decrees coincide with the Code-inscription not only in their alphabet, but in their orthography. The abandonment of Ζ has led to the attempt to express this sound by δ, δδ, as *κατοικίδεθαι*. The termination *-θαι* in the same word is characteristic of the Code group: in the elder it would be *-σθαι*. Further differences between the elder Vigle and the Code group may be noticed as follows: Vigle, Ξ (ζ) for ττ or σσ, as *ἐδίκαζε* (aor.; Code, *ἐδίκακσε*), *ἀνδάζαθαι* (Code,

δάττωνται), ὄζοι (Code, ὀ-πόττοι), ζωῶι (Code, δωός); *υ* in the diphthongs *αυ*, *ευ*, *ου*, regularly written with the F. In the later Vigle decrees, Ἀ**F**λῶνι and ἔ**F**αδε (Hom., εἷαδε) occur, but also τούτων. This phenomenon of F for *υ* occurs once in a Naupaktian inscription (Να-**F**πακτίων), and once in a Korinthian, ἐ**F**θετος. The much vexed ἀ**F**υτοῦ on the base of the Naxian colossos at Delos, obtains some comfort from a doubtful ἀ]**F**υτάν, and a certain ἀμε**F**ύσασθαι of the elder group. The Homeric ἀγχέμαχος receives support from ἀγχέμολον; and the relative ὅτειος, found in the Code, gains further confirmation. As Doric inscriptions posterior to the introduction of the Ionic alphabet vary in the use of the vowel E and H in the termination of the present infinitive of verbs in -έω (E is most frequent), it is interesting to see that the archaic orthography in the Vigle monuments, where H was also in use, is uniformly E, although in Comparetti's minor inscription from the Lethaios, published at the same time as the Code, we find καλῆν, but also δόμην and ἧμην. Finally, at Vigle occurs the nom. **F**αρήν (gen. ἀρνός) whose F has been assumed, but never before proved, to exist.

Beside the Vigle inscriptions, Comparetti publishes also, in the same number of the *Museo Italiano*, several inscriptions of archaic type, gathered by Halbherr from Oaxos, Eleutherna, and Lyttos, all within a radius of 30 miles from Gortyna. The alphabet of Oaxos contains the same letters as that of Vigle, except Φ (Ϙ), but conforms to the angular type throughout, even in Γ and Ι (ʃ), and has a peculiar form for F, hitherto unrecognized and resembling the letter N slightly varied, ⋌. In fact, some coins, hitherto assigned to Naxos, have been restored to Oaxos by Halbherr, in consequence of the discovery of these inscriptions. This character (⋌) is doubtless the same that has also been found on Pamphylian coins, in the form of a reversed N (⋏). Some interesting words occur: ἰν for ἐν with dative only, and in composition, not with accusative also, as in Arkadian and Kypriote; it is used before consonants as well as vowels: ἰσς and ἰς stand with the accusative. The infinitive termination -σθαι becomes -σται, as in Elis, Boiotia, and Northern Greece generally. With this we may compare, ἀμίστως, μιστῶ, for ἀμίσθως, *etc.*: ἀντρηίωι for ἀνδρηίωι exhibits a rather rare change: σποF**F**δάν for σπουδήν is a use of the F which we have seen at Vigle: ἀβλοπία confirms the gloss of Hesychios, ἀβλοπές, ἀβλαβές· Κρῆτες—a similar interchange of π and β is noticed by Plutarch as Delphian.

The neighboring Eleutherna furnishes the same angular alphabet, with the same form for *digamma* but with the H enclosed by two bars instead of three (Ⱨ), as not unfrequently among the Phoinikians; and E with two horizontal bars (Ɛ), which is also Phoinikian at times. Here likewise the F takes the place of *υ* in the diphthongs *αυ, ου*; but we find *ἀμισθεί*. In one fragment, where the sense is not clear, Comparetti presents the word *δισυροποιῶι*: the following gloss of Hesychios is worth weighing: *ὕρον, σμῆνος · Κρῆτες*.

The alphabet of Lyttos, which is boustrophedon like those of Oaxos and Eleutherna, has I (S) and Γ (C) curved as in the Code, and one of the two fragments bears the closed H, the other the open. Blass's reading of the pronoun *ὅτερος* twice in the Code is here confirmed by the appearance of the word between division marks.

It is interesting to see, here, how truly Greek individuality asserted itself, even in the matter of alphabets, within this narrow circle of neighboring towns, but it is not unprecedented.

The alphabet of Amorgos has also received an addition in the direction of greater antiquity, as it would seem. This alphabet presents so great a variety in the archaic inscriptions which have reached us, that it is difficult to reduce it to order. Hitherto it has kept within the bounds of the Ionic, and has thus confirmed the notice of Suidas, that the island was colonized in the XXIX Olympiad, 664–60 B. C., by Samians under the leadership of the Iambic poet Simonides the Elder. F. Dümmler, however, has recently published, in the *Mittheilungen* (1886, p. 98), a rock inscription in which we find the Doric *san* (M) instead of the Ionic *sigma* (ϟ), Π curved at the top (ᒣ), and a degenerated form of the broken *iota* (ʃ) in one case and the straight form (I) in another. The direction is retrograde, and H is closed (ꟾ). But the form of the name, *Δηιδάμας*, is Ionic, and we may therefore compare it with the Bubon inscription found at Olympia, and assigned by Roehl to Euboia, with the remark that it surpasses all other Ionic inscriptions in antiquity because it uses *san*. We may at least acknowledge the influence of other alphabets with the early Ionian colonists, and Ross long ago suggested relations with Argos. Indeed, Dümmler publishes another retrograde inscription, fully Ionic, with open H and with Ω, in which Ξ is turned upon its side (ꟻ), a position which is peculiar to Argos.

The recent excavations upon the Akropolis at Athens, which have added so much to our knowledge of the art that preceded the Persian

invasion, have not been barren of inscriptions. Several of the columns and other constructions, which originally supported offerings of statues and different objects, were inscribed, to designate that fact, in letters that are so regular that they form an artistic addition to the objects themselves, besides giving the information desired. They have been published by Kabbadias, Director of Excavations in Greece, in the Ἐφημερὶς Ἀρχαιολογική, 1886. Their value consists in the contribution which they make to the scanty literary notices of early artists. One, which lacked about half its length on the right, has been ingeniously restored by C. Robert (*Hermes*, 1887, p. 135), as follows:

ΜΕΑΡΤΟΣΑΜ ἔθεκεν ὁ κεραμε
ΥΣΕΡΛΟΝΑΓΑΡΤΕΜ Τἀθεναίαι
ΑΜΤΕΜΟΡΕΓ οἰεσεν Η
ΟΕΥΜΑΡΟΣΤ ο ἄγαλμα

Nearchos the potter was already known from a black-figured vase bearing his signature, found on the Akropolis, and also from the signatures of his sons Ergoteles and Tleson, the latter of whom is represented by 34 vases found in Italy. Antenor was the sculptor of the famous group of the Tyrannicides, Harmodios and Aristogeiton, which was carried off by Xerxes to Persia and finally restored to Athens by Alexander or one of his successors in the East. The father, Eumares, is identified with the painter Eumarus of Pliny (XXXV. 56), who describes him as the first to distinguish between man and woman in his paintings, and as the successor of the monochrome painters. His date has already been set by Winter (*Arch. Zeit.*, 1885, p. 200) at about 550 B. C., and with this our inscription readily accords.

At the very forefront of Greek sculpture, Pliny (XXXVI. 11) places the Chian family of Melas, his son Mikkiades, his grandson Archermos, and his great-grandsons Bupalis and Athenis. The last flourished, as he says definitely, in the LX Olympiad (540 B. C.) and were lampooned by Hipponax, as some related, till they hanged themselves from chagrin, a story which Pliny does not believe. This date would bring Archermes into the early part of the sixth century. Pliny knew of many statues of his at Delos and elsewhere, and a scholiast on Aristophanes (*Av.*, 574) ascribes to him the first representation of Nike with wings. In 1880, Homolle discovered at Delos a part of the base of a statue with an inscription intimating that the statue was the workmanship of Archermos and his father Mikkiades. Later on, another portion

was added to the base showing that it was a dedication to the Far-darter. Near by, was discovered an archaic winged statue which was believed to have occupied the base, and to represent the winged Nike, or possibly Artemis. While Kabbadias was carrying on his excavations on the Akropolis, last July, he lighted upon the fragment of a column bearing an inscription to the effect that the offering was the workmanship of Archermos the Chian (. . . . Ἄρ]χερμος ἐποίεσεν ὁ Χῖ[ος] - - - ἀνέ]θεκεν Ἀθεναίαι πολιόχο[ι]). One of the statues excavated in the vicinity differs from the others, and bears a foreign air: Kabbadias conjectures that this was the veritable offering from the hands of Archermos, and draws the conclusion that Archermos either worked in Athens, or that statues from his workshop in Chios found their way immediately to Athens. This, if true, is indeed a noticeable fact, as he says (Ἐφημ. Ἀρχ., 1886, p. 135); but, when we examine the characters of the inscription, we should say that they belonged to the close of the sixth century rather than toward its beginning. They are very regular and handsome, strikingly different from those of the Delian base, and are characteristically Attic, with two notable exceptions. The *sigma* is the Ionic with four bars (Ϟ), and the *lambda* also Ionic with a short bar at the top (Γ). Such intrusion of Ionic letters is not unprecedented, especially where the artist is Ionian; but this has hitherto been confined to the post-Persian period at Athens, while this column must antedate the destruction of the city by the Persians. Another Ionicism is the absence of the aspirate with the article ὁ, though the dialect is wholly Attic. Furthermore, the *theta* has the dot in the centre, not the cross, and this form appears in monumental inscriptions at Athens and in Ionia at about the same time, so far as is known, namely, just before the close of the sixth century. Hence, it is safer to suppose that the Archermos of the Akropolis is either a grandson of the earlier one, or at least that the inscription belongs to the waning years of his century, although it must be added that the *theta* with point is found on coins of Athens which produce the impression of greater antiquity than any with the bar-*theta*, and are ascribed by Head to the Solonian period, while other numismatists bring them down to the Peisistratidean.[5]

[5] Since the above was written, Petersen's article in the *Mittheilungen*, 1887, p. 372 (*Archaische Nikebilder*), has been received. He accepts the attribution to Archermos, and says that the letters are actually more archaic in form than they appear in the fac-simile.

A third dedication published by Kabbadias from the same finds is inscribed, like the others, upon a base, and consists of two parts, the dedication proper to Athena by a certain Onesimos, and the mutilated name of the artist above, of which sufficient remains to render the reading *Theodoros* certain. Kabbadias thinks this Theodoros to be the famous Samian artist, to whom the invention of bronze-casting is ascribed, and who worked in Sparta, building the structure called Skias. A bronze head larger than life was among the results of the excavations near the place where this base was found, and Kabbadias inclines to regard it as the work of Theodoros consecrated by Onesimos. Little can be urged against this on the score of epigraphy, if the activity of Theodoros be allowed to cover the first quarter of the sixth century, as is probable. The dedication of Onesimos is pure Attic, and might easily belong to the period of Koehler's Salamis Klerouchia-decree, which he dates at about 570. It is noticeable that in the name Theodoros the Ionic four-barred *sigma* is employed.

The name of the poet Aischylos in an inscription attracts the attention of all. Last February, a stone was found on the Akropolis stating that Aischylos produced a play in the archonship of Philokles, and that Xenokles of Aphidna was the *choregos*. The play, we know from the *Didaskalia*, was none other than the Oresteian trilogy, and, although nothing is added to our previous information by the inscription, it is still interesting to find the *Didaskalia* confirmed, and it stirs the heart to feel that one more link binds us to that sublime production to which the *Agamemnon* belongs.[6]

The chances of destruction which wait upon important memorials are well illustrated by the fortune of an inscription from the Peiraieus, which has been treated by Foucart in the masterly manner that characterizes all his productions (*Bull. Cor. Hellen.*, 1887, p. 129). During the latter part of last year, the owner of the property on which was built the fort of Eētioneia, on the west side of the harbor of Peiraieus, leased it to a contractor as a quarry for building-stones. A considerable part of the wall was thus destroyed; but, while the work was in progress, it chanced to be visited by a lieutenant from a French frigate

[6] The forms of the letters assign the inscription to the latter half of the fourth century B. C., and they are the same in form and size as those of some fragments already published in *C. I. G.*, II, 971, in which mention is made of a victory gained also by Aischylos, with Perikles as *choregos*. The conjecture that these all belong to a redaction of the *Didaskalia* by Lykurgos is very reasonable.

lying in the harbor, who wished to examine the ancient fortifications. While looking over the ground and the stones brought to light from the wall, he noticed two that had a part of their surface smoothed into a regular square which had been inscribed. He called Foucart's attention to them and thus preserved them from probable loss to science. The first was to this effect: *In the archonship of Diophantos* (395–4 B. C.), *month of Skirophorion* (June–July), *for work by the day, pay for cattle drawing the stones*, 160 *drachmas*. The other says: *In the archonship of Euboulides* (394–3 B. C.), *beginning from the Signal up to the front of the gate by the Aphrodision, on the right as you go out, 790 feet: contractor, Demosthenes the Boiotian; also to haul the stones*. From these apparently insignificant facts very important results are obtained by Foucart, aided by the fortunate mention of the dates. It was in the year of the archon Diophantos that the Thebans, after the visit of the Persian agent to Greece, formed their alliance with the Athenians against the Lakedaimonians; and the death of Lysander under the walls of Haliartos caused the extension of the alliance until it included all the Boiotians, the Argives, and the Korinthians. Before the end of this archonship the forces of the confederates had gathered at Korinth. In the early part of the archonship of Euboulides the battle of Korinth was fought, Konon gained his naval victory at Knidos, and Agesilaos fought at Koroneia. In the following spring (393 B. C.), Konon arrived at Korinth at the head of the Persian and Greek fleet, and thence proceeded to the Peiraieus, where he set to work to reconstruct the Long Walls and those of the Peiraieus, with the aid of his crews and the money furnished by the Great King. Xenophon (*Hel.*, iv. 8) adds that the Boiotians and other cities voluntarily assisted in the work, and Diodoros (xiv. 85) testifies to the same effect. To Konon therefore is habitually conceded the glory of reërecting the walls destroyed by Lysander; but our inscriptions show that the Athenians had already begun the task the year before, encouraged by the alliance with the confederates, and quickened by the danger of a Lakedaimonian invasion, to which the Peiraieus was particularly exposed, as indeed Thrasyboulos openly declared to the Theban envoys when seeking the alliance (Xen. *Hel.*, iii. 5, 16), a reminder which will readily account for the presence of a Boiotian contractor in Attika.

The gate mentioned in the second inscription can be identified at the northern extremity of the western wall, where it turns abruptly to the east. Within this, and near by, must have stood the Aphrodision of

the inscription. But the only Aphrodision hitherto known in the Peiraieus was built by Konon, out of gratitude to the goddess for his Knidian victory, and this was situated on the opposite side of the harbor, near the present custom-house, and was probably not begun till some months after our contract was recorded. Mention of an older Aphrodision, founded by Themistokles, has indeed been made by a scholiast on Hermogenes, but he has been believed to be confusing Themistokles with Konon, and no credence was given him. Now he may be rehabilitated. The existence of an Aphrodision in Eëtioneia gives Foucart opportunity for a new interpretation of the scholiast on Aristophanes, *Pax* 145, and a readjustment of the topography of the Peiraieus. The scholiast says, "The Peiraieus has three harbors, all closed: one the so-called Kantharos, then the Aphrodision, then five stoai about the harbor." These three harbors are usually placed all on the south and east side of the port, the Aphrodision between the other two, without any distinct harbor to which it could give name. Foucart now removes it to the west side, extending it from the entrance up to the northern limit, with the Kantharos, as before, on the right of the entrance, and the five stoai stretching along the east and northern shore. This interpretation relieves the passage of its difficulties, removes the necessity for the various emendations which have been proposed, and simplifies the topography of the Peiraieus.

This leads us naturally to two important architectural inscriptions which add much to our inadequate knowledge of details. One from Eleusis has been published by Philios in the last number of the Ἐφημ. Ἀρχ. for 1886, and contains, like that of the Athenian naval arsenal of Philon found near Peiraieus in 1882, the specifications for the construction of a large building within the sacred precinct, presumably a temple, but by what name it is to be designated is left in doubt, possibly by reason of the losses at the side of the stone, though in length the inscription amounts to 195 lines. The *Telesterion* designed by Iktinos would naturally have been completed before this document was engraved, and its architects, three in succession as named by Plutarch, are different from the Philagros mentioned here. A board of overseers act in conjunction with the architect, but the contracts are to be filled in accordance with the plans and drawings which he may furnish. The stone used is partly from Aigina, the Peiraican Akte, and Eleusis, but very largely from Pentelikos; it must be delivered in the precinct sound and whole and white, without spot or blemish. The dimensions

of the blocks and their number in each series are detailed with great minuteness. Each contractor must supply his own material except in the case of the iron and lead for securing the blocks in place, and these are furnished by the state.

Of far greater interest is the document published (likewise in the Ἐφημ. Ἀρχ. for 1886, p. 145) by Kabbadias from his excavations at Epidauros, in which we have, given in very complete form, the contracts assumed by different persons for the construction of the temple of Asklepios within the famous precinct. It contains none of the specifications for the manner in which the work is to be executed, or of the kind of stone to be used, such as the Eleusinian slab embodies solely. These probably existed upon another stone and are here taken for granted. In the well-known inscription relating to the Erechtheion (*C. I. A.*, I, 324) the moneys paid are chiefly for work by the day; but here, as at Troizen, Hermione, Lebadeia, *etc.*, various parts of the construction are awarded to contractors, and in this case to the lowest bidder, as would appear from the amounts paid, which are seldom in round numbers. For instance, Demochoos supplies timber for 299 drachmas and 5 obols, just one obol below the round number 300. Each contractor furnishes one or more bondsmen according to the amount of his contract. The bondsmen are native Epidaurians and only designated by name; the contractors mostly foreigners, Korinthians and Argives, as appears often to have been the case in small towns. At Athens, contracts are habitually taken by citizens, and the presence of the Boiotian as mentioned above at Eētioneia is due to the exceptional circumstances. The Korinthians engage especially, though not exclusively, to quarry and transport the stone. For example, Loukios the Korinthian contracts to quarry and draw the material for the stoa at 6300 drachmas, Sotadas the Argive to construct it for 3068. Euterpidas the Korinthian quarries and draws for half the naos at 6167 drs., Archikles the Korinthian quarries the other half for 4400, and Loukios draws it for 1600. An Argive constructs the whole naos for 3200. Polemarchos the Stymphalian paints the stoa by the encaustic process for 1050 drs., Loukios the Korinthian furnishes the pine for 4390, and Tychamenes the Kretan the cyprus; while elm, lotos and boxwood were used for the doors. A substantial workshop is constructed under similar contracts, reminding us of the famous workshop of Pheidias at Olympia.

From the excavations, we know that the temple was peripteral, with

six columns at each end, eleven at each side, with naos and pronaos, but no opisthodomos. The sculptures in the eastern pediment represented the conflict of the Kentaurs and Lapiths, in the western that of the Amazons. Rich akroteria in the shape of winged victories crowned the summit and corners of the roof. Portions of all these have been found. The dimensions of the ground-plan were about 43 by 82 feet. In addition to the details already given, we have contracts for the foundations, the stylobate, the prodomos, the pavements, the roofing, the pediments, the sculptures in the pediments, and the akroteria. There is a singular discrepancy in the cost of the sculptures of the two pediments, one amounting to 3010 drs. and the other to 1400 only. The parts painted are the stoa, the naos, the akanthai, parts beneath the beams, serpents on the gorgoneion and the lion-heads on the cornice. It is probable, from other remains of Doric architecture, that the painting of the stoa and the naos was confined to the upper parts. Two doors led into the prodomos, and one large one from there into the naos. The last was an elaborate affair. In addition to the wood and other materials employed in its construction, ivory is contracted for to the amount of 3070 drs., and the gluing amounts to more than 2600. Gilding ornamented the kymatia, the astragals, rosettes and stars, and a golden choros cost more than 1000 drs. The walls, columns and pavements were all smoothed and polished after erection, and a general cleaning of the naos was contracted for at the completion of the building. The work appears to have lasted three years, eight months and ten days, as the architect Theodotos is paid for that length of time in five separate instalments, three yearly, the fourth for six months, and the last for 70 days. His pay is 353 drachmas for the year, or one drachma a day, which is the usual rate at Athens in the fifth century B. C., though it runs up to two toward the close of the fourth. Our inscription belongs to the first part of the fourth century. Theodotos has no less than six bondsmen, although but three are required for the largest contract awarded, amounting to 9800 drachmas. During the third year Dorkon appears to have been appointed as assistant to Theodotos, and was paid 350 drs. Beside the definite contracts, from which we have taken selections only, there are many items of minor expenditure for work done and services rendered, in which the payments are made direct. One of these may possibly refer to the cost of the inscription itself: Eudamos receives 20 drs. for making a stele, and Paseas 49 drs. 1 obol for cutting and painting an inscription (*γραμμά-*

τῶν ἐνκολάψιος κἐνκαύσιος). Several new words occur, architectural terms, naturally, and ἄνευν for ἄνευ is written once, and is probably to be supplied later on, where Kabbadias reads ἄ[νευ], in the same phrase: we may compare the Elean ἄνευς. In speaking of the Kretan inscriptions, we have already remarked upon the strong individuality of closely neighboring towns as exhibited by the different characters which they severally employed. This is exemplified in Argolis by the signs used to designate numbers. Hermione and Troizen were already known to differ materially in this respect; and now Epidauros presents a third system of notation, in part wholly unknown elsewhere in Greece. Though they had already accepted the Ionic alphabet, they still clung to their earlier notation in which the sign for 100 is the closed H.

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A SILVER PATERA FROM KOURION.

[PLATE XXX.]

In describing the famous patera from Palestrina, and being puzzled for an explanation of its central medallion, M. Clermont-Ganneau remarks:[1] "Thus far this patera from Palestrina is unique in its class. But it seems to me more than probable that some day in some quarter of the Mediterranean there will be discovered a repetition of it, either exact or more or less complete, with variations which may throw light upon the question of its interpretation." Such a replica has been recently discovered among the treasures from Kourion,[2] and is now in the Metropolitan Museum of New York. It is not an exact repetition of the Palestrina patera, but a strikingly similar production with just such variations as we are accustomed to find in Phoinikian workmanship. This patera from Kourion is a more highly finished work of art, with more elaborate bands of ornament, an inner zone of more significant design, and a central medallion which may throw some light upon the question which M. Ganneau leaves unsettled. Unfortunately, it is not in a very perfect state of preservation: the ornamental band inclosing the central medallion is entirely gone, as is also the greater portion of the lower zone. But enough remains to give us a sufficiently clear impression of the central medallion and of the figured narrative of the upper zone. These designs are hammered and en-

[1] *La Coupe Phénicienne de Palestrina*, p. 152.

[2] CESNOLA, *Cyprus*, p. 326: "In the preceding room the various articles lay scattered over the floor, but in this room [Room D of the temple] they were found along the curve of the eastern wall, placed upon a kind of ledge about eight inches above the pavement, and hewn in the rock all around the wall. The vases were standing by themselves; the sixty bracelets were in three heaps, and also apart from other objects; the bowls and dishes were found stacked one inside the other in nine stacks, the top one in each case containing earrings, rings, amulets and fibulæ. The bowls and dishes have suffered most, several of the latter being so much oxydized as to make it impossible to separate them, since the silver would fall into dust at the first touch." Through very skilful cleaning by Mr. Balliard, this surface-oxydation has been removed and the design of our patera clearly brought to view.

graved on the inner surface of the patera, nothing being visible on the outer surface but rough patches of oxydation. In shape it resembles the pateræ found at Nimrûd;[3] being a little deeper toward the outer edges and flatter-bottomed than the Palestrina patera.[4] Its dimensions are: diameter of the opening, 8¼ ins.; breadth of the upper zone, 1 in.; height, about 1⅛ in.; ornamental bands, ¼ in. and ⅛ in. For obvious reasons, the breadth of the lower zone and central medallion, as well as the height, cannot be given with exactitude. In color, the patera presents only the rusty brown of oxydized metal, though here and there in small spots we can even yet detect a glimmering remnant of the silver.

The Central Medallion.—The composition of this central scene is not completely preserved. We see only an Egyptian king or hero brandishing his mace with his right hand, and extending his left over the heads of three suppliant figures. Back of him is an attendant, holding a strange object like a short staff surmounted by a circular disk. Above are portions of the wings of a bird. We are not without means of filling in additional details, as there are several other pateræ in which this group is represented. We find it, for example, in a second patera from Palestrina,[5] which we shall have occasion to refer to as the Eshmunjaad patera; and again in a patera from Salerno.[6] Both of these contain rather more elaborate compositions than are likely to have found place in our medallion, and the vacant spaces are filled in with cartouches and other ornaments which here seem to have been omitted. In both of the pateræ from Italy the left hand of the figure back of the king clutches a victim by the hair; this figure is certainly absent in our patera. Both contain an additional figure[7] to the right of the suppliants. There seems to be no room for such a figure, and, besides, we find no trace of its existence, for the lines above the hands of the suppliants seem to be mere scratches. In both of these pateræ from Italy we also see, between the legs of the central figure, a small lion, and further down, separated from the entire scene by a band

[3] See especially LAYARD, *Monuments of Nineveh*, Second series, pl. 59.

[4] The shape is given, somewhat differently, in *Mon. d. Inst.*, X, pl. 31, fig. 1ª; and CLERMONT-GANNEAU, *op. cit.*, pl. I (*Journal Asiatique*, 1877).

[5] The patera which bears the inscription *Eshmunjaad-ben-Ashto*; figured in *Not. d. Scavi*, 1876, tav. II; *Mon. d. Inst.*, X, pl. 32; *Gaz. Arch.*, 1877, pl. 5; PERROT and CHIPIEZ, *Hist. de l'Art*, III, fig. 36; *Corpus Inscr. Semit.*, fasc. III, pl. XXXVI.

[6] Figured in *Mon. d. Inst.*, IX, pl. 44.

[7] In the Eshmunjaad patera, a figure of Horus; in the Salerno patera, of Isis.

of hieroglyphs, a crouching figure. The lion or the crouching figure may have appeared in the Kourion patera; but that they were probably absent may be gathered from the examination of a Kypriote patera from Kition,[8] now in the Louvre. Here, as in the case of our Kourion patera, the artist utilizes the group of the king vanquishing his enemies for the central medallion of a patera with two[9] zones of figured ornament. He consequently simplifies the composition by the suppression of unnecessary or inconvenient details. It is therefore to the Kition patera that we look chiefly for the restoration of our medallion. From it we may fill out the following details. (1) Complete the central figure, by adding two plumes between the uræi of his headdress; the royal necklace about his neck; the schenti over his loins; possibly the outer cloak showing itself under the left arm and between the legs; and the bow and arrows in the left hand, which also grasps the hair of the suppliant prisoners. (2) Complete the figure behind the king, by adding the captive thrown over his right shoulder, the long spear in his right hand, one or two plumes on his head. (3) Complete the three suppliants, by posing the figure nearest the spectator according to the Eshmunjaad rather than the Kition design. (4) It is not easy to reconstruct the exact position of the winged disk or hawk above. The lines would seem to indicate a hawk extending a plume over the king's head, as in the Eshmunjaad patera, but in the opposite direction. This would have been done without crowding the space above the suppliants. The main difficulty is that the lines representing the plume are much too large. More probably, as in the Kition patera, there was a winged disk over the king, and a Horus-hawk above the suppliants. The hawk would then supply the place of the hierokephalic Horus. The difficulty again is to reconcile this with the peculiar direction of the plumage lines. (5) Below the group place a horizontal ornamental band, and leave vacant the space between it and the circumference of the medallion.

This restoration may be still further substantiated by the similar treatment of the same group on the outer zone of a patera from Kourion,[10] now in the Metropolitan Museum, New York. The central medallion of this patera represents an Assyrian royal figure stabbing

[8] Figured in *Mus. Nap. III*, pl. XI; also in CL. GANN., *op. cit.*, pl. III; PERROT and CHIPIEZ, *Hist. de l'Art*, III, fig. 270.

[9] The Eshmunjaad and Salerno pateræ have only one figured zone, and have larger central medallions.

[10] Figured in CESNOLA, *Cyprus*, p. 329; CL. GANN., *op. cit.*, pl. IV; *Rev. Arch.*, 1877, pl. I; PERROT and CHIPIEZ, *op. cit.*, III, fig. 276.

a lion. In contrast with it, our patera presents us with an Egyptian conquering his enemies. May not this suggest to us that these paterae were produced at a time when foreign rulers alternately gained the upper hand in Kypros? The composition of the group on our medallion was not an invention of the Phoinikian metal-worker. It was a favorite Egyptian mode of representing a victory, especially from the time of the Ramessides. In the sculptures of the twenty-fifth dynasty, we find this group recording the victory of Taharqa (Tirhakah) over the Assyrians.[11] In the very next dynasty, Apries conquered the Kypriotes at sea, and Amasis[12] brought this island under subjection. As it is probable, on other grounds, that the paterae we have mentioned were made about the middle of the sixth[13] century B. C., we cannot be far wrong in connecting our medallion with the fact of an Egyptian conquest. Turning now to the Palestrina patera, so ably described by M. Ganneau, may we not carry with us a little light for the interpretation of its central medallion. The man with his arms attached to a post behind his back is not unknown to us. He is to be found on Egyptian reliefs and paintings, represented as a foreigner, an Assyrian, an Abyssinian, *etc.*, and is used, notably in the industrial arts, for the decoration of thrones, handles of vases,[14] *etc.* So common was it, in fact, that we find it reduced to hieroglyphic form, as a determinative of the word *smau*,[15] "to kill." In the Palestrina patera it is still a bearded Assyrian who is thus consigned to subjection or to death, while the triumphant Egyptian with his long lance occupies the centre of the field. It looks as if the artist sympathized with the conquered people, for the conqueror is represented without the insignia of royalty, while beneath him is a dog or a jackal instead of a lion. M. Ganneau has already observed the Assyrian character of the man linked to the post, and the Egyptian character of the conqueror; but he looks for some narrative connection with the scene upon the upper zone of the patera, or thinks it may be a meaningless fragment of some undiscovered compo-

[11] WILKINSON, *Anct. Egyptians*, III, fig. 601. [12] HERODOTOS, II. 182.

[13] The Eshmunjaad patera is decorated with hieroglyphs, which, according to MASPÉRO, show no sign of a later origin than the XXVI dynasty (*Gaz. Arch.*, 1877, p. 16). For an excellent enumeration of the paterae and *résumé* of the epigraphical evidence as to the period to which they belong, see DUMONT and CHAPLAIN, *Céramiques de la Grèce propre*, pp. 112–32.

[14] See PRISSE D'AVENNES, *Hist. de l'Art Égypt.*, plates entitled "*Art Industriel*"; also MASPÉRO, *L'Archéol. Égypt.*, fig. 261.

[15] WILKINSON, *Anct. Egypt.*, III, fig. 604.

sition. We look upon it as a detached composition, sufficiently complete in itself, and intended to convey an impression in contrast to that conveyed by the upper zone. The upper zone says to us, The Assyrian has triumphed over the wild forces of nature: the central medallion replies, Yes, but the despised Egyptian has triumphed over him.

Before we turn to the remaining designs, we have still to ask ourselves, What is the strange object carried in the hand of the attendant? There are two Kypriote monuments which throw light upon this question. One of these is the other patera from Kourion, where the same group is represented on the outer zone. In this case, the disk-like object is distinctly marked with branches, giving us a conventionalized tree.[16] The other is the Kition patera already mentioned. Here the distinct branches have disappeared, and concentric lines of pearl ornament are substituted in their place. There can be no doubt that, in this instance, the attendant behind the king carries a branch or tree, for, in the outer zone of the same patera, three trees are represented in precisely the same way. In our patera from Kourion, the trees in the outer zone are expressed in a compromise-method: the main trunk, by lines; the branches, by rows of pearl ornament: while the object held by the attendant has lost every indication of branches, and presents even the outward form of a tree in an exaggerated way—it has reached the stage of being a mere circular disk filled with cross-hatched lines and mounted upon a stem or handle; a mysterious object inviting all sorts of interpretation.[17]

The lower zone.—The adjoining band in the Palestrina patera consists of a procession of eight stallions, over each of which fly two birds. In our patera, we see a more significant procession, involving human figures. We can make out three musicians, parts of two or three standing or walking figures, the head and arm of a figure holding a lotus flower, and the parasol which probably protected a chariot. Beside these figures, there remain only a few mysterious lines, which we leave

[16] On the pedestal of a statue of Herakles from Golgoi, Eurytion, who drives the cattle of Geryon, carries in his arms a well-defined tree (Cesnola, *Cyprus*, p. 136; *Rev. Arch.*, 1872, pl. 21). On a red-figured vase, reproduced by Cl. Gann. (*op. cit.*, pl. VII), Herakles with his club replaces the conqueror; the triple-headed Geryon, the three suppliants; Athena with extended arm replaces Horus; and Hermes, with his wand and a branch, the attendant.

[17] Similar disk-like objects with handles are found upon some of the Hittite sculptures. M. Perrot explains these as paterae (!), as if paterae were usually carried on sticks: Perrot and Chipiez, *Hist. de l'Art*, IV, pp. 550, 556; figs. 278, 280.

unexplained. Again we must resort to other paterae to help us in our restoration. But, unfortunately, we know of no other which gives us precisely this scene. In a silver patera of the Egyptian style from Golgoi [18] we find the three musicians represented as playing the lyre, tambourine and double pipe. Also in a patera now in the Varvakeion,[19] at Athens, the three musicians appear, though differently treated. We may accordingly suppose that in this procession there were only three musicians: the first playing on the tambourine, the second on the double pipe, the third on the lyre; the order of the players being different from that on the other two paterae.[20] Processional scenes, common on Egyptian, Assyrian and Persian monuments, occur also on several Phoinikian paterae. The one which approaches nearest to that upon our patera is found on the outermost zone of a second patera from Kition,[21] also in the Louvre. Here are seen mounted and unmounted warriors, and the king in his chariot, forming a grand procession.[22] The general spirit of such a procession we may suppose to have been given in our patera.

The mysterious lines to the left of the musicians, apparently part of the original design, suggest another restoration of this lower zone. In the silver patera from Golgoi, the three musicians are in the sacred boat. There are four of these boats at right angles to each other around the central medallion. A similar arrangement of boats occurs on the Eshmunjaad patera. The mounted horseman in our patera does not, as such, conflict with this view; for, between the four boats on the Golgoi patera, we find represented horses, a chariot-scene, cattle, and geese. But the horseman cannot, in this case, occupy such a position, as this would not leave room enough for the four boats. Besides, the boat-scene would be out of relation to the central medallion and the outer zone, in both of which we have significant pictures. Moreover, the lines of the boats would orient the patera in a manner at variance with the orientation established by the scene on the outer zone. If, how-

[18] Cesnola, *Cyprus*, pl. xi. [19] Perrot and Chipiez, *op. cit.*, iii, fig. 274.

[20] On two archaic Kypriote paterae, the musicians appear in the order, double pipe, lyre, tambourine. One from Idalion is published, *Rev. Arch.*, 1872, pl. xxiv; Cesnola, *Cyprus*, p. 77; Cl. Ganneau, *op. cit.*, pl. v. The other, from Kourion, now in the Metropolitan Museum, New York, is unpublished.

[21] Published *Mus. Nap. III*, pl. x; Cl. Ganneau, *op. cit.*, pl. ii; Perrot and Chipiez, *op. cit.*, iii, fig. 272.

[22] Similar processional scenes occur on the paterae from the tomb of Regulini-Galassi in Cere: Grifi, *Mon. di Cere antica*, pls. v, viii, ix, x; Perrot and Chipiez, iii, figs. 268, 275. Also on a silver krater from Palestrina, *Mon. d. Inst.*, x, pl. 33.

ever, we suppose that a procession is represented, the beginning and end of it would fall under the fortification on the outer zone; that is, precisely where we should expect to have it begin and end. We may also observe that the general movement of this procession is from left to right, a fact which helps to cut it off and distinguish it from the scene on the outer zone, where the movement is in the reverse direction.

The ornamental bands: torsade and palmette.—The line of ornament which separates the lower from the upper zone, and which probably also encircled the central medallion, is the torsade or twisted cable, which occurs frequently on the Assyrian monuments, here placed between two circles of diminutive pearl ornament. Upon the archaic pateræ from Idalion and Kourion, and upon the pateræ from Nimrûd,[23] we find the torsade without the pearl ornament. In our patera, we have the more elegant form of the torsade, the loosely twisted cable showing little openings or eyes at regular intervals, enriched by the addition of the circles of pearls. The Kypriote artists of this period appear to have been specially fond of the pearl ornament, as we find it upon a number of pateræ, used not merely as an ornamental band but as a conventional substitute for lines. In one of the pateræ from Kition,[24] all the circular bands of ornament are made up of triple rows of pearl ornament. The other band of ornament which forms the outer circumference of the upper zone, we have termed the palmette ornament, from its resemblance to the Assyrian palmette. It is a conventional form of floral ornament derived from the Egyptian lotus. Upon Egyptian wall-paintings,[25] an Assyrian pavement[26] from Kouyundjik, and a bronze vessel[27] from Nimrûd, it appears as a series of lotus blossoms alternately expanded and closed. In this form it also appears upon Kypriote pateræ.[28] In our patera, the closed lotus bud has disappeared, and its place is supplied by a diminutive circle or pearl. The expanded lotus flower has also assumed a conventionalized form which shows but little trace of its origin. Greater richness and solidity of effect is secured by placing below the palmette a line of pearls. In the Palestrina patera this uppermost band of ornament is replaced by the more significant, though less decorative, cosmic serpent.

The upper zone.—Here we find, with slight variations in the details and mode of treatment, the same design which appears in the famous

[23] LAYARD, *op. cit.*, pl. 58–68.
[24] *Mus. Nap. III*, pl. XI.
[25] PRISSE D'AVENNES, *op. cit.*, pl. "*frises fleuronnées.*"
[26] LAYARD, *op. cit.*, pl. 56.
[27] LAYARD, *op. cit.*, pl. 57.
[28] CL. GANN., *op. cit.*, pls. II, IV.

Palestrina patera. It represents the exploits of a king or hero in Assyrian costume. The narrative begins and ends with the symbolic representation of a walled town, and, like the written language, reads from right to left. It is punctuated, or divided, into four nearly equal parts by the fortification above, the mountain below, and the two hills[29] at either side. In the first section (I, II), we see the king starting from the town in his chariot: he descends and shoots a stag. In the second section (III, IV, V), the stag is killed and flayed, and the king offers a sacrifice. In the third section (VI, VII), which begins the *antistrophe*, the king is attacked by a gorilla, is miraculously saved, and in turn attacks the animal. Finally (VIII, IX, X), the king captures and kills the gorilla and returns to the town.

We may now examine the separate scenes in detail and compare them with the corresponding scenes on the Palestrina patera.

I. *The king in his chariot starts out from the town.*—We may fill out this picture by adding the completer details of the king's Assyrian costume and the battle-axe over his left shoulder, the Egyptian driver pressing forward to urge his steeds onward, and the quiver attached to the side of the chariot. The parasol over the king and the bird flying toward the town, which appear in the Palestrina patera, may be omitted in our restoration; as there is no trace of them here, or in the remaining scenes. As slight deviations in the two drawings, we may notice, that, in the Palestrina bowl, the right fore-legs of the horses extend in front of the wheels of the chariot belonging to the next scene; in our patera they are suggested, not fully drawn, behind the wheels: also that, in our patera, traces of the horse's collar are still visible. The wheel of the chariot in this scene is too large and has eight spokes; in the remaining scenes it has only six.

II. *The king has left the chariot and is drawing his bow to kill a stag which stands in front upon a slight eminence. The driver brings the horses to a stand-still.*—The differences between the two drawings are more marked than before. The peculiarities of the Palestrina representation are, the stag in rapid motion and upon higher ground, no tree behind the king, the two birds, and the parasol. The trees in our

[29] The hill to the left is no longer visible, but may be restored by means of the Palestrina patera. The large hill below divides the entire narrative into two parts. The stag episode and the gorilla episode are opposed to each other like the strophe and antistrophe of a Greek chorus. The smaller hill subdivides the narrative still further.

patera are drawn in a geometrical manner, and the branches indicated by lines of pearl ornament: the tree in the Palestrina patera is drawn in a ruder but more natural manner. To complete our picture, we may draw the Egyptian driver in an erect posture, add the quiver to the chariot and collar to the horse, and to this and all subsequent representations of the horse add a long tail drawn very much like a long curved feather.[30] The king's garment appears to be the royal *kaunakes*,[31] and is drawn uniformly in subsequent scenes, without the variations observable in the drawing of the Palestrina patera. The stag is in an expectant, motionless attitude. We may complete his head and antlers, and add, perhaps, the short parallel rows of lines which indicate the hairy texture of his hide.[32] We may also complete the hill, giving it the same general form as the hill on the Palestrina patera, but with less elevation. We may draw it according to either one of the two methods employed on our patera. The presence of the stag upon a Kypriote patera presents no such difficulty as does its appearance upon the Palestrina patera, when the attempt is made, as by M. Clermont-Ganneau, to prove that the latter was made in Carthage. For, not only was the stag common in Kypros, but at Kourion itself, as Aelian informs us (*De Nat. Animal.*, v. 56), there were quantities of stags in the sacred grove of the shrine of Apollon (*op. cit.*, xi. 7).

III. *The king has shot the stag.*—We may complete our drawing by placing the bow in the king's right hand, and in his left the arrows extending over his left shoulder. An arrow is seen plunged in the stag's breast, from which the blood is dripping to the ground. The hill is slightly depressed where the king is standing, but rises again toward the end, where the wounded stag is vainly endeavoring to escape.

IV. *The driver has turned the chariot about and feeds the horses: the king is flaying the stag whose carcass is suspended on a tree.*—In this scene on the Palestrina bowl there are two birds flying nearly over the driver's head, and four trees, one of which is the date-palm. On our patera there are no birds, and only three trees, all of the same conventional type. The details of the picture may be completed by adding the tripodal manger from which the horses are feeding, the chariot upturned so that the pole rests against the tree and exhibiting a quiver

[30] This method of representing the horse's tail seems to have been the only one employed on Phoinikian paterae.

[31] HEUZEY, *Rev. Arch.*, 1887, p. 257–72.

[32] If these lines, as M. Ganneau supposes, were intended to represent spots, the stag becomes the dappled fallow deer sacred to Apollon: see PRELLER, *Gr. Myth.*, p. 183.

attached to this side also, and the king with his knife flaying the suspended stag. The scene occupies less space, and the figures are more crowded, than in the corresponding scene on the Palestrina patera.

v. *The king offers a sacrifice to Apollon.*—This scene terminates the first portion of the narrative. In order to place it in the first half of the zone, the artist was obliged to treat it in a more summary fashion than appears on its Palestrina counterpart. He accordingly omits the two altars, and substitutes a single fixed altar. There is no room for the king seated upon his throne to the right of the altar, so he is represented as standing behind it. There is, perhaps, a difference in the significance of the two pictures to account for the difference of form. The two altars and the combined disk and crescent[33] of the Palestrina patera appear to suggest a double sacrifice, addressed to two divinities, one solar, the other lunar; as well as two kinds of sacrifice, one of blood or wine, the other, and larger, the burnt offering of the stag.[34] In the Kourion patera, especially if we suppose that it was made in Kourion or for some one in Kourion, it was enough to represent the sacrifice as made to Apollon alone; for here was the great shrine to Apollon Hylates,[35] with its famous grove. The determinative of the god is given by the winged disk above. In Egyptian, Assyrian, Persian and Phoinikian monuments the winged disk had indicated a solar divinity: it may be that we should content ourselves with seeing in the symbol here no more than the general Phoinikian Sun-god. The mount which closes the first half of the narrative is somewhat larger and higher than the corresponding hill on the Palestrina patera. This may be accounted for by the sense of symmetry, which our artist exhibits in his desire to balance the fortification at the top of the patera. Hence he omits the five trees, the stag and the hare, which appear on the Palestrina mount. But we may believe that he did not omit the gorilla's head, which appears from the mouth of a cavern to the right of the hill. There is room enough for it, and its presence would account for the altar being drawn so close to the body of the king in the adjoining scene.

[33] For the combined disk and crescent on Phoinikian monuments, see HELBIG, *Ann. d. Inst.*, 1876, p. 217.

[34] The stag was offered in Phoinikian sacrifices (see CL. GANN., *op. cit.*, pp. 69–89) the gazelle in Chaldæan sacrifices to Šamaš, Ištar and Sin, solar and lunar deities (MÉNANT, *Glypt. orient.*, I, p. 145).

[35] ENGEL, *Kypros*, II, p. 667: according to CESNOLA, *Cyprus*, p. 342, the temple of Apollon was outside of and to the north of Kourion.

VI. *The king is returning to the town, when he is attacked by a gorilla, but is saved by divine interposition.*—In our patera the scene is again given in shorter space. The gorilla is just emerging from his cave, instead of being fully out and away from it. To complete the picture, we have only to add the club in his right hand and the waving grass or dust in front of him, which marks the place from which the chariot and its contents are transported to the sky. We have called the monster, who endangers the life of the king, the gorilla, because that term suggests to us, what we have here represented, the troglodyte hairy-man of ancient and modern story. It is evident that it is not an ape that our artist intended to represent: for his Egyptian and Assyrian masters had instructed him how to draw more accurately the simian type. We are at a loss to connect this creature directly with any graphic ancestor. We have reached a missing link, and until we find it must seek an explanation from another quarter. Had we been called upon to predict what kind of a creature would have been employed to endanger the life of the king, we should have looked for a lion, or a lion-headed man, or a griffin, or one of the composite beings known to us in ancient art. But a troglodyte wild man of the woods is an unexpected appearance, and his presence must be accounted for.

We know, from literary sources, that the Phoinikian and Greek imagination had peopled the heart of Africa with monsters resembling our gorilla. Herodotos (IV. 191) tells us that in the eastern desert of Libya there were, according to the Libyans, "*kunokephaloi* and *akephaloi* with eyes in their breasts, and wild men and wild women, and quantities of other imaginary monsters." According to Aelian, beyond the fertile land of Egypt, in the desert toward Ethiopia, there dwelt the Κυνοπρόσωποι ἄνθρωποι, or dog-faced men.[36] The Troglodytes, of which Aelian speaks (*op. cit.*, VI. 10; IX. 44), were also men. The hairy skins which Hanno brought from western Africa to Carthage appear to have been those of the female gorilla.[37] The presence of such

[36] *De Nat. Animal.*, X. 25: Ὅασιν τὴν Αἰγυπτίαν διελθόντι ἀπαντᾷ ἑπτὰ ἡμερῶν ὅλων ἐρημία βαθυτάτη· μετὰ δὲ ταύτην Κυνοπρόσωποι νέμονται ἄνθρωποι, κατὰ τὴν ὀδὸν τὴν εἰς Αἰθιοπίαν ἄγουσαν. Ζῶσι δὲ ἄρα οὗτοι θηρῶντες δορκάδας τε καὶ βουβαλίδας. Ἰδεῖν γε μὴν μέλανές εἰσι, κυνὸς δὲ ἔχουσι τὴν κεφαλὴν καὶ τοὺς ὀδόντας· ἐπεὶ δὲ ἐοίκασι τῷδε τῷ ζώῳ, καὶ μάλα γε εἰκότως αὐτῶν ἐνταυθοῖ τὴν μνήμην ἐποιησάμην. Φωνῆς γὰρ ἀμοιροῦσι, τρίζουσι δὲ ὀξύ, κάτεισι δὲ ὑπὸ τὴν ὑπήνην αὐτοῖς γένειον, ὃν εἰκάσι τοῖς τῶν δρακόντων αὐτά, αἱ δὲ χεῖρες αὐτῶν ὄνυξιν ἰσχυροῖς καὶ ὀξυτάτοις εἰσὶ τεθηγμέναι, τὸ δὲ πᾶν σῶμα δασεῖς πεφύκασι, κατὰ τοὺς κύνας καὶ τοῦτο. Ὠκιστοι δὲ εἰσι, καὶ ἴσασι τὰ ἐν τοῖς τόποις δύσβατα· ἐντεῦθεν τοι καὶ δυσάλωτοι δοκοῦσιν.

[37] PLINY, *Hist. Nat.*, VI. 36.

a monster on a Kypriote patera of the sixth century need not surprise us, as, in the preceding century, the Kypriotes were in commercial relations[38] with Egypt, and could not have failed to have been impressed by the trained monkeys,[39] and to have heard of the wilder denizens of the desert.

It is to be expected that the divinity would protect his pious worshipper from danger. Here the miraculous preservation is accomplished, not by Baal, but by his counterpart Baaltis or Astarte. It was natural that the Kypriote artist should not overlook his chief divinity. He may also, by representing the lunar goddess, have intended to suggest that it was already evening when the king was returning to his castle. Or it may be that the king has passed from the district of Apollon's shrine, and is already under the dominion of Astarte.[40] She is represented here by a winged Hathoric mask, bearing aloft, in her long arms, chariot and horses, king and driver. The symbol, like that for Apollon, is an Egyptian symbol, but it is not likely that are represented here the Egyptian gods which Amasis endeavored, with small success, to introduce into Kypros. It would be more natural to see, in her, Artemis, the counterpart of Apollon. The curved wings, with which she appears in Persian and early Greek art, her association with Apollon and with the stag, would point in this direction. But it is Hera rather than Artemis that the Argive settlers of Kourion would have carried with them to Kypros. So we content ourselves with seeing only the more general Phoinikian goddess, in whom were combined many of the attributes which the Greeks, in a later day, distributed amongst Hera and Artemis, Aphrodite, Athena and Demeter. It is probable, also, that at this time the Phoinikian population[41] of Kourion outnumbered the Greek. The miniature-skill of the artist in representing the whole chariot-scene within a circle of $\frac{1}{4}$ in. diameter should not be overlooked.

VII. *Saved by the divinity, the king attacks the gorilla.*—We may complete the chariot as before, omitting the parasol and two birds represented on the Palestrina patera. In our patera, the gorilla has not fallen to the earth, but is ascending a hill. The frightened horses, which have overtaken him, are represented in more spirited fashion. The interposition of a hill, dividing this scene from the next, introduces a

[38] ATHENAIOS, XV. 18; PETRIE, *Naukratis*, I, p. 4. [39] AELIAN, *op. cit.*, VI. 10.

[40] This suggests that the unknown temple discovered at Kourion was a temple of Astarte. [41] PERROT and CHIPIEZ, *op. cit.*, III, p. 288.

symmetrical rhythm into the composition of the frieze, marking as it does the middle point of its second half. It is more carelessly drawn than the larger hill: its wooded character is indicated by two conventional trees, which fill the space occupied by the Horus-hawk on the Palestrina patera. Though differently drawn from the hill on the opposite side of the frieze, it conveys the impression that, in returning to the town, the king passes through the same hilly woodland country as that upon which he met the stag. The mountainous character of the country about Kourion, and especially in the direction of the shrine of Apollon, will account for the representations of hills on our patera.

VIII. *The king captures the gorilla.*—The treatment of this scene is more conventional than in the Palestrina patera. The pose of the king and that of the gorilla are both derived from the ordinary group representing conquest, such as we find in our central medallion. Even the tying of the captive's arms behind his back is a common Egyptian motive. To complete the design, we have merely to finish the lines of the battle-axe, and draw the king's left arm which grasps the gorilla's hair. In this scene, the king's garment is more clearly preserved than in any other figure of the king on this or the Palestrina patera. It is evidently the woolly *kaunakes*, figured on Chaldæan and Assyrian monuments, and highly valued by the Greeks.[42] The parallel rows of little lines are reminders of the mode of its manufacture, but come to denote also its hairy or woolly texture, for the hairy skins of the stag and of the gorilla are indicated in the same manner.

IX. *The king returns to the town.*—The Palestrina picture adds to ours the bird and the king's parasol, both of which were here intentionally omitted. The only difference between the two is that, in the Palestrina picture, the horses have reached their destination, and their fore-limbs already lose themselves behind the walls of the town. It is substantially the same design as that of the first scene.

X. *The town is reached.*—There is room enough for another scene, before our hero has reached his destination. What that scene was we cannot tell, for it has been lost through the fracture in the patera. Nor can the Palestrina patera enlighten us, for, in that, the ninth scene is the last. Possibly, the king descends from the chariot to enter the town on foot. At all events, the end is not like the beginning, and we must wait until another patera of similar design is found before we know the end of the story. The wall-structure, with its three

[42] ARISTOPH., *Wasps*, 1056–1131.

crenellated towers, is not a castle, but the symbol for a town. This appears to be proved by the triple-towered structure represented on a patera from Amathous,[43] also in the Metropolitan Museum of New York. In this case, we can look through the walls into the city, where we see houses of domical construction, like the "bee-hive" tombs of Asia Minor, Greece and Etruria. The structure on our patera seems, then, to represent the walls of Kourion, within which the king returns.

Interpretation.—If we ask, who is the royal, priestly hero whose exploits are here related, an answer comes from Kypriote mythology. Can it be any other than Kinyras,[44] the mythical king of Kypros, the cherished priest of Aphrodite and heartily beloved by the golden-haired Apollon?[45] He was the founder of Kourion,[46] as well as of Amathous, Paphos, and other cities of Kypros. He was the inventor of the hammer and chisel, and of mining,[47] and hence an appropriate subject for the decoration of a patera. He was called the king of Assyria,[48] and here wears the Assyrian royal costume. The stag episode tells us of his priestly character, and the gorilla episode reveals to us both the tender care of the goddess and the lack of personal courage of the Kypriote king who gave to Agamemnon the beautifully wrought breastplate of kyanos and gold and tin (*Il.*, XI. 20 ff.), but who failed to send the promised support to Troy, and was afterwards driven from his possession in Amathous. Lucian (*De dea Syr.*, 9) tells us of an ancient shrine to Aphrodite established by Kinyras in Mount Libanos, a day's journey from Byblos; so that Syro-Phoinikian tradition furnished materials for a similar and earlier treatment of the Kinyras myth.

The middle zone of the patera is almost wholly lost, but the figures which are left may be explained within the limits of the Kinyras myth. Kinyras was the personification of Phoinikian music, which was based upon the pipe. He came into musical conflict with Apollon and was overcome by him. His name is suggestive of the plaintive songs which were sung in the various Adonis festivals over the ancient world: Greece, Asia Minor, Kypros, Syria, Palestine, and Egypt had similar dirges in honor of a youthful god or hero whose

[43] CECCALDI, *Mon. antiq. de Chypre*, pl. VIII; and *Rev. Arch.*, 1876, pl. I; CL. GANN., *op. cit.*, pl. VI; CESNOLA, *Cyprus*, pl. XIX; PERROT and CHIPIEZ, III, fig. 271.

[44] ENGEL, *Kypros*, II, pp. 94–136; MOVERS, I, pp. 238–53.

[45] PIND., *Pyth.*, 2. 15. [46] ENGEL, I, p. 204. [47] ENGEL, II, p. 105.

[48] HYGIN., *Fab.* 242; BION, I. 24.

life was suddenly cut short.[49] May it not be that the procession in the second zone of our patera expresses in plaintive notes the sorrow over Phoinikian downfall in Kypros? The central medallion we have already explained as signifying Egyptian triumph, but we have not explained the man who follows the triumphant king. If we refer to the Egyptian monuments which contain similar representations, there are few that give us any help. In one of these, however, representing the triumphant Taharqa,[50] we see to the left of the scene the prototype of this figure. It is the solar divinity Amen-ra,[51] crowned with two ostrich feathers, bearing in one hand the long sceptre and in the other the symbol of life, and drawing after him the captive nations symbolized by human-headed cartouches. A similar divinity of inferior order was the Egyptian Shu,[52] the "sun of the sun," crowned with one or four ostrich feathers. Translated into Phoinikian mythology, he is Melkarth or Herakles,[53] who was closely associated with the cult of Apollon and Aphrodite[54] in Kypros, upon whose altar human sacrifices were offered, and who was responsible for the death of Kinyras.[55] Instead of the sceptre he carries a spear, instead of the symbol of life he carries the cedar-tree which was to be placed before the temple of Aphrodite and on which on the sad opening days of the Adonis festival a human figure was hung.[56] With Egyptian conquest comes Phoinikian death. This seems to be the key which unlocks to us the meaning of the patera.

Conclusion.—The striking resemblance of the figured narrative on the Kourion and Palestrina pateræ at first suggests a single artist: yet, the stronger decorative sense shown in the general composition, the finer ornamental bands and more carefully executed details of the Kourion patera make it probable that it was not made by the artist of the Palestrina patera. The differences, however, are not so great, but that either may have been a modified copy of the other or derived from the same design. M. Ganneau is inclined to ascribe to the Palestrina patera a Carthaginian origin: but that the Kourion patera was made in Kypros is almost a certainty. Not only does it exhibit the mixed characteristics of Kypriote art, but, if our interpretation be correct, it has a

[49] ENGEL, II, p. 115; MOVERS, I, pp. 243–53.
[50] LENORMANT, *Hist. anc. de l'Orient*, II, p. 367.
[51] WILKINSON, III, p. 9. [52] *Idem*, III, p. 172.
[53] In the patera from Salerno he wears the lion-skin.
[54] MOVERS, I, p. 382. [55] ENGEL, II, p. 617. [56] *Idem*, pp. 558–59.

definite historical and local significance. It was, moreover, found with objects of gold, silver, copper and iron;[57] all of which metals were found in Kypros.[58] The great abundance of metallic objects which have been discovered on the island in recent years makes it probable that the Greeks were not wrong in ascribing to the fathers of metallurgy, the Telchines, a home in Kypros.

We have taken the central medallion as an indication that the patera represents the brief period of Egyptian domination in Kypros, and accordingly may be referred to the middle of the sixth century B. C. The Egyptians,[59] as early as Thothmes III, engraved silver pateræ. It is Egyptian and not Assyrian influence that we feel in the Nimrûd pateræ; and in all which have been found in Kypros we recognize a style either purely Egyptian,[60] or Egyptian mixed with Assyrian,[61] or Greek[62] designs. In none do we recognize a purely Assyrian style. We therefore look to Egypt as the ultimate, perhaps also the nearer, inspiration of the beautiful silver pateræ which were made by Phoinikian or Greek artists and carried by merchants from one end of the Mediterranean to the other.

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[57] CESNOLA, *Cyprus*, ch. XI. [58] ENGEL, I, ch. IV.
[59] MASPÉRO, *L'Arch. Égypt.*, pp. 299–301. [60] CESNOLA, *Cyprus*, pl. XI.
[61] Our Kourion patera. [62] Amathous patera, CL. GANN., *op. cit.*, pl. VI.

NOTES ON ORIENTAL ANTIQUITIES.

IV. AN EYE OF NABU.

Among the smaller objects from Mesopotamia in my possession are two which deserve detailed description.

One of these is a sardonyx disk, twenty-three millimetres in diameter. The layers of stone have been carefully polished so as to give the appearance, on one side, of the human eye: an outer white layer represents the cornea; the next upper layer of light brown forms the iris; and yet another layer of dark brown, the pupil. The stone is cut with some skill, so as to secure the right position of the iris and pupil, as the layers are not perfectly even. A hole has been pierced through the diameter of the "eye," to fasten it with a wire, or string, into the socket. On the iris-layer is a very delicate inscription, as follows: *Ana Nabû bêlisu Nabu-kuduri-usur sar Babili ana balati iskun.* "To Nabu, his lord; Nebuchadnezzar, King of Babylon, made for his life." This object, then, formed the eye of an idol of Nabu, set up by Nebuchadnezzar in honor of the god whose name he bore.

The class to which this object belongs is not unknown, and has been the subject of successful study by M. Ménant. A very curious cameo, in glass, has long been known, in which a Greek head appears surrounded by a dedicatory inscription of Nebuchadnezzar to the god Merodach. It was a great puzzle to scholars, until M. Ménant (*Pierres Gravées*, vol. II, pp. 142–48) showed that it is a copy of an onyx in the collection of the Grand Duke of Tuscany (Museum of Florence), which originally served as the eye of an image of Merodach, but which at a later time, perhaps at the conquest of Alexander, a Greek artist utilized by cutting, in the dark iris and pupil, a head with a Greek headdress. It is plain that this gem can no longer figure as a portrait of Nebuchadnezzar. Several other examples of these sardonyx "eyes" exist in collections. In George Smith's *Assyrian Discoveries* (p. 385) is given the translation of a dedication by Nebuchadnezzar to Nabu on a similar "eye," of which he got only a cast in his first expedition. In Ménant's Catalogue of the Museum of the Hague another sardonyx

eye of the same kind is described, with an inscription indicating that it belonged to an image of Merodach. Two others are cited by Ménant, one belonging to the Gobineau Collection, now in the possession of M. Hirsch, and the other to the Louvre (*ibid.* p. 147).

V. A BABYLONIAN BRONZE PENDANT.

Yet another interesting object is a bronze pendant, forty-two millimetres in length, pierced at the upper end for suspension. It is engraved on the two sides, as given in *figures* 17, 18. A worshipper, probably holding a staff, appears on one side in adoration before a goddess seated in a chair with six stars attached to the back of it, and

Babylonian Bronze Pendant:

FIG. 17.—*Obverse;* FIG. 18.—*Reverse.*

resting on a composite winged animal. On the other side the same animal, or griffin, appears twice, rampant, and over them are the seven dots, or stars, perhaps of the Great Bear.

The goddess here represented frequently appears in Assyrian art, both on the basreliefs and on the cylinders, and once on a scarab apparently of Phœnician engraving and with a Phœnician inscription. She appears with such comparatively late elements as the sacred tree and the winged disk with streamers, which have an Assyrian rather than a Babylonian origin, though continued down to a period long subsequent to the fall of Nineveh. They are all rudely engraved, with the drill or wheel and not with the corundum point, but on hard chalcedony or carnelian. They are generally rather small, but I have one large one in my collection, of a yellowish chalcedony, obtained in Bagh-

dad and presumably from Babylonia. It is not easy to identify this goddess. She seems to be the same as appears borne on men's shoulders on a Nimrûd sculpure in Layard's *Monuments of Nineveh* (First Series, pl. 65). Of the three goddesses there represented, this one seems to be the second, drawn in profile. This is the only case I recall in which the goddess on this peculiarly ornamented chair appears with any animal. For this reason, and because this animal is not the lion, but the griffin in an unusual position, she can hardly be identified with the *Venus supra leonem*, who often appears on the cylinders. The latter goddess seems to be the Ishtar of War, and is drawn in front view, and variously armed. The goddesses in the Babylonian and Assyrian pantheon are not so well differentiated as the gods, and it is extremely difficult to distinguish them from each other.

The ring held in the hand of the goddess on this pendant merits notice. It is so often borne by goddesses, either in the form of a simple continuous ring, or of a ring, or wreath, of dots, that it might appear to be a feminine emblem. But in a single case known to me (Layard, *Monuments of Nineveh*, First Series, pl. 26) it is borne by the supreme god Aššur represented in the developed form of the winged disk. On the rock of Bavian (Layard, Second Series, pl. 51) each of the two bearded deities holds in one hand two objects, one the ring, and the other a sort of sceptre. As the two sceptres vary much in form, and the ring, which in one case is held near the middle of it, is held in the other case near its end, it is evident that the ring is not attached to the sceptre, as Ménant supposes it to be in the case of the god "Serah," of the famous stone-tablet of Abu-habba, who carries in his right hand a short rod, with a large circle evidently drawn separate from it, held at the middle of the rod. Ménant identifies this with a long rod, with a small circle attached to its middle, which often appears on the cylinders, and which Lenormant has regarded as a balance, but which Ménant, trusting to the inscription of the god "Serah," calls a sceptre of Justice, made in the form of a measuring rod. The ring and the rod held by "Serah," I think, are clearly separate, and we thus have three instances where a male deity holds the ring with the sceptre: this on the stone-tablet of Abu-habba, and two on the rock of Bavian, beside the unique case in which Aššur holds the ring alone. Lenormant has much to say about a peculiar weapon in the form of a ring, or disk (*Les Origines de l'Histoire*, t. I, pp. 152–59) held by the gods; but, even if his interpretation be right (and the text depended on

by Lenormant for this revolving disk is differently translated by Sayce, *Hibbert Lectures*, pp. 180–82), I do not know of its being represented in Mesopotamian art. This ring, held generally by a goddess and *not* notched, cannot be it.

VI. THE STONE TABLET OF ABU-HABBA.

I am greatly in doubt whether the inscriptions of the god "Serah" on this Abu-habba tablet have been properly interpreted. There are three small inscriptions which describe the objects represented. The objects being figured directly before us, it would seem that it would be easy to interpret the inscriptions: but such is not the case. The right of the figured portion is taken up with a deity in a four-horned tiara, seated under a canopy, which is supported in front by a palm-trunk column which has Ionic volutes at the top and bottom: immediately under the canopy, and so on a level with the top of the tiara of the god, are the common emblems of Sin, Shamash and Ishtar: the god holds in his extended hand a ring and a rod. The left portion is occupied by a table, on which rests a large disk of the sun over two volutes: two cords behind the disk, reaching to the table, are held by two figures whose busts are seen in the sky: a small bearded figure leads a second to the altar, and behind them is a third beardless figure with a four-horned tiara, with both hands lifted. Under the whole length of the figured portion appears a sea or stream of water, with four stars in the water. These stars represent the planet Venus, and not the sun, in its course under the earth.

In the principal open space, to the left, is an epigraph perfectly easy to read: *Salam ili Shamash bêlu rabû | ashib E-Parra | sha kirib Sipparaki*: "Image of the Sun-god (Shamash) great lord, inhabiting E-Parra, which is within Sippara." Dr. Haupt informs me that *salam* cannot well refer to any other than the image of a human or living object; otherwise, I should be inclined to suppose that the "image" of this inscription is the large disk of the sun on the altar. This is not the only known case of such a disk of the sun worshipped in the East. Professor John A. Paine has described several large disks in the land of Moab (too large to be mill-wheels) which he regards as objects of sun-worship. If this epigraph cannot refer to the large disk held by cords, it must describe the seated god, or, rather, the whole scene of which he is the central figure.

The narrow space over the canopy is occupied by two closely inscribed

lines, as follows: *Ilu Sin ilu Shamash iltu Ishtar ina pût apsi | ina birit ili Siru timeru mesrit* (?). It is clear that the deities Sin, Shamash, and Ishtar are represented, immediately under this inscription, by their usual circular symbols. The meaning of the rest of this line and of the next is not so plain. *Ina pût apsi* might mean "in front of," or "in the mouth of" *apsu*, "the ocean," only they are not specially figured as related to the ocean, which must be the water at the bottom of the scene. At most, only Ishtar is drawn in connection with the ocean, in which she appears four times. I raise the question whether it may be translated, "in front is the ocean."

The next words, *ina birit ili Siru*, would be translated, "Within (or *between*, or *near by*) the god Siru" (or "*is* the god Siru"). Siru, or Serah, is the Serpent-god, and Ménant and others understand that it is Serah who sits in the pavilion. But in this temple the seated god must be the Sun, Shamash: scarcely any other god could have this place of honor. It is difficult to see how this seated god can be Serah, unless Serah were considered to be a form of Shamash, which is unlikely. I raise the question, whether the back of the pavilion, rising from the ocean behind the Sun-god and bending over him till it meets the top of the palm-tree column, is not the Serpent, Siru or Serah. As seen in the photo-lithographic figures (*Trans. Soc. Bib. Arch.*, VIII, p. 164; or Ménant, *Pierres Gravées*, I, p. 243)—but *not* in the lithograph of vol. V of the British Museum Inscriptions—it clearly has the head of a serpent. The rest of this epigraph, *timeru mesrit* (?), is difficult to understand. I raise the question, whether *timeru* may not refer to the palm-tree (Heb., *tamar*, "palm-tree") column in front of the seated Sun-god. The word *timeru*, in the inscriptions, means "a column" in the expression "a column of smoke." We would then have represented the great encompassing ocean figured below, out of which arises the mighty Serpent which encompasses earth and sea and sky; the same which is represented as encompassing all things on the bowl of Palestrina. Or, possibly, the Serpent is the storm-cloud which rises out of the ocean, and covers the throne of the Sun, reaching to the pillars which support the heavens; as we have it described in *Job*, xxvi: 9, 11: "He closeth in the face of his throne, and spreadeth his cloud upon it. . . . The pillars of heaven tremble and are astonished at his rebuke." The pillars of heaven tremble in a storm, as the pillars of the earth tremble in an earthquake, *cf. I Sam.*, ii: 8; *Job*, ix: 6; *Ps.*, lxxv: 3. For the pavilion of clouds, *cf. Ps.*, xviii: 11: "He made darkness his hiding-

place, his pavilion round about him; darkness of waters, thick clouds of the sky."

The epigraph within the pavilion and over the hand of the seated god is in two short lines, and must describe something near to it: it reads, as I make it, *Agu ili Shamash | mush-shi ili Shamash*. It will be seen that I read the two vertical wedges, not as the numeral "two" (Pinches), but as *ditto*, repeating the *ilu Shamash* of the line above, which there was not room to write again in full. The first line is easily translated, "Circle (ring, disk) of the god Shamash." Of course, then, it is Shamash who is seated on the throne, and not another god, Siru, or Serah. This "circle" I understand to be the ring in the god's hand, while the *mush-shi* of the second line (a word I am not able otherwise to identify) may probably indicate the wand or rod which he holds in his hand with the ring.

If the above interpretations have any merit, it comes less from ability to translate the inscriptions than from a careful study of their relation to the objects figured. My controlling idea has been, that the epigraphs must be in close relation to the design: that whatever is mentioned in the inscription must be found in the scene represented, and as near to it as possible. This reason alone should, I think, almost compel us to see, as the *agu* or "circle," the ring in the hand of the god, and not the disk on the altar outside of the pavilion. For the same reason, although the seated god is the chief figure of the whole design, I somewhat hesitate to make *salam*, in the left-hand inscription, refer to the god instead of to the nearer disk on the altar.

To this long digression, suggested by the ring held in the hand of the goddess on the bronze pendant, let me add that, of the three figures approaching the god, the last is Aa, wife of Shamash: she bears the divine emblem, four horns to her tiara. The consorts of the gods, when not possessing, like Ishtar, any special attribute, are represented on the seals with a divine tiara, a long goat-hair robe, often flounced, and with both hands lifted in an attitude of respect. Human worshippers lift but one hand: where several figures approach a god, his wife appears in the rear of all.

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ANTIQUITIES OF SOUTHERN PHRYGIA AND THE BORDER LANDS.

I.

It is impossible to discuss the southern cities and frontier of Phrygia without discussing the cities on the other side of the frontier. If the site of each city were proved by epigraphic evidence of the name, found on the spot, the case would be different: but a number of names can be placed only by balancing evidence, whose value depends on the ancient condition of a wide extent of country. It happens that the central cities of western Pamphylia (I use the word in the late-Roman and Byzantine sense) are almost all fixed by independent epigraphic evidence, but the Pamphylian cities on the Phrygian frontier can be placed only by an investigation extending over the entire province of Pamphylia Secunda. Hence, the rather complicated plan of the present paper is forced on me. I discuss the border, city by city, and, after fixing the position of each city, mention any facts about its history in ancient time which seem to be as yet unknown.

Prof. Hirschfeld's careful *Reisebericht* (Berlin *Monatsber.*, 1879) has been most useful: I am the more anxious to lay stress on this, as the want of positive identifications in this district would lead those who look merely at definite positive results to undervalue his work. Clear statement of geographical facts and of ancient authorities make his work continually suggestive to the student,—far more so than if he had made a series of guesses, on insufficient evidence, at the ancient names of the sites which he visited.[1] Since Leake, guesses are no longer allowable: no other person's guesses can compete with his in authority, and modern travellers must rest on definite balancing of evidence. Each new guess at a name makes a new difficulty in the progress of our knowledge.

A. PHRYGIA.

1. LAODIKEIA.—I may contribute a few points toward the history of this important city, a detailed study of which is very much required.

[1] I refer to his work as Hirschf., p. —: and to Mr. A. H. Smith's article in the *Journal of Hellen. Stud.*, 1887, as A. H. S., p. —. Where a coin is mentioned without any reference, it is to be found in Mr. Head's *Historia Numorum*.

1. GARGILIUS ANTIQUUS, Proconsul of Asia. In April 1884, I copied the following inscription on a fragment of the cornice, buried upside down amid the ruins of a large building on the north side of the stadium.

ΙΑΝΩΑΔΡΙΑΝΩΚΑΙϚΑΡΙϚΕΒΑϚΤΩΚΑΙϚΑΒΕΙΝΗϚΕΒ
ΠΙΑΝΘΥΠΑΤΟΥΓΑΡΓΙΛΙΟΥΑΝΤΕΚΟΥΚΑΘΙΕΡΩϚΑΝΤΟ
. . . Τρα]ιανῷ Ἀδριανῷ Καίσαρι Σεβαστῷ καὶ Σαβείνῃ Σεβ[αστῇ
οἱ.....ε]πὶ ἀνθυπάτου Γαργιλίου Ἀντε[ί]κου καθιέρωσαν τὸ [γυμνάσιον?]

Gargilius Antiquus may have been proconsul of Asia in the year that Hadrian visited Laodikeia, Nov.-Dec. 129 A. D., or soon after: his consulship is unknown, but may have been about 115–16. Hadrian perhaps ordered the Gymnasium (?) to be built, or it may have been dedicated during his visit.

2. ΧΩΡΟΙ. The territory of Laodikeia was divided into ΧΩΡΟΙ, of which the following are known.

(1) *Eleinokaprios:* It is known from the following inscription, on a sepulchral stele at *Budjali Cahve*, on the main road from the interior to the coast, about two miles west of Kolossai: copied by Arundel, by Renan 1865, by Ramsay 1881, and by Smith 1884: published *C. I. G.*, 3954, and Lebas-Wadd., 1693 *a*. As there are several inaccuracies in the published texts, I give it in full: τοῦτο τὸ θέμα καὶ (ὁ) ἐπ' αὐτῷ βωμός ἐστιν Τατίας καὶ τοῦ ἀνδρὸς αὐτῆς Μοσχᾶ · ἐν ᾧ κεκήδευται ἡμῶν ἡ θυγάτρην Τατάριν · οὐδενὶ δ' ἐξέσται ἄλλῳ κηδευθῆναι εἰ μὴ τῇ μητρὶ αὐτῆς καὶ τῷ πατρεί · εἰ δὲ μετὰ τὴν ἡμετέραν τελευτὴν ἀπειθήσει τις τῶν προγεγραμμένων, δώσ(ε)ι τῷ Χώρῳ τῷ Ἐλειναπριτῶν (δηνάρια) φ'.

The name of this district is probably derived from the fact that two rivers, Kapros and Eleinos,[2] flowed through it. In that case it must have been the northwestern *choros* of Laodikeia, including the district about *Urumlu*, *Serai Keui*, and *Gereli*, and the Eleinos is probably the stream that flows past *Urumlu* and joins the Lykos. The stone has therefore been carried a long way from its original to its present position, a very common occurrence.

(2) *Kilarazos:* It is mentioned in an inscription at the village *Hadji Aybli*[3] (Smith-Ramsay, 1884).

[2] (See, below, 3. RIVERS.)

[3] Pronounced Hadji Ipli. The text of l. 1 is certain: the division of the names doubtful.

ΖΩΞΑΔΙΜΟΛΟΞΩΟΧΩΡΟΞ	Ζωσάδι? Μολοσῶ? ὁ Χῶρος
ΟΚΙΛΑΡΑΖΕΩΝΜΝΙΑΞΧΑΡΙΝ	ὁ Κιλαραζέων μν(ε)ίας χάριν.
ΕΛΠΙΞΠΑΡΟΔΙΤΑΙΞΧΕΡΙΝ	ἐλπὶς παροδίταις χ(αῖ)ρ(ε)ιν.

Kilarazos is placed on the map on the hypothesis that this inscription is near its original position. This place suits the authority quoted in the next paragraph.

To these we may probably add the following places, mentioned by Niketas Khoniates, a native of this district.

(3) *Panasios* is mentioned by Niketas Khoniates (p. 254) along with Lakerios, as *choroi*. The description of Manuel's operations suggests the situation about Denizli given on the map. *Lakerios* is perhaps identical with Kilarazos.[4]

(4) *Karia:* The references (Niket. Khon., pp. 655 and 523) show that it lay on the main road not far from Kolossai. It is called a *komopolis*, which in this place probably means merely a village.[5]

(5) *Tantalos* is mentioned along with Karia, as a *komopolis* on the march from Ikonion past Kolossai, towards Antioch on the Maeander.

Harmala (Niket. Khon., p. 549) may be in this district, but is more probably lower down the Maeander. *Hyelion* and *Leimmocheir* (Niket. Khon., p. 252) are two villages on the Maeander, where the bridge on the great eastern highway spanned the river. In Roman time the bridge was near Antioch: in Byzantine time the bridge was probably in the same place, though it may possibly have been higher up. In neither case could these villages have been within the bounds of Laodikeia. *Louma* and *Pentacheir* are placed by Haase (Ersch-Gruber, *Encycl. s. v. Phrygien*, p. 274) in the Lykos valley: the only reference to them (Niket. Khon., p. 251) shows that they were further west, perhaps even beyond Tralleis; in that neighborhood, Mount Latmos is called *Besh Parmak* (*i. e.*, "Five Fingers").

3. RIVERS. Two are named on a coin, which is described by Mionnet (*Supplem.*, VII, p. 587):

"Obv. ΙΟΥΛΙΑ·ΔΟΜΝΑ·CЄΒ. Buste de Julia Domna.
Rev. ΛΑΟΔΙΚЄΩΝ·ΝЄΩΚΟΡΩΝ·ΤΟ·ΠΤ·Η· Femme debout tenant une patère de la main droite, et de la gauche le simulacre de Jupiter *Laodicenus*, debout à gauche entre un loup

[4] Byzantine names often occur greatly changed from the old forms: *e. g.*, Kapatiana for Pakatiana, Morea for Romea (Ῥωμαία).

[5] NIKETAS is singularly loose in his use of words: see below, under SEIBLIA.

et une chèvre: au-dessus du premier on lit dans le champ ΛΥΚΟC; au-dessus de l'autre ΚΑΠΡΟC."

This coin refers to the position, not of the town, but of the state of Laodikeia. The town is placed between the Asopos and the Kadmos, but the boundaries of the territory, *i. e.*, the state Laodikeia, are the Lykos and the Kapros: the latter separates it from Attoudda, the former from Hierapolis. The entire population of the territory, whether or not they resided within the walls of the town, were equally styled Λαοδικεῖς; and the coinage is struck in the name of the corporate body, the Λαοδικεῖς. The Kapros was a tributary of the Maeander (Strab., p. 578): it therefore must be the river of *Serai Keui*.

The Eleinos is the river next to the Kapros on the east (see (1)). Its name is doubtless the same as the Selinos of Ephesos and of Elis (Xenoph., *Anab.*, v. 3, 8).

The Asopos washed the walls of Laodikeia. The Kadmos was recognized both by Arundel and by Hamilton: the remarks A. H. S., pp. 224–5 seem to me correct. A glance at the map annexed will show that Pliny's description of the city is rather confused: *imposita est Lyco flumini, latera adluentibus Asopo et Capro* (*N. H.*, v. 105).

The natural boundaries of Laodikeia on the south and the southeast are determined by the lofty mountains of Kadmos (*Chonas Dagh*) and Salbakos (*Baba Dagh*) (Hirschfeld, p. 325). The little valley of the river Kadmos, which flows between the two ranges, probably belonged to the territory of the city.

4. GATES. The gate on the eastern side of Laodikeia was called the "Syrian Gate" (αἱ Σύριαι Πύλαι: Philostr., *Vit. Soph.*, I. 25). City gates were commonly named after some important town on the road which issued through the gate: so at Smyrna we have the "Ephesian Gate;" at Ephesos the "Magnesian Gate." The commerce of the East passed through the gates of Laodikeia: for example, the red earth of Kappadokia, which had in early times reached the Greeks by way of Sinope, was afterwards brought along the great eastern highway through Laodikeia to Ephesos (Strab., p. 540). The North and West gates were perhaps called "Hierapolitan" and "Ephesian."

5. TRIMITARIA was a title applied to Laodikeia: it is derived from τρίμιτος, a kind of cloth evidently manufactured in quantity there. The district is one which has preserved manufacturing power through the Turkish occupation. The title has been misunderstood by Wesseling.

II. HIERAPOLIS.—The inscription Lebas-Wadd., 1687, is of the highest interest as referring to *une veritable société mutuelle établie entre les ouvriers teinturiers en pourpre:* this suggests to M. Waddington the influence of Christianity. Unfortunately, a false reading[6] is the only authority for this interest: knowing M. Waddington's text, I yet read the stone clearly and unhesitatingly *τῷ συνεδρίῳ τῆς προεδρίας τῶν πορφυραβαφῶν*, "the council of presidents (*πρόεδροι*) of the purple dyers."

The text *C. and B.*, p. 375,[7] ought to be read *Μονο[γέ]ν[η]ς εὐχαριστῶ τῇ θεῷ.* The formula occurs also in the Katakekaumene (*Ἀπολώνιος Δράλας δυνατῇ θεῷ εὐχαριστῶ Λητῷ*[8]), at Ephesos (*εὐχαριστῶ σοι Κυρία Ἄρτεμι*, Wood's *Ephesus, App.*, Augusteum 2–4, 8), and at Dionysopolis (*εὐχαριστῶ Μητρὶ Λητῷ, C. and B.*, p. 385). The formula is peculiarly connected with the worship of Meter Leto. This goddess is traced by inscriptions: (1) at Perga of Pamphylia, where she is identical with the *Ἄνασσα Περγαία*, usually known by the Greek title Artemis. This follows from the inscription of Attaleia *ἱερέα διὰ βίου θεᾶς Λητοῦς τῆς Περγαίων πόλεως.*[9] (2) In Lykia generally, where she is one of the *θεοὶ πατρῷοι*, and the guardian of the tomb: cp. Bennd.-Niem., No. 96, p. 118 ff.; Treuber, *Gesch. d. Lykier*, p. 69 ff. (3) In the district of Hierapolis, Tripolis, Attoudda, and along the whole line of Mt. Messogis to the sea. A coin of Tripolis, with the legend ΛΗΤΩ ΤΡΙΠΟΛΕΙΤΩΝ, shows the goddess sitting with sceptre in hand. The type of Leto, carrying the infants Apollon and Artemis, occurs on coins of Tripolis, Attoudda, Mastaura and Magnesia. A coin of Hierapolis has the legend ΛΗΤΩΕΙΑ.ΠΥΘΙΑ. Lethaios at Magnesia, a river flowing out of Mt. Messogis, perhaps means the river of Leto, being Grecised in accordance with the false idea that *Λητώ* is

[6] Viz., *προσδείας*. In the same inscription l. 1, for *[βωμῷ]* read *βαθρικῷ*; for *κορήσκου* read *κοριάσκου*; for *Ἀσβέ[στ]ηρ* read *Ἀσβόλου ν(εωτερου?)*; for *[ἐπε]τέ[λ]ε[σε]* read *κατέλειψα*. ΠΑΠΩΝ seemed certain to me also. Read also *ὅσον ἂν πορίσῃς βίον, ὦ φίλε παροδεῖτα, εἰδὼς ὅτι τὸ τέλος ὑμῶν τοῦ βίου ταῦτα.*

[7] I refer to my paper *Cities and Bishoprics of Phrygia* in the *Journ. Hell. Stud.*, 1883, as *C. and B.*

[8] Smyrna *Museion* no. *τκζ*, where it is wrongly printed *εὐχαρίστῳ* as an adjective.

[9] This must mean "the great goddess of Perga." In publishing this inscription (*Bull. Corr. Hell.*, 1883, p. 263) I did not observe that Leto of Perga is here identical with Artemis of Perga. The inscription is misunderstood by Treuber, *Lykier*, p. 76. A Messapian inscription has the expression *Artemis-Leto:* see Deecke, *Rh. Mus.*, 1887, p. 232, who wrongly separates the names by a comma. In both cases, the names Artemis and Leto are applied to the same deity.

connected with λανθάνω.[10] (4) In the Katakekaumene, where she is more commonly known as Artemis Anaitis, with a Greek title Artemis and a Persian title introduced by the settlers planted in eastern Lydia by the Persian kings. (5) In Ephesos, where also she is usually known as Artemis. An Ephesian coin bears the legend ΛΗΤΩ. (6) Leto πρὸ πόλεως at Oinoanda, *Bull. Corr. Hell.*, 1886, p. 234.

These traces of the worship of Leto the Mother point to its entrance from the south into Asia Minor: if Lykia were its point of entrance, it must have come from Rhodos, but, if Pamphylia be its first seat in Asia Minor, it must have come through Kypros. The pair of deities, mother and son, Leto and Lairbenos Apollon,[11] become in time the triad, Leto, Artemis and Apollon, mother and daughter in the divine nature being distinguished. The Kybele and Attys of northern Asia Minor are probably in origin the same pair as the Leto and Lermenos of the south, borne along a different road and perhaps also at an earlier time: in Ephesos and in the Katekekaumene, the two have met. My friend Prof. Robertson Smith's suggestion that the name Λατώ is the old-Semitic *Al-lat*, Ἀλιλάτ of Herodotos[12] (I. 131; III. 8) agrees perfectly with the geographical distribution, and derives additional probability from the agreement.

Hierapolis is a name obviously of the Greek period: the pre-Hellenic name appears to have been Kallatêbos (Herod., VII. 30). Some time between 530 and 553[13] Hierapolis was raised to the dignity of a *metropolis*. A district of Phrygia was separated from the rest of the province and placed under Hierapolis. This arrangement had certainly not taken place in the time of Hierokles (about 530), but is clearly implied at the council of 680.[14] The remodelling of the two Phrygias, which took place under Justinian, was probably the occasion when the new department (which for the sake of a name I call Phrygia Hierapolitana) was formed. Considering how close was the connection of ecclesiastical and political organisation, it is probable that a civil governor, as well as a metropolitan bishop, resided henceforward at Hierapolis until the Provinces were replaced by Themes.

[10] Also known at Ephesos and Stectorion.

[11] On the epithet *Lairbenos* or *Lermenos*, see *C. and B.*, V.

[12] *Al*, the definite article: for another explanation (*Alilat* feminine of *helel*, "the shining one") see SAYCE on HERODOTOS, I. 131

[13] Hierapolis is a *metropolis* in (*Concil. Constantinop.* III) A. D. 553.

[14] Where Sisinnios signs ὑπὲρ ἐμαυτοῦ καὶ τῆς ὑπ' ἐμὲ συνόδου. This was probably the case in 553 also (though not expressly stated), since Hierapolis ranks there as metropolis.

In *Notitiae VII, VIII, IX,* and *I,* the bishopries subject to Hierapolis were Motella, Dionysopolis, Anastasiopolis, Attoudda, and Mossyna. In the late *Notitiae,* a northern district (comprising Kadoi, Aizanoi, Tiberiopolis, Ankyra, and Synaos) was added: this arrangement, which is later than the institution of Themes, has obviously a mere ecclesiastical, and never a political, significance.

III. **MOSSYNA.**—I placed this bishopric (*C. and B.*, p. 377) between Dionysopolis and Laodikeia. The name was known only from the Byzantine lists, and I restored it conjecturally, in an inscription, *ὁ δῆμος ὁ Μο[σσυνέων]*.[15] I can now confirm this by the following inscription, which is the first half of one copied by me in 1883 and published (*C. and B.*, No. 8):[16]

Διὶ Μοσσυνεῖ καὶ τῷ δήμῳ· Γ(αΐος) Νώνιος Ἀπολλωνίου υἱὸς Ἀνιησία Διόφαντος, ὁ διὰ γένους ἱερεύς, τὸ ἄγαλμα καὶ τὸν βωμὸν σὺν τῇ ὑποσκευῇ πάσῃ ἀνέστησε δοὺς ἐκ τῶν ἰδίων (δηνάρια) .. τὰ δὲ λοιπὰ οἱ ἐπαγγειλάμενοι καθὼς ὑπογέγραπται· Ἀπολλώνιος Β΄ τοῦ Φιλοξένου ΑΝΑΙΣ *(δηνάρια)ι΄· Ἀπολλόδοτος Διοδώρου ἀγορανόμος (δηνάρια) κέ΄· Ἀπολλόδοτος κ. τ. λ.*[17]

ΑΝΑΙΣ is quite distinct. The date of this inscription about A. D. 100, as given when the other part was published, is confirmed by the whole style of the first half and by the name *Γάλβας*. But, whereas formerly I assigned the inscription to Dionysopolis, it must now be transferred to Mossyna. *Sazak* is a village on the border of the two districts, and the other inscriptions found there (and already published) are certainly Dionysopolitan. The country, which I formerly divided between Mossyna and Metellopolis, belongs entirely to Mossyna. Metellopolis is identical with Motella, in the same neighborhood (see **A. XI.**).

[15] Formerly I restored Μο[σσύνων]: the correct form is given by the text which follows. The coins published by Mionnet as reading ΜΟΣΣΙΝΩΝ are all misread: they belong to the Mostenoi.

[16] Half of the inscription was concealed beneath the floor of the mosque at *Sazak*. In 1883 I could not induce the inhabitants to let me tamper with the planks: in 1887 I got their consent.

[17] The inscription is in a very dark corner of the mosque: in 1883 we read it by light reflected from a pocket-mirror: in 1887 I procured a small lamp, and read two words more correctly than in 1883: in 5, Γάλβας for Γαλεᾶς, and in 4, Ἀλλειδίων for Ἀλεξιδίων (noted in the publication as uncertain). I find in my old notebook that I had made the second correction in revising the inscription on the stone, and in publishing took the first false reading.

IV. ATTOUDDA.—The evidence that Attoudda (*C. and B.*, XVI) stood at the village of *Assar* is very strong: *C. I. G.*, No. 3950, an inscription erected by the people of Attoudda, is said to have been found at Assar,[18] and an inscription (*Bull. Corr. Hell.*, 1887, p. 348) in honor of a person named Karminios, who certainly belonged to a family closely connected with Attoudda, was copied at Assar by M. Clerc. It is quite certain that Attoudda stood in this neighborhood, and I formerly (*C. and B.*, XVI) accepted the view that the actual site was at Assar. I am now obliged to slightly modify this view, and place Attoudda beside Haz Keui, 1½ miles west of Serai Keui, and 6 miles N. E. from Assar. No problem in the topography of Phrygia has cost me so much time and trouble as the placing of Attoudda and Trapezopolis, and yet Attoudda was one of the few places whose site was considered certain before I first travelled in Phrygia. The modification I adopt is so slight that it may appear a waste of time to discuss it, and I should not mention it here, if it were not necessary for the placing of Trapezopolis.

As to the actual value of the abovementioned evidence: inscr. 1 is attributed by Sherard, who alone saw it, to Aphrodisias. His notes were evidently hasty and inaccurate, as is obvious from the remarks of Franz[19] (*C. I. G.*, No. 3950, and *Add.*, No. 3946): inscr. 2 mentions a member of a family which was closely connected with both Attoudda and Aphrodisias (*C. I. G.*, 2782–3), and which therefore may have been connected also with the intermediate city, Trapezopolis. Again, inscriptions might easily be carried from a site near Haz Keui to Assar: though the road is uphill, the distance is not great; and it is also quite possible that an inscription of Attoudda might have been sent in ancient times to Trapezopolis.[20] Finally, it must be remembered that Assar itself is not an ancient site, though it is certainly near an ancient site, which I shall prove to be Trapezopolis.

The district of Phrygia which we have to examine consists of a low

[18] It is wrongly called *Ipsili Hissar:* the name must have been reported by a Greek servant. Assar is the only name known in the district (A. H. S., p. 223: *Bull. Corr. Hell.*, *l. c.*).

[19] So, *C. I. G.* 388, an inscription of Eukarpia is attributed, through a fault in Laborde's notes, to Eumeneia, 25 miles distant (*C. and B.*, p. 402). Experience teaches me how easily such an error may creep into a road-book. Sherard may have found the inscription at Gereli (see below).

[20] In this way a Prymnessian decree at Nakoleia long produced the false belief that Prymnessos was situated where really Nakoleia stood.

level plain along the Maeander, and of a large tract of hilly country, consisting of alluvium intersected by deep ravines, which extends between the actual valley of the Maeander and the lofty rocky Mt. Salbakos (*Baba Dagh*, "Father Mount"). In this district two ancient cities existed: one, corresponding to the modern town *Kadi Keui*, was situated somewhere near Assar or Kadi Keui; the other, corresponding to the modern town *Serai Keui*[21] was situated beside Haz Keui. The latter was Attoudda: Men Karou, whose temple beside the Maeander is described by Strabo (p. 481), is celebrated on coins as the chief deity of Attoudda. At the temple, which stood near the Maeander, between Karoura and Laodikeia, *i. e.*, somewhere a few miles west of Serai Keui, a great medical school, following the system of Herostratos, existed in the first century B. C., founded by Zeuxis and Alexander Philalethes. This fact shows that the Anatolian deity Men had some of the character of the Greek Asklepios. No traces of the temple are now known, but this district, lying under the hills, very subject to earthquakes, and full of hot springs of the most varied character, is peculiarly liable to be silted up. The remains of Attoudda also have, in modern times, almost disappeared, which is partly accounted for by the close neighborhood of the rapidly growing town, Serai Keui. The centre of modern life has changed to Serai Keui, but the change is quite recent. The weekly Bazar of the district was held in an open space on the south side of Haz Keui, until thirty years ago, when it was transferred to Serai Keui. Such markets, held not at the modern centres of life, are always good evidence of ancient custom: in some cases they mark the site of an ancient city, now deserted; in others, they continue the ancient meeting-place of a people living in villages without a city-centre. Strabo (p. 341) gives an example of the former: Aleision, a city mentioned by Homer, had ceased to exist, but a market called Ἀλησιαῖον was held near the site. *Kara Eyuk Bazar* is the ancient site, but *Adji Badem* is the government town, in the territory of Themissonion (A. VIII): at Keretapa (A. VII) *Kayadibi* is the Bazar and the ancient site, and *Satirlar* the government town: in the Hyrgalean Plain, *Kai Bazar* is the seat of a weekly market for the district, but is otherwise absolutely deserted: the same is the case at Eriza (B. 6) with *Ishkian Bazar*, and among the Perminodeis (D. 9) with *Kizil Kaya Bazar*.

[21] It is a most useful principle for ancient topography that a modern town almost always exists in the neighborhood of a Græco-Roman town; but the site is usually changed. I hope soon to publish a study of this subject in the *Journal* of the Royal Geographical Society. Kadi Keui is the seat of a Mudir, Serai Keui of a Kaimakam.

I group together the inscriptions of this district, one or two (especially *C. I. G.*, 3951–2) may belong to Trapezopolis, but the most of them are certainly Attouddan: (1) *C. I. G.*, 3948; (2) 3949; (3) 3950; (4) 3951; (5) 3952 and *add.*, Lebas-Wadd. 743, and A. H. S., No. 1; (6) *C. I. G.*, 3953; (7) *Bull. Corr. Hell.*, 1887, p. 348, No. 4; (8) *ibid.*, No. 5; (9) *C. I. G.*, 3947 may belong to this district, but Dr. Sherard mentions it and 3946 as found in *Dere Keui*, and the latter is really an inscription

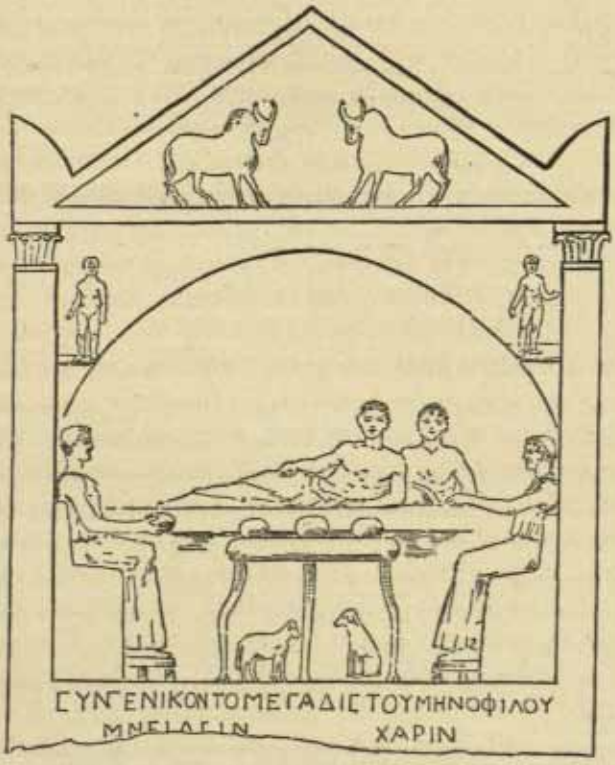

FIG. 19.—*Tombstone from Attoudda, Phrygia; found near Serai Keui.*

of Sardis; the text which is not understood by Franz ought to be read [τοῦτο τὸ . . . . . *ἀνέθηκεν*] Ἐπαφροδειτος Ἑρμᾶ? *καὶ τὸ ναΐδιον.* (10) In 1883, I saw, at *Serai Keui*, two tombstones, found in the neighborhood. They belong to Attoudda, and show an interesting variety of the "Sepulchral Feast." I give a sketch of one of them (*fig.* 19). The inscription beneath is *συνγενικὸν τὸ* Μέγα *δὶς τοῦ* Μηνοφίλου *μνείας χάριν*: "The family tomb of Megas, son and grandson of Menophilos,

in memoriam." The second stone had lost its inscription: it was very like the other, but the sheep and dog, instead of being under the table, occupied the angles where the other stone has two children, and three persons reclined at table. (11) Fragment found at Assar (Smith-Ramsay, 1884): broken on three sides, complete on right, except where dots indicate lost letters. It seems to be connected with some local games:

ἀν ΔΡΑΞΙ · ·
ΟΥΤΟΥΛ ·
ΩΤΑΤΟ ·
ἐπὶ ἀγωνο ΘΕΤΟΥΔΙ
ονυσίου τοῦ Διονυσ ΙΟΥ
ἀ ΛΙΠΤΤΗΝ
λονγ ΕΙΝΙΑΝΟΝ
πολυ? ΧΡΟΝΙΟΥ

(12) at Assar: copied by me in 1883:

////////////// [ὁ · δεῖνα ····· νο]
ΞΘΕΥΥΥΕΓ ς θεῷ ὑψέσ-
ΤΥΕΥΧΗΝ τῳ εὐχήν.

KAROURA was a village 20 miles from Laodikeia on the road to Antioch (and thence to Ephesos). Reading Strabo (p. 579) in the country, one feels no doubt that he places Karoura on the south side of the river. The railway-survey measures 12 English statute miles from Serai Keui to Laodikeia, but the line of the Roman road was straighter, and we may safely estimate 12 Roman miles from Laodikeia to Serai Keui, and place Karoura 8 Roman miles west of Serai Keui on the south bank of the Maeander. Beside Antioch, the Roman road crossed the Maeander by a bridge,[22] and went by way of Nyssa, Tralleis, and Magnesia to Ephesos.

Karoura is unknown in Byzantine times: it was a mere village of the territory of Attoudda. The name is obviously derived from the Attouddan Men Karou: the Greek idea that it meant *Καρίας ὄρια* is merely popular pseudo-etymology.

V. TRAPEZOPOLIS is localised at the site near Assar and Kadi Keui by a series of arguments, which are difficult to state clearly and briefly: Trapezopolis was in the *conventus* of Alabanda, and is reckoned by Ptolemy to Karia:[23] it must therefore have lain west of the Roman

[22] On a coin the bridge has six arches.

[23] Ptolemy's authority would be small, if not supported by PLINY, v. 109.

road from Laodikeia to Kibyra, or it would have been included in the conventus of Kibyra-Laodikeia. Trapezopolis was reckoned to Phrygia Pacatiana throughout the Byzantine period: it cannot therefore have lain in the great plain of Taba, for the towns of that plain, Taba, Herakleia, Apollonia, all belong to Karia. Careful examination of the hills between the plain of Taba and the Laodikeia-Kibyra road, by Sterrett in 1884 and Ramsay in 1886, shows that no city ever existed there except Sebastopolis, which was Karian.

The previous arguments prove that Trapezopolis was on the Phrygo-Karian frontier, west of the Laodikeia-Kibyra road, and that there is no place south of Mt. Salbakos where it could possibly have stood: therefore it must have been north of the mountain, *i. e.*, it must lie in the district between Attoudda and the modern Denizli on the east and Antioch and Aphrodisias on the west. The little that we know about Trapezopolis suggests that it was situated in this neighborhood. The order of Hierokles points distinctly here: he first enumerates the cities of the Lykos valley, Laodikeia, Hierapolis, Mossyna, Attoudda, Trapezopolis, Kolossai. We have alliance-coins of Attoudda and Trapezopolis. The Byzantine evidence tends to connect Trapezopolis with Laodikeia, and on the other hand to connect the cities south of Mt. Salbakos with Kolossai. The situation now given to Trapezopolis explains why it was included neither among the bishoprics subject to Hierapolis nor among those subject to Khonai (see **A. II, VI**).[24] Trapezopolis was formerly placed at Makuf in the plain of Taba. M. Waddington proved long ago that Makuf was the site of Herakleia *ad Salbacum*, and transferred Trapezopolis to Kizil Hissar, but this village is on the Laodikeia-Kibyra road, and is not an ancient site.

B. THE PHRYGO-KARIAN FRONTIER.

The Phrygo-Karian frontier lay between Aphrodisias on the one side and Trapezopolis on the other, and one who sees the country is at once led to place it along the long ridge now called Tchibuk Dagh:[25] the mountain and the frontier pass into the lofty ridge of Salbakos. The rest of the frontier north of Salbakos results from a study of the border cities of Karia. Many of these are very obscure: two, Kidramos and Hyllarima, are not mentioned in Forbiger's *Alte Geographie*.

[24] For a further confirmation, see **B. I. KIDRAMOS.**

[25] *Tchibuk*, a pipe with a long stem.

B. 1. KIDRAMOS is assigned to Phrygia by numismatists except Head (*Hist. Num.*). The only ancient authorities, the *Notitiae*, assign it to Karia. But the style of the coins is rather Phrygian,[26] and this would lead us to place the town on the Phrygo-Karian frontier. It also places ZЄYC ΛYΔIOC on its coins, which proves that it must have been on the Karo-Lydian frontier, *i. e.*, in the Maeander valley[27] and near the river. I should expect to discover the site of Kidramos between Antioch and Attoudda, a little west of Karoura, about due south of the modern village Ortakche, on a spur of the hills that fringe the valley.

After this discussion of the sites of Trapezopolis, Attoudda, and Kidramos was written out, I observed a confirmation so striking as to constitute a very strong argument in its favor. Imhoof-Blumer (*Numism. Zft.*, 1884, p. 272) points out that the coins of Laodikeia, Attoudda, Trapezopolis, and Kidramos, agree in giving magistrates' names in the genitive with *διά*, a peculiarity unknown in any other city: precisely these four cities lie side by side on my map.

B. 2. HYLLARIMA is to be looked for in the east of Karia: under the Empire it struck coins whose style suggests the Phrygian rather than the Ionian side of Karia, and it is mentioned in the Byzantine lists: Hierokles has *Harpasa—Neapolis—Hylarema—Antiokheia—Aphrodisias*, which suggests that Hyllarima is to be looked for south of the Maeander and west of the Morsynos.

B. 3. GORDIOU TEICHOS is fixed near Kara Su by the route of Manlius (see E). It occurs in no Byzantine lists.

B. 4. APHRODISIAS.—The site has long been known, and the ruins are a popular resort for tourists.

C. THE PHRYGO-LYDIAN FRONTIER.

C. 1. TRIPOLIS.—The river Maeander above the junction of the Lykos was, throughout ancient history, the boundary between Phrygia and Lydia. Close on the opposite bank, geographically a part of this district of Phrygia which I call "the Lykos valley," yet historically always a city of Lydia, lies Tripolis. It was in the *conventus* of Sardis, which proves that Ptolemy, when he places it in Karia (so also Steph. Byz., in

[26] Except one: *les types et l'aspect de cette monnaie rappellent tant ceux de certains bronzes de Termessos:* IMHOOF, *Monn. Gr.*, p. 397.

[27] IMHOOF, *l. c.*, who draws the proper inference as to the situation of the city. Zeus Λάδιος is also known at Sardis but not elsewhere.

his confused and inaccurate remarks), makes a pure mistake. According to Pliny[28] it bore the name Antoniopolis. An inscription of the Roman period calls it Μαιονίη Τρίπολις. The Byzantine lists always reckon Tripolis to Lydia, and Herodotos VII. 30 is conclusive evidence that it was Lydian in the fifth century B. C.

C. 2. **BRIOULA** was in the Maeander valley, on the north side of the river, in the district round Nyssa but west of Mastaura,[29] in the *conventus* of Ephesos (Pliny, v. 111). These indications point to the ancient site beside the village of Billara, in which name we recognize the ancient word. Billara lies near the railway station at Kuyujak: Mr. Hogarth, who visited it at my suggestion in 1887, reports that the ancient city is distinct, but inscriptions are wanting. On its coins appear ΗΛΙΟϹ and ΜΗΤΗΡ ΘΕΩΝ, in whom we may recognize Lairbenos and Leto (see **A. II. HIERAPOLIS**).

C. 3. **HYDRELA.**—If there were any authority for placing Hydrela in Lydia, the Maeander would then be the boundary between Lydia and Phrygia from the Lykos to the Ionian coast, but the scanty references place Hydrela in Karia. Considering that several authorities place Tripolis and Laodikeia in Karia, it is probable that Hydrela, also, in spite of Livy and Stephanos, should be assigned to Lydia. After the preceding exposition, the statement of Pliny (*N. H.*, v. 105), that it was in the *conventus* of Kibyra-Laodikeia is clear evidence that it lay near Ortakche, and Livy's words[30] agree exactly with this position. The statement of Strabo (p. 650) that the inhabitants of Hydrela, Athymbra, and Athymbrada were transplanted to the new city Nyssa in Seleucid times (which can hardly be quite true), while pointing to some situation in the Maeander valley, gives no precise indication of locality.

The limits of the Kibyratic *conventus* are now fixed. The *conventus* of Alabanda was bounded on the north by the Maeander, and the two *conventus* of Kibyra and Ephesos touched each other on the north bank between Brioula and Hydrela. Hydrela is never mentioned in Byzantine lists, though it coined money from Hadrian to Geta, and was therefore an independent city under the Empire. It lies on the fron-

[28] *Tripolitani iidem et Antoniopolitae Maeandro adluuntur:* v. 111.

[29] *I. e.*, if we can trust that STRABO's order (p. 650) Βρίουλα, Μάσταυρα, Ἀχάραια, is strict.

[30] *Cariam quae Hydrela appellatur agrumque Hydrelitanum ad Phrygiam vergentem:* LIV., 37, 56. Ὕδρηλα πόλις Καρίας: STEPH. BYZ.

tier of Byzantine Asia, Phrygia, and Karia, and might perhaps be expected in the lists of Asia.[31]

A. PHRYGIA.

VI. KOLOSSAI.—The name occurs also, in the singular, as that of a city in the Kaystros valley, the modern Keles. This Kolose is also frequently mentioned in Byzantine lists as Koloe, which proves that the lake Koloe near Sardis, and the village Koloe in the Katakekaumene bear the same name as the Phrygian city: Kolossai, Kolose, Koloe, Keles, are various forms of the same Anatolian name.

Kolossai was a station on the great eastern highway, 8 miles from Laodikeia. The ruins of the city lie on the banks of the Lykos about 3 miles north of the village of Khonas. The ruins of a large church, probably the famous church of S. Michael,[32] could be traced emerging above the soil at least as late as 1881. The natural phenomenon at Kolossai described by Herodotos (VII. 30) has often been discussed by travellers. The explanation given by Hamilton (*Researches in Asia Minor*, I, 511), though generally approved, appears to me wholly inacceptable: violent change in the landscape is in all cases a doubtful hypothesis; but only the supposed necessity of explaining Herodotos could lead any one who had seen the Lykos to suppose that a river which deposits calcareous matter once covered itself over entirely for five stadia and is now quite open. The words of Herodotos[33] describe the common natural phenomenon now called in the country a *duden*, where the water of a high-lying plain finds a subterranean exit and emerges in a large fountain in a lower country. The Lykos rises in such a *duden*, and it seems to me not open to doubt that this is the phenomenon to which Herodotos alludes. His words indeed suggest that the water disappears in the city: but, in the first place, the term Kolossai means strictly the entire state and not merely the space of the city; and, in the second place, I can only apply to Herodotos's account

[31] It is clear that the known conditions would be almost equally well fulfilled if Hydrela and Kidramos were transposed: careful exploration of the situation, which I have seen only from the railway, might decide. If we could find Hydrela in Byzantine Asia, or if Kidramos were known to be in the *conventus* of Alabanda, we should have a definite proof of the correctness of the positions above assigned.

[32] αὐτὸν τὸν περιβόητον ἐν θαύμασι καὶ ἀναθήμασι τοῦ Ἀρχιστρατήγου ναόν: SCYLITZ., p. 686.

[33] Κολοσσὰς . . . . . ἐν τῇ Λύκος ποταμὸς ἐς χάσμα γῆς ἐσβάλλων ἀφανίζεται, ἔπειτα διὰ σταδίων ἐς μάλιστά κη πέντε ἀναφαινόμενος, ἐκδιδοῖ: VII. 30.

of Kolossai the remark made by Hirschfeld about his account of Apameia: *er spricht offenbar nicht als Augenzeuge.*[34]

KHONAI.—At the Council held in Constantinople in 692 A. D. the bishop of Kolossai is mentioned. In all later notices the phrase is ἐπίσκοπος Χωνῶν ἤτοι Κολοσσῶν,[35] or simply ὁ Χωνῶν. The earliest instance of the name Khonai known to me is *Concil. Nicaen.* II, A. D. 787. In the lists of cities whose names have been changed (Parthey, *Hierokles, etc., app.*), Khonai is given as the later name of Kolossai; and this view is commonly accepted. The actual fact, however, is that Khonai was a new city, in a different situation, which dwarfed the old city of Kolossai. Kolossai stood in the open plain, in a most exposed situation, and could not be made a strong city. Its defenceless condition was no disadvantage in the Roman and early Byzantine time, while it was conveniently situated so that the high-road along the Lykos valley passed through its gates. But when the troubled times began, and when the whole of Asia Minor was exposed to the ravages of Arab armies, the situation was a serious disadvantage: a new city with a strong citadel on an outlying peak of Mt. Kadmos grew up, and attracted the population of Kolossai. It is possible that the change was hastened by an actual sack of the old city, but as to this we have no information.[36] The change from Kolossai to Khonai occurred between 692 and 787, in the period when the Byzantine empire was weakest and the Arab incursions most wide-spread and dangerous. Khonai, the most powerful fortress in the Lykos valley, was probably (though no actual authority exists among the miserably scanty records of the social history of Anatolia) a *thema* or station for troops. In 857 it was raised to the rank of an archbishopric. Photios, who had just been irregularly appointed to the Patriarchate of Constantinople, desired to strengthen his cause by the support of the Roman Pontiff: he sent the bishops of Amorion and Khonai as envoys to Rome, honoring the latter with the title of archbishop (see *Vit. S. Ignatii*, in Mansi *Act. Concil.*, XVI, p. 235). In the earlier and intermediate *Notitiae*, Khonai is never mentioned, and along with it are omitted four bishoprics of

[34] *Kelainai-Apameia*, pp. 11, 19, in *Berlin. Abhandl.*, 1885.

[35] In all cases which I have observed, this phrase (*e. g.*, Ἀπόλλωνος Ἱεροῦ ἤτοι Ἀετοῦ, Στρατονικείας ἤτοι Καλάνδου) has the same meaning: the two names denote not the same but different cities; the centre of population has changed, or is changing, to a new site.

[36] In *Mittheilungen* (*Athen.*) 1882, I explained the relation between Khonai and Kolossai, and compared it with the history of Prymnessos and Akronios.

southern Phrygia, Keretapa, Themissonion, Sanaos, and Valentia: the five form a well-marked group, and a line drawn around them cuts off the whole southern district of Pacatiana. The inference is, that, in the year 857 or very soon after, this district was separated from the metropolis of Laodikeia and subjected to the metropolis of Khonai. The fact that Khonai is entirely omitted from the *Notitiae* of this period (*I, VIII, IX*) proves that the lists there given are not absolutely complete, and we shall find another omission in the case of AKMONIA.[37] In the latest *Notitiae* (*III, X, XIII*), Khonai is mentioned as a metropolis, without any dependent bishopries, and Keretapa, Themissonion, and Sanaos reappear among those dependent on Laodikeia. Such variations are not uncommon: *e.g.*, Eukhaita has four dependent bishopries in *Not. X*, but in *Not. III*: τῷ Εὐχαίτων θρόνος ὑποκείμενος οὐκ ἔστι.

VII. KERETAPA (*C. and B.*, XV).—I previously followed Professor Kiepert's opinion, that Keretapa was situated on the Adji Tuz Gŏl, on the road from Laodikeia and Kolossai to Apameia, with the necessary correction of transferring the site from Tchardak at the western end of the lake, where no Græco-Roman ruins exist, to Sari Kavak, on the lake not far from its northeastern end. I have, however, found it necessary to desert the old view: Sanaos was situated at Sari Kavak.

Keretapa was in all probability situated at Kayadibi, and the ΑΥΛΙΝΔΗΝΟΣ of coins is the lake that lies between Kayadibi and Salda. The evidence may be put briefly thus. The order in Hierokles puts Keretapa and Themissonion together in southern Phrygia: Ptolemy agrees: the site at Kayadibi was in Phrygia, and it is not possible to put any other city there except Keretapa. Some slight arguments also tell directly in favor of placing Keretapa at Kayadibi. (1) Its territory then adjoins Kolossai and Themissonion, and Hierokles mentions the three cities together. (2) The name Diokaisareia, which was applied to it, is explained by the inscription on an altar at Kayadibi (A. H. S., No. 54) Διεὶ Καίσαρι: there was at this place a cultus of Cæsar as Zeus, and the city might readily acquire the name Diokaisareia. (3) In the brief account of S. Artemon[38] it is told that Patricius, *Comes* and governor of Phrygia-Pacatiana, proceeding from

[37] See my *Cities and Bishopries*, No. XXII, in J. H. S., 1887.

[38] *Acta Sanctorum*, October 8th, p. 46. The title *Comes* applied to the governor, shows that the life of the saint was composed later than 536 A. D. The scene is laid under Diocletian. A mere abstract is given by the Bollandists: if any fuller MS. of the biography of Artemon exists, it would probably contain much local detail.

Laodikeia εἰς τὴν Καισαρέων [read [Διο]καισαρέων, there is no city Kaisareia in the province] πόλιν, arrested Artemon on the road three miles from Laodikeia. At Kaisareia [Diokaisareia] Artemon produced by his prayers a lake, whereupon Vitalius the priest and many others were converted.[39] (4) There is some reason to think that Khonai and Keretapa were conterminous. An appearance of S. Michael of Khonai at Keretapa on Sept. 6th is celebrated by the Greek Church: Le Quien (*Or. Christ.*, I, 813) uses the expression (which he either infers from this appearance or derives from some *menologion* unknown to me): *Chonae, quae juxta Ceretapa.* Kayadibi and Khonai are divided only by mountains, no other city intervenes, and there is no other site unappropriated whose territory could be conterminous with Khonai. (5) A coïncidence connected with the name is of some interest, if it be not unreal. Keretapa seems to belong to the large class of Anatolian names containing the element KEP, to which class perhaps the national name "Karia" belongs. The second part, *tapa*, seems to be the same word as the Karian *taba*, "rock."[40] *Kayadibi*, in Turkish, means "under the rock;" and the most remarkable feature in the situation is a lofty peak on the north, which rises so abruptly that it seems actually to overhang and overshadow the town. (6) This position of Keretapa explains its omission in some *Notitiae* (see KOLOSSAI).[41]

The bishops of Keretapa are often mentioned in the Councils of the fifth, sixth, and seventh centuries. In 359 A. D., Theodoulos, bishop of Keretapa, seems to be a dignitary of some consequence, and not of an obscure town. The coinage is rich, from Augustus onwards. A fertile country of great extent belongs to the city, and it lay on the Roman road from Themissonion to Takina and Apameia.

With regard to the reported pre-Hellenic rock-sculptures of Karaat-li, close to Kayadibi:[42] I went to examine them in 1886, and found only three figures nine inches high, in a niche—rude village-work of the Roman period.

[39] διὰ προσευχῆς ἐν τῷ τόπῳ ἐκείνῳ ἐξήγαγεν ὕδωρ πολύ: the ἐξ shows that ὕδωρ cannot mean rain, but either a fountain or lake. Artemon was presbyter in Laodikeia, and Sisinnius bishop.

[40] Steph. Byz., s. v., *Taba.*

[41] On the top of the hill overhanging Kayadibi are extensive ruins of one of the most curious, probably pre-Hellenic, fortifications that I have seen in Asia Minor. H. A. Brown and I visited them late one evening in 1886: we found nothing except great lines of walls formed of loose small stones, surrounding a considerable extent of country.

[42] Davis, *Anatolica*, p. 135; Perrot, *Hist. de l'Art*, IV, p. 742.

VIII. THEMISSONION.—M. Waddington proved conclusively, many years ago,[43] that Themissonion was in the valley now called Kara Eyuk Ova. Defective knowledge of the district led him to place it at Kadja Hissar,[44] and to make some incorrect statements about the topography: but his proof is a masterpiece of topographical analysis, and leaves me nothing to do except to apply it to the proper site, Kara Eyuk Bazar.[45]

Pausanias (x. 32) mentions Themissonion τὸ ὑπὲρ Λαοδικείας as a city of Phrygia, and says that a large cave 30 stadia from the city sheltered all the inhabitants from the invading Gauls. In front of this cave stood statues of Herakles, Apollon, and Hermes, which embody different aspects of the character of the native deity. Coins show that the chief deity of Themissonion was ΛΥΚαβας[46] ΣΩΖΩΝ. The Saving-god—*Theos Sozon*—was worshipped in Antioch Maeandr. (a coin reads CΩZΩN) and in various parts of Kabalis. A number of monuments of this cultus have been described by M. Collignon (*Bull. Corr. Hell.*, IV, p. 291; pl. IX) and Mr. Smith (A. H. S., p. 236). I copied a rude and very faint inscription below one of the reliefs mentioned by M. Collignon:[47]

NICЄPMOΓЄ NOYHPAKΛIEY XHN	Μή]νις Ἑρμογέ- νου Ἡρακλ(ε)εῖ εὐ- χήν.[48]

An inscription on the rocks at Tefenni[49] (incorrectly published, A. H. S., p. 236), also beneath a relief, ought to be read Μενέλαος Μήνιδος

[43] *Bull. Archéol. de l'Athenaeum Français*, 1855: reprinted in *Mél. Numism.*, I, p. 107.

[44] Kai Hissar or Kaya Hissar (Kaja Hissar, where *j* represents *y*, is mistaken and given according to the French spelling as Kadja) is the proper name. It is not an ancient site.

[45] "The Bazaar of the Black Mound," a large tumulus beside the village: the valley takes its name from the village on the ancient site. Adji Badem, "Bitter Almond Tree," is the seat of the governor, a Kaimakam.

[46] Mr. HEAD has ATKιoς ΣΩZΩN.

[47] These reliefs are in a rock at the village Yuvalik, which is strangely misspelt by MM. Duchesne and Collignon, "Djouk Ovarlak": *Yuva* is a kind of tree, *lik* is the collective termination.

[48] M. Collignon gives one line of an inscription, below one of these rock-reliefs, which either is an incorrect copy of my line 2, or is a second instance of the name Herakles applied to this god.

[49] Tefenni is quite near Yuvalik.

Ὀροφύλα[κι] εὐχήν · ἔτους ϛορ'[80]: the deity to whom the vow is paid is almost invariably specified in inscriptions. We have, therefore, three names for this god: Orophylax, Sozon, and Herakles. The first is a mere title; the third identifies him with a Greek deity to whom he shows some analogy; Sozon is more remarkable. The following inscription from Sinda (which I copied in a cemetery beside Aghlan Keui in 1884, and which therefore belongs to the same district as the rock-reliefs) throws some light on it:

ΜΗΝΙCΑΠΠΟΛΩΝ	Μῆνις Ἀπολ(λ)ων[ί-
ΟΥΕΑΥΤΩΖΩΝ	ου ἑαυτῷ ζῶν
ΚΑΙΝΑΝΑΤΗΓΥΝΑ	καὶ Νάνα τῇ γυνα[ι]κὶ
ΖΩCΗ ΚΙ	ζώσῃ
ΙΕΡΕΥCΔΗΜΗΤΡΟC	ἱερεὺς Δημητρὸς
ΚΑΙCΑΟΑΖΟΥ	καὶ Σαοάζου.

Saoazos is a variant of the commoner *Sabazios*, and is probably nearer the pronunciation of the district. The worship of Sabazios has been recognised at Tefenni by MM. Duchesne and Collignon, and there can be little doubt that this "Saviour-god," who was the great object of worship in the district, is simply the well-known Phrygian Sabazios. The name Sozon was, I believe, suggested as a Greek title of suitable meaning approximating in sound to the native Saoazos. The series of figures of various types, a horseman bearing club or battle-axe and sometimes with radiated head, must be interpreted as representing Sabazios; and the common type on Phrygian, Pisidian, and Lydian coins, which Mr. Head catalogues as an Amazon, ought to bear the name Sabazios. A dedication Ἀπόλλωνι καὶ Μητρὶ Ἀπόλλωνος (*Bull. Corr. Hell.*, II, p. 174), *i. e.*, Apollon and Leto, may serve to prove that in this district Sabazios was the name given to the son of the goddess Leto, and may show us the cultus of Leto at an intermediate point between Perga and Hierapolis (see II).

The worship of Men in the same district is also vouched for by inscriptions, both published and unpublished. Men and Sabazios appear to me almost equivalent names. The idea that Men was the moon-god is due to popular etymology identifying the name with the Greek word for "month." The crescent horns, which in many representations mark him as the moon-god, are, I think, a mere misunderstanding of archaic wings on the shoulders.

[80] I read ϛορ' on the rock: my copy indicates no doubt. Mr. SMITH prints ΣΟΡ, and transcribes (ε)ωρ'.

B. THE PHRYGO-KARIAN FRONTIER.

Following the lines of Diocletian, I shall enumerate under Karia the next towns south of Themissonion. The frontier lay, as is plain from Hierokles, between Kibyra and Themissonion. I shall now show more narrowly that it lay between Themissonion and Phylakaion, and north of the river Indos.

B. 4. PHYLAKAION or Pylakaion is mentioned only by Ptolemy, as in southern Phrygia, and by *Geographus Ravenn.*, which proves it to have been on a Roman road. We have now completely exhausted southern Phrygia except the road between Themissonion and Kibyra. Beside Derekeui, about 9 miles south of Themissonion, on the road to Kibyra, there is an ancient site. Now in the Peutinger Table we find:

"Laudicium Pylicum
Temissonio XXXIIII Cormassa XII Perge."

It is usual to understand Laudicium Pylicum as Laodikeia ἐπὶ Λύκῳ; but, first, the Table was taken from a Latin, not a Greek source;[31] secondly, ἐπὶ Λύκῳ does not explain the termination of Pylicum. In *Pylicum* I recognize Pylakaion, and find two roads mixed and confused in the Table:

"(1) Cormassa [XXI Comama XIII Cretopolis XXVI] Perga. (2) Laodiceia XXXIIII Themissonion [IX] Pyliceum [XX Cibyra XXXVI Isinda] XII [Termessos XVIII] Perga."

Phylakaion may be recognized in the Byzantine period. The last three names on Hierokles' Karian list are Χωρία Πατριμόνια, Κιβύρα, Κοκτημαλικαί: the last is obviously corrupt: the beginning is assimilated to the preceding Kibyra, and the word is Ktema-likai. The original form was Ktema [Py]likai[on], and Χωρία Πατριμόνια is a dittography. If Phylakaion was an imperial estate, we should then understand why it alone of all the towns on this road did not coin money.

This position of Phylakaion near the Lykian frontier is confirmed by a passage in Ptolemy v. 2. 27, which should be read παρὰ μὲν τὴν Λυκίαν Φυλακήνσιοι[32] καὶ Θεμισώνιοι, παρὰ δὲ τὴν Βιθυνίαν Μοκκαδηνοὶ[?]καὶ Κιδυησσεῖς, ὑφ' οὓς Πελτηνοὶ[?], εἶτα Μοξεανοί, εἶτα Λυκάονες, ὑφ' οὓς Ἱεραπολῖται. With this slight change, which crept in through the similar beginning of Λυκάονες and Λυκίαν, the geographical order is correct: on Μοξεανοί see my *C. and B.*, p. 422; the Lykaones

[31] Compare *Turium* [*T*]*rogmor*[*um*], *Massilia Grecorum*, *etc.*

[32] This form can hardly be correct. Μοκκαδηνοί should be Μακ(εδόνες) Καδηνοί.

are the people in the valley called Cutchuk Sitchanli Ova between Sandikli and Afiom Kara Hirsar, immediately east of the Moxeanoi, and I long ago proved that the Hierapolitai are the people of the Sandikli valley.[53] The proper form of the name is uncertain: Pylik[aï]um (*Tab. Peut.*), [Phy]likai[on] (Hier.), Pylakaion and Phylakaion (Ptol.), Filaction (*Geogr. Ravenn.*) all occur. The forms in Ptolemy are probably Grecised to suit a supposed connection with φύλαξ.

B. 5. **ERIZA**, which lies near Ishkian Bazar, between Phylakaion and Kibyra,[54] is mentioned by Hierokles as Erezos, and in the *Notitiae* as Siza. Included in Phrygia, before the time of Diocletian, it was thenceforward comprised in Karia. A few coins EPIZHNΩN exist.

A milestone, which I copied at Tcham Keui in 1884 (probably in the territory of Eriza), belongs to the Roman Road, Themissonion-Kibyra:

ΤΟΙϹΘΕΩΝ	Τοῖς Θεῶν [ἐπιφανεστάτοις
ΑΥΤΟΚΡΑΤΟ	Αὐτοκράτο[ρι Καίσαρι Λ.
ϹΕΠΤΙΜΙΩϹΕΥΗ	Σεπτιμίῳ Σευή[ρῳ Περ-
ΤΙΝΑΚΙϹΕΒΑϹ	τίνακι Σεβασ[τῷ Ἀραβικῷ
ΑΔ ΗΝΙΚΩΠ	Ἀδ[ιαβ]ηνικῷ Π[αρθικῷ
ΚΑΙΑ ΟΚΡΑΤΟ	καὶ Α[ὐτ]οκράτο[ρι Καίσαρι Μ.
ΑΥΡΗΛΙΩΑΝΤΩΝ	Αὐρηλίῳ Ἀντων[είνῳ
ϹΕΒΑϹΤΩ	Σεβαστῷ[καὶ Π . Σεπ-
//////////////////	[τιμίῳ Γέτᾳ νἱῷ?τῶν]
ΓΑΛΩΝΙΑ	με]γάλων [Β]α[σιλέων καὶ Ἰουλίᾳ
ϹΕΒΑϹΤΗΙΙΗΤΓΙ▒ΛΚΑ	Σεβαστῇ μητέρα (sic) Κά[στρων.
ΑΙ ΟΙ ΙΒΥΙ	Ἀ[π]ὸ [Κ]ιβύ[ρας Μιλια δυώδεκα?

The inscriptions found at Asha Dodurga and Yokari Dodurga also belong to the territory of Eriza: these are *C. I. G.*, 4380 *r*, *s*, *t*, *u*, *v*.; and *Bull. Corr. Hell.*, 1885, p. 324.[55] Others, copied by Sterrett and myself in 1884, will shortly, I hope, be published by him. These prove that the people considered themselves Pisidians, as Strabo also (p. 570) must have done, and that they probably used the era of Kibyra, A. D. 25.

B. 6. **SEBASTOPOLIS** of Karia occurs in Hierokles, not in the *Notitiae*. Its apparent omission must be due to the fact that the official name Sebastopolis was replaced by the old native name:[56] it is uncertain

[53] *Trois Villes Phrygiennes* in *Bull. Corr. Hellén.*, 1882.

[54] On the exact situation, see E.

[55] Understanding that the name *Durdurkar* is a mistake for Dodurga or Todurga.

[56] So in late Byzantine time Diokaisareia of Isauria becomes Prakana.

which of the strange names Ταπασσῶν, Μετάβων, Προμισοῦ, Ἀνωτετάρτης is to be given to Sebastopolis. Its discovery is due to Schönborn.

B. 7. SINDA is mentioned only by Livy (see E). It was apparently a small place, which was merged either in Kibyra or in Eriza.

B. 8. KIBYRA was, under the Roman Empire, along with Eriza and Phylakaion, reckoned to Phrygia, and the tone of Kibyratic inscriptions tends to connect it with the country to the east rather than with Karia and the west. The frontier of Byzantine Karia and Pamphylia lay between Kibyra and Lagbe. It is clear that, as might be expected, the rearrangement of the provinces interfered very little with the old lines of demarcation. Phrygia and Karia were carved out of the single Asia, but the line separating Lykia-Pamphylia from the older Asia continued to separate them from the new Karia-Phrygia.

A. PHRYGIA.

IX. TAKINA.—For the full text,[57] and an account of the inaccurate copies previously published, of the important inscription which gives this name, see A. H. S., No. 12. Takina is mentioned also by the *Geogr. Ravenn.* as Tagina, and by Ptolemy as Γάζηνα (which must be corrected to Τάγηνα). I know no other instances of the name. Takina, being mentioned by the *Geogr. Rav.*, must have stood on a Roman road.[58] This is confirmed by the milestone (Smith-Ramsay, 1884;[59] *Ephem. Epigraph.*, v, p. 593). It is one of the series erected on the roads of Asia, from the Hellespont to the Pisidian frontier, by Manius Aquillius, about 130 B. C. The number engraved on it in Greek and Latin is CKΓ, CCXXIII, which, like all others on the milestones of Aquillius, must be the distance from Ephesos. Now the distance from Takina by the nearest pass to Kolossai and Laodikeia, and thence by the ordinary road (see V. ATTOUDDA) to Ephesos, is only about 166 Roman miles. It is plain, therefore, that the Roman road made a circuit, and that the distances were measured for all the way along the road. There are only two possibilities: the distance may have been measured by way of Laodikeia, Themissonion, Keretapa; or by way of Laodikeia, Apameia, and the shore of Lake Askania. The distances along both are given in

[57] In l. 7 he reads Βασιλάτης, assuming a name Βασιλάτη: it would perhaps be better to read Βασιλῶ τῆς θυγατρός. His transcription of the other Takinaean inscriptions contains several errors, which can be easily corrected by any reader.

[58] The obvious close relation to *Tab. Peut.* makes this practically certain.

[59] I again verified the text in 1886.

the following table: from Ephesos to Attoudda, I take the distance as measured along the railway, and for the rest I depend on my own map drawn, with the aid of a survey, in preparation for a proposed extension of the Ottoman railway to Apameia. My map is on the scale of 4 English statute miles per inch: I measured with a compass the number of inches along the line of the road, assuming that it ran straight from inch to inch, and added one in twenty for the necessary winding of the road.

Ephesos		Ephesos	
Attoudda	93	Laodikeia	107
Laodikeia	107	Apameia	173
Themissonion	141	Mallos (Kilij)	191
Keretapa	162	Adada (Elles)	205
Takina	176	Takina	223

From this table it follows that Aquillius measured along the great eastern highway, which, from 400 B. C. to 300 A. D., formed the backbone of Anatolian communication, as far as Apameia, and then turned down southwards round the frontier of the province. He carried the road at least as far as Takina, but there can be little doubt that it was continued to Keretapa and Themissonion either by him or in later time. It is also obvious, from the table, that the Roman road took the shortest possible line. The distance measured along the line of the rails, existing or projected, from Ephesos to Apameia is 178½ English statute miles: according to the above table, the distance in Roman miles along the same road is 173 miles. The line of the road does not actually lie through such cities as Magnesia, Tralleis, Nyssa, Antiokheia:[60] and the table shows that the sum of separate distances from city to city must be decidedly greater than the distance from end to end.

The line of the road constructed by Manius Aquillius must have been on Roman soil: lake Askania must therefore have been the boundary between Roman Asia and non-Roman Pisidia. It is probable,[61] that the same boundary continued between Asia and Pisidia, first when the latter became Roman and was attached to the province of Galatia, and afterwards when a great part of Pisidia was attached to the new

[60] Apameia, Laodikeia, Karoura, on the other hand, are directly on the line of the road.

[61] It cannot however be inferred with certainty that the whole line of road must have always continued to be in the same province. The road Kibyra-Alaston is measured from Kibyra in Asia, and yet runs for the most part through Pisidia (see below).

province of Lycia-Pamphylia by Vespasian. The Roman cities at Elles and Kilij were therefore probably cities of Asia.

Takina is not mentioned in the Byzantine lists: Hierokles, however, mentions Valentia in this part of Phrygia, and Valentia is mentioned as a bishopric in the Councils of 451 and 553. These references show that Valentia was a temporary name of a bishopric which in earlier and later time must occur under a different name. Takina and Valentia are therefore probably the same. In the earlier classes of *Notitiae*, Takina-Valentia is omitted with the rest of this district (see KOLOSSAI). In *Notitiae* of the latest class, it is perhaps included in the bishopries of Pamphylia Tertia (see D).

We have seen that Elles must have been in Asia at the time of Aquillius, and that it would probably continue attached to that province till Diocletian's time. But geographically it is connected with Pisidia rather than with Phrygia. A coin of Adada (Mionnet *Supplem.* and Friedländer's *Appendix* to Hirschfeld) gives a magistrate's name; and, according to M. Waddington's law, this proves that Adada was in the province Asia. But Ptolemy's authority and other considerations place Adada in Pisidia. The order of Hierokles leads me to place Adada at Elles, and this position explains the contradiction among the authorities. The legend ΑΔΑΔΑΤΩΝ on the coin above quoted is misunderstood by Friedländer: it should be accented Ἀδαδατῶν, as genitive plural of an ethnic Ἀδαδάτης, used for the commoner Ἀδαδεύς. The name Elles, more correctly Elyes or Ilyas, is a corruption of Saint Elias, who was therefore the saint of the church of Adada. The order of Hierokles makes Kilij the site of Mallos, which is doubtless the Mallos πρὸς Χῶμα Σακηνόν of Pisidian inscriptions: in that case Χῶμα Σακηνόν is perhaps the fine mountain called by the Turks Ai Doghmush ("the Rising Moon"), south of Apameia.

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[*To be continued. N. B. The map which is to accompany this paper will appear in Part II.*]

MITTHEILUNGEN AUS ITALIENISCHEN MUSEEN.

[TAFEL XXXI, XXXII.]

I.

Es ist nicht zu leugnen, dass die aus Aegypten stammenden, griechisch-römischen Denkmäler, welche sich zum grössten Theile in den aegyptischen Museen Englands und des Continents verbergen, im Allgemeinen noch wenig Beachtung finden. Zwar haben die Ausgrabungen in Naukratis wiederum die Aufmerksamkeit auf die Ansiedelungen der Griechen im Nildelta gelenkt und auch über ihre künstlerische Thätigkeit wichtige Aufklärungen gebracht. Aber von den Denkmälern, welche die griechische Kunst in Aegypten zur Zeit der Ptolemaier hervorgebracht hat, sind bisher verhältnissmässig nur wenige bekannt gemacht worden. Ich betrachte es als ein günstiges Vorzeichen, dass der erste Jahrgang diesser Zeitschrift mit der Publikation einer Anzahl bemalter, in Alexandreia gefundener Vasen eröffnet wurde, deren Inschriften von Herrn Augustus C. Merriam in dankenswerther Weise besprochen worden sind, während Technik und Stil der Malereien noch eine genauere Untersuchung verdienen. Ich füge jetzt ein Bildwerk herzu, welches mir geeignet erscheint auf eine andere Seite der alexandrinischen Kunst einiges Licht zu werfen.

Der auf TAFEL XXXI von beiden Seiten abgebildete Gegenstand ist eine kleine, etwa 10 mm starke Platte aus Serpentin; sie befindet sich in der Sala dei Papiri des aegyptischen Museums zu Turin, wo ich im Sommer 1886 Gelegenheit hatte sie zu untersuchen. Die Breite der Platte beträgt 0.092 m., die Länge 0.180. Beide Seiten derselben sind mit vertieften Reliefdarstellungen bedeckt, welche in der nach einem Gypsabguss hergestellten Reproduktion erhaben erscheinen. Aus der meist sehr starken, einige male aber ganz schwachen Vertiefung diesser eingravirten Gegenstände läszt sich schliessen, dass der Stein theils als Gussform, theils als Stempel gedient hat. Im ersteren Falle wurde das flüssige Metall in die hohle Form gegossen und bis zum Erkalten darin gelassen. Auf diesse Weise konnten natürlich

nur Halbfiguren oder reliefartige, auf einer Seite verzierte Platten gewonnen werden. So ist ohne Zweifel bei der Herstellung der Gefässhenkel verfahren worden, welche auf der einen Seite des Steines eingeschnitten sind (B, 11. 12) und welche nach dem Rande der Platte zu keine Abflussrinne zeigen. Um ein Rundbild zu giessen, musste eine zweite, jetzt verloren gegangene Platte aufgelegt werden, deren Vertiefungen die andere Hälfte der zu giessenden Figur enthielten. Das genaue Aufeinanderpassen beider Formen konnte dadurch gesichert werden, dass einige vorstehende Zapfen der Deckplatte in entsprechende Zapfenlöcher der unteren eingriffen. Vielleicht dienten die Löcher auf der Plattenseite A nr. 1 und 5 und B, 6, in welchen aber auch kugelförmige Gegenstände gegossen werden konnten, zugleich diesem Zwecke. Zum Eingiessen des Metalls sind überall schmale, nach dem Rand zu sich verbreiternde Eingussrinnen angebracht. Wo diese fehlen und die Gravierung sehr schwaches Relief zeigt, kann der Stein nur als Stempel, zum Einpressen des Musters in dünne Metallbleche gedient haben. Dieses Verfahren nehme ich an für die Darstellungen B, 8. 1 und 4, sowie für das Eppichblatt (σέλινον) inmitten der anderen Plattenseite.[1]

Die Bestimmung und Bedeutung der meisten, in dem Stein eingravirten Gegenstände ist ohne weitere Erklärung deutlich. Auf der Seite A sind ausser verschiedenen Henkeln, wie sie an Metallgefässen der hellenistisch-römischen Zeit ganz gewöhnlich sind, eine stehende Sphinx in Vorderansicht und ein Krokodill zu erkennen. Auf Seite B nr. 10 ein Ohrgehänge; B, 3 eine weibliche Maske. Nr. 2 und 9 sind die Vorderseiten von Figuren des Harpokrates und des Sarapis, beide in bekannter Auffassung. Harpokrates stehend, mit dem Füllhorn in der Linken, den rechten Zeigefinger an den Mund legend, über der Brust mit einem Fell bedeckt, dessen Zipfel an seiner linken Seite niederzuhängen scheinen. Auf dem Haupte trägt er anscheinend die Doppelkrone von Ober- und Unteraegypten. Dasselbe Mo-

[1] Ein Formstein, welcher als Stempel zum Einschlagen in Metallplatten dienen soll, muss meines Erachtens aus einem hinreichend festen Material bestehen. Aus diesem Grunde kann ich nicht glauben, dass die von CURTIUS (*Das archaische Bronzerelief aus Olympia*, Tafel III, fig. 6) publicierte Form aus Athen, welche aus Talk besteht, ursprünglich bestimmt gewesen sei "dünne Silberbleche hinein zu drücken und zu hämmern." Eine wirklich zum Einstempeln dünner Bleche verwendete Hohlform ist in Olympia gefunden worden und im vierten Bande Tafel 26, a der "*Ausgrabungen von Olympia*" photographirt. Diese Hohlform ist aber aus Erz gegossen.

tiv zeigt z. B. die Bronzestatuette der Sammlung Louis Fould, publicirt von Chabouillet, *Description des Antiquités du cabinet L. Fould*, pl. 13 (vergl., pl. 14). Die Figur des sitzenden Sarapis hat den dreiköpfigen Cerberus zur Seite und streckt in der Rechten eine Schale vor, während die Linke ein Scepter aufstützt. Es ist ein aus Münzbildern wohlbekannter Typus, über welchen zuletzt Adolph Michaelis im *Journal of Hellenic Studies*, VI, 1885, p. 309 (pl. E, 14) gehandelt hat.

Formsteine, wie dieser in Turin befindliche, sind mehrfach bekannt. François Lenormant hat ein sehr ähnliches Exemplar aus der Sammlung Raifé mit folgenden Worten beschrieben: "Moule à fondre les métaux en stéatite, ayant appartenu à un bijoutier gréco-égyptien. Sur une des faces sont les creux d'un manche de patère, d'une figurine de Patèque, d'une figurine d'Harpocrate, et d'une sorte de bouton circulaire décoré d'un masque de face. De l'autre côté sont les creux de deux boucles d'oreilles, dont une décorée d'une tête de lion."[2] Was Lenormant von diesem Beispiel vermuthet, gilt wegen des Fundortes mit noch grösserem Rechte von dem turiner Stein. Beide Formen stammen ohne Zweifel aus griechisch-aegyptischen Werkstätten und sind Werkzeuge alexandrinischer Toreuten gewesen, über deren Thätigkeit wir auch sonst vereinzelte Zeugnisse in der Literatur und unter den Monumenten besitzen.[3] Denselben Ursprung dürfen wir vielleicht für eine ebenfalls aus Serpentin gearbeitete Hohlform im fünfzehnten Saale des Lateranischen Museums in Rom mit dem Bilde einer Sphinx und eines Apisstieres vermuthen. Wenn diese letztere Form auch in Ostia gefunden wurde, so kann sie doch ebenso wohl aus Alexandrien importiert sein, wie der in Ostia bestehende Kult des Sarapis (Mommsen, *Römische Geschichte* V, 577). Für die Verehrer dieses Gottes waren wahrscheinlich die kleinen Votivbildchen bestimmt, welche ein Goldschmidt von Ostia mit Hülfe des lateranischen Formsteines herstellte.

Wichtig ist auf dem Turiner Exemplar das wiederholte Vorkommen von Henkeln einer bestimmten, in der griechisch-roemischen Zeit sehr beliebten Form. Sie finden sich meist an runden Schalen, deren Hauptschmuck sie bilden, oft auch vereinzelt, da der aus dünnem Blech

[2] LENORMANT, *Descript. des antiquités de la coll. de feu M. A. Raifé:* Paris, 1867 p. 108 nr. 819.

[3] Einige Notizen über die alexandrinische Toreutik habe ich zusammengestellt in der Abhandlung *Die Grimanischen Brunnenreliefs in Wien;* Leipzig, 1888, Anmerkung 35–37.

getriebene Gefässleib der Zerstörung leichter ausgesetzt war. Vollständig erhaltene Gefässe besitzt z. B. die wiener Sammlung; Henkel allein kommen in den Museen häufiger vor (vier Stücke, welche im turiner Museum aufbewahrt werden, sind bei Arneth, *Die antiken Gold- und Silbermonumente des K. K. Münz-und Antikenkabinets zu Wien*, Tafel S. III und III_a abgebildet). Eine Zusammenstellung und Vergleichung der ornamentalen und figürlichen Motive des Reliefschmucks dieser Henkel würde nicht nur den Beweis liefern, dass ihnen ein bestimmtes, wenig variirtes System der Dekoration zu Grunde liegt, sondern auch erkennen lassen, dass die Motive selbst und die Auffassung des Reliefs sich mehrfach mit denen des hellenistischen "Reliefbildes" berühren, als dessen Heimath mit grosser Wahrscheinlichkeit Alexandrien angenommen werden darf.[4]

Der Augenschein lehrt wenigstens soviel, dass der Besitzer des turiner Formsteins vorzugsweise und auch derjenige des Exemplars der Sammlung Raifé mit der Anfertigung solcher Gefässe beschäftigt waren. Ob wir das Recht haben, diesse Henkelform geradezu alexandrinisch zu nennen, lasse ich unentschieden. Aeltere vor die hellenistische Zeit zurückreichende Vorbilder finden sich in der phoenikischen Kunst (Perrot, *Hist. de l'Art* III, fig. 555, 556) und von ihnen könnten die griechischen Toreuten im Ptolemaierreiche direkte Anregung empfangen haben. Jedenfalls würde es nicht auffällig sein, wenn in Alexandrien, wo die griechische Kunst aufs neue die Einflüsse des Orients in sich aufnimmt und soviele Typen der assyrisch-phoenikischen und aegyptischen Kunst in hellenischem Geiste umgebildet werden, auch die Henkelmotive des Turiner Formsteins entstanden wären.

II.

Während eines kurzen Aufenthalts in Bologna im Sommer 1886 fiel mir im *Museo civico* daselbst das Fragment eines Reliefs in die Augen, welches unter den wenigen griechischen Sculpturen dieser Sammlung sich durch eine seltene Feinheit der Ausführung auszeichnet. Dieses auf Tafel XXXII abgebildete Fragment hat etwa 25 cm. Breite und ist aus griechischem Marmor gearbeitet. Erhalten ist nur

[4] In der oben citirten Abhandlung habe ich nachgewiesen, dass das hellenistische Reliefbild im Zusammenhang mit der Wandverkleidung (Inkrustation) der Wand entsteht und dass letztere in Alexandrien hauptsächlich ihre Entwicklung findet.

Kopf und Hals eines nach links gewendeten Widders, welcher unterwärts von der Hand einer verloren gegangenen Figur gehalten wird, sowie vor dem Kopf der Rest einer wollenen, mehrfach mit Knoten versehenen Binde. Die Konturen des Bruches sind in der Abbildung leicht zu verfolgen. Am unteren und rechten Rande des Reliefs ist auf der photographischen Reproduktion noch ein Theil der Wandfläche wiedergegeben, in welche das Fragment gegenwärtig eingesetzt ist. In der unteren rechten Ecke ist eine aufgeklebte Marke sichtbar, welche angiebt, dass das Relief sich ursprünglich in der Sammlung der Universität von Bologna befand. Weitere Notizen über die Herkunft desselben sind mir nicht bekannt. Weder Conze (*Archäol. Zeit.* 1867 p. 89*) noch Wieseler (*Göttinger gelehrte Nachrichten* 1874 p. 578 ff.), noch Heydemann (*Mittheilungen aus den Antikensammlungen in Ober- und Mittelitalien. 3. Hallisches Winckelmannsprogramm* p. 51 ff.) scheinen es gesehen zu haben. In den *Cataloghi del Museo civico di Bologna* (Bol. 1871) ist es nicht mit aufgeführt.

Augenscheinlich bildete das Fragment den mittleren Theil einer grösseren in wenigen Figuren abgeschlossenen oder auch friesartig ausgedehnten Darstellung. Auf der linken Seite befand sich etwa ein mit Binden geschmückter Altar, an welchen von rechts her ein Mann das Opferthier heranführte. Von diesem Opferdiener sind nur die Finger der rechten Hand sichtbar, während der Unterarm von dem Hals des Widders verdeckt wird.[5] Denken wir uns die männliche Figur in gehöriger Grösse ergänzt und einen Altar hinzugefügt, so gewinnt dass Relief eine Höhe von mindestens 35 cm. und eine Breite von nicht unter 50 cm. Die letztere kann aber beträchtlich grösser gewesen sein, wenn wir annehmen, dass das Fragment zu einem Friese gehörte und etwa aus der Darstellung eines Festzuges übrig geblieben ist.

Der eigenthümliche Reiz dieser sicher originalgriechischen Schöpfung laesst sich eher nachempfinden, als mit Worten beschreiben.

[5] Ich will nicht verhehlen, dass mir auch der Gedanke gekommen ist, die beiden oberhalb des Halses und Hornes des Widders aufwärts gehenden, sorgfältig eingeritzten Linien könnten die Konturen des zur Hand gehörigen Armes sein. Ich kenne zwar kein anderes Beispiel einer soweit gehenden Verbindung einfacher Zeichnung mit dem Relief. Doch laesst sich an den sogenannten Reliefbildern, einer Klasse malerisch behandelter, mit landschaftlichem Hintergrund versehener Reliefs, deren Publikation in einem besonderen Werk ich vorbereite, häufig genug beobachten, dass einzelne Theile des Beiwerks sich im Grunde des Reliefs verlieren und dann nur durch eingeritzte Umrisslinien verdeutlicht werden.

Die Modellirung erhebt sich nur wenig (bis zu zwei cm.) über den Reliefgrund und weiss doch durch einige kräftig hervorgehobene Schatten eine starke malerische Wirkung zu erreichen. Ein hochentwickelter Realismus verräth sich in der Art und Weise, wie der Künstler die Textur des Hornes, das flockige Vlies und die Einzellöckchen vor den Ohren des Widders mit wenigen Strichen mehr skizzenhaft, aber sicher andeutet. Erst in der hellenistischen Epoche, seit dem Ende des vierten Jahrhunderts gelangt die griechische Bildhauerei zu einer auf schärfster Beobachtung beruhenden Naturwahrheit in der Wiedergabe der Einzelformen und namentlich der Oberfläche des menschlichen und thierischen Körpers. Etwa dieser Zeit, dem Ende des vierten oder dem Anfang des dritten Jahrhunderts, möchte ich das Fragment in Bologna zuschreiben. Ich kenne wenige Sculpturen, die sich diesem Relief in der Feinheit der Zeichnung und in der Zartheit der Modellirung vergleichen lassen. Einigermassen ähnlich scheint mir in stilistischer Hinsicht ein malerisches Relief der Villa Albani in Rom. Es stellt eine ländliche Opferscene dar, vor dem Altar steht eine ältere Frau, zwei andere begleiten die religiöse Handlung mit den Tönen einer Doppelflöte und eines Tamburins.[6]

Auch ein Relief der sala della croce greca des Vatikanischen Museums (Herakles zum Schmauss gelagert) könnte zur Vergleichung herangezogen werden. Aber die stilistische Übereinstimmung ist nicht gross genug, um irgend welche Schlüsse darauf zu bauen. Über die Entwicklung der Plastik der hellenistischen Epoche sind wir bekanntlich nicht einmal innerhalb der attischen Kunst, welche uns doch die grosse, continuirliche Reihe der Grabstelen hinterlassen hat, genauer unterrichtet. Dass sich die verschiedensten Richtungen nebeneinander behaupten, und zwar Richtungen von einem ausgeprägten, individuellen Charakter, darüber kann schon jetzt kein Zweifel herrschen. Eine bestimmte Scheidung stilistischer, örtlich zu begrenzender Gruppen, namentlich im spätgriechischen Relief, wird jedoch erst möglich sein, wenn die Sammlung und Publikation der Denkmäler in derselben Weise, wie sie jetzt für das attische Grab- und das römische Sarkophagrelief begonnen worden ist, vollständig durchgeführt sein wird.

TH. SCHREIBER.

Rom, Oktober 1887.

[6] Das Relief ist ungenügend abgebildet bei ZOEGA, *Bassir.* tav. 105.

THE "OLD FORT" EARTHWORKS OF GREENUP COUNTY, KENTUCKY.

[PLATE XXXIII.]

I.—INTRODUCTION. On the southern side of the Ohio River, in Greenup County, Kentucky, at a point about a mile and a half below Portsmouth, Ohio, and nearly opposite the old mouth of the Scioto River, there is a very interesting series of ancient earthworks, worthy of more attention than it has received of late years. The position was well chosen, for from the top of the highest walls or embankments a fine view could be had of the Scioto valley for several miles, and also for a few miles each way of the Ohio valley, were it not for the timber along the latter on the margin of the river. The main work, a large quadrangular enclosure, is locally known as the "Old Fort." This enclosure, together with its so-called covered ways or parallel walls, was described and mapped two-thirds of a century ago by Caleb Atwater of Circleville, Ohio.[1] In 1846 these earthworks were re-surveyed by E. G. Squier and D. Morton, who discovered mounds and embankments not noted by their predecessor: a full account of them, with maps, will be found in the well-known work of Squier and Davis, *The Ancient Monuments of the Mississippi Valley.*

During the winter of 1885–6, I re-surveyed these imposing remains of antiquity. After a careful inspection of the ground beyond the ravine, at the end of the southwestern covered way, I became satisfied that there were earthworks, belonging to the series, not shown even in Squier's survey. This fact has induced me to prepare the present paper, and to accompany it with a diagram or outline-map of this "Old Fort" and its entire accessories, thinking that they may interest students of North American antiquities (see PLATE XXXIII).

II.—THE MAIN WORK, OR GRAND SQUARE. The main work, central enclosure, or Grand Square as it deserves to be called, is situated on a terrace some forty feet above the river bottom, the distance to the river

[1] His account appeared in the first volume of the *Transactions of the American Antiquarian Society*, published in 1820.

itself being about a quarter of a mile. In shape, it is a quadrangle with rounded corners, but instead of its sides agreeing with the cardinal points, as was first reported, it is rather the corners which look toward them. The inside area, though not level, is practically even—as even as ploughed land can be expected to be—and was probably shaped off to a reasonably perfect plane in the first place, for the convenience of the people using it: the inequalities of the ground having thus been removed the sky-line of the surrounding embankments is practically parallel with it. The top of each section of the wall, therefore, forms a straight line, excepting that portion of the N. W. wall which gradually rises from near the western gate to a point near the centre, and a slight depression in the S. W. wall near the south corner. While the N. W. and N. E. walls are, generally speaking, horizontal, the wall from the east corner and that from the west gate rise evenly to the south, where is the summit of the entire earthworks. The lowest part of the walls is at the western opening. The walls are not rounded at the top but there is a level space or walk of about eight feet in width, which can be readily traced along almost the entire length of the six embankments which constitute them.

These embankments, treated as four walls, are, in respect to their width at the base and vertical height, in mean dimensions, as follows: The N. E. wall is 60 to 65 feet wide, and 10 feet high. The S. E. wall has the same width and is 10 to 12 feet high, with the exception of a place near the southern corner, where it crosses the end of a spur of the slope of a higher plateau, which at that point overlooks the interior of the enclosure—most of that part of the slope which projected beyond the inside line of the wall was graded away and the material used in levelling the square. The S.W. wall ranges from 62 feet in width and 10 feet in height, at the south end, to 45 feet in width and 8 feet in height, at the west end. The N.W. wall is from 45 to 60 feet in width and from 8 to 10 feet in height.

There are six openings or entrances to this enclosure, the narrowest (the northern one) being 13 feet, and the widest (the N. E. one) 27½ feet wide. The northern and southeastern entrances are not on a level with the natural surface, but are raised some two feet higher. Neither inside nor outside ditch entered into the plan of the builders here, for there are none, the walls being, generally speaking, equally elevated above the inside area and the outside natural surface, except at the narrow point described.

The larger dimensions of this Grand Square can now be given. From the centre of the S. E. to that of the N.W. opening a straight line, measured on the plan, gives a distance of 832 feet, and, between the other two openings, of 822 feet, making a mean diameter of 827 feet. The perimeter, or a continuous line traced entirely along the centre of the walls and across the openings, has a length of about 3,175 feet. The land contained within the inner lines of the embankments, but omitting any portion of the entry-ways, is about 13.20 acres in area.

Doubtless, when its architects first drew its lines on the ground, as they necessarily must have done, proper rectangles were formed, for it is even now, practically, an "exact square," as Mr. Squier called it. The following geometrical facts, deduced from plotted diagrams, will demonstrate this statement. The first diametrical line mentioned bears N. 47¼° W. (magnetic); the second one N. 42° E.—the two lines intersecting within three-quarters of a degree of exact right angles. The latter line intersects the first precisely at its (own) middle point, but about three feet N. W. of the middle of the former, or N. E. and S. E. dimension: were it, however, to run at right angles with it, it would cross about as far to the S. E., its termination striking within two feet of the right hand side of the N. E. opening, instead of half-way across it.

Considering the thousand years, approximately speaking, that have probably elapsed since these high embankments were raised, would it be rash to suggest that the builders of the same, of whatever tribe or race they were, had definite ideas of castramentation? Indeed, if we could see and test their original lines and should find them to be actually a degree or two out in angle, and ten or twelve feet in distance, for so large a square, we should have found blunders that could easily be paralleled in the work of more modern surveyors.

III.—THE NORTH-EASTERN COVERED WAY. The northeastern covered way extends a little over 2,000 feet from the wall of the enclosure, and its constituent embankments vary in width from 20 to 32 feet at the base, and in height from 1½ to 3½ feet—the narrowest parts being those on each side of the northern opening. Although, for convenience sake, occasionally called "parallel walls," here and elsewhere, like the southwestern ones, which are, for the most part, truly parallel, the walls of this covered way, at no place present any parallelism: the least distance between them, from top to top, is 176, and the greatest 320 feet. The walls intersect two ravines, both of which were undoubtedly in existence when they were built, for the embankments

follow the slopes nearly to the bottom. The ends of the walls, at both crossings, show that they have been cut away by water coming from the adjoining high land.

The length of the N. W. wall, following along its central portion, is 2,135 feet, and that of the S. W. wall 2,320 feet. The northern opening or gateway is 15 feet wide, and the distance between the embankments at the southern end is 80 feet. The included area, as bounded by the lines forming the inside bases of the walls, continued across all the openings, as in the case of the Grand Square, is 8.80 acres.

IV.—THE SOUTH-WESTERN COVERED WAY. The walls of the S. W. covered way run strictly parallel for nearly 1,100 feet, and are 191 feet apart (on centres) for that distance: the S. E. wall then makes a very slight angle to the left, or southward, but the other continues its course unchanged to the end. They are 35 feet wide at the base and from 2½ to 3½ feet in height. The length of the N. W. wall, both ends of which are finished, or rounded off, is 1,510 feet, and the farther end rests on the edge of the ravine, which is some 40 feet in depth and 500 feet wide, and has very steep sides. The end of the other wall has been destroyed by the falling away of the bank, leaving its present length exactly 1,190. The area, bounded by the lines forming the inside base of the walls and lines drawn between their extremities, is 4.90 acres.

V.—Before describing the outlying earthworks, the extent and dimensions of the entire "fort" with its covered ways should be ascertained. From its extreme limits on the N. E. to the end of the finished embankment on the S. W. the distance is 4,500 feet in an air line, or .85 of a mile. The entire length of all the embankments, or walls, as built, omitting original openings or vacant spaces, is a few feet over 10,200 feet, or 1.93 miles. The land included within the square, and covered by the parallel walls, together equals 26.90 acres. A fair computation of the area covered by the bases of all these walls, and of the cubical contents of the embankments raised on them—including the "traces" and the spur crossed—according to the data furnished by this survey, gives as follows:

For the grand square, ...	4 acres,	29,400 cubic yards.
" northeastern parallel walls,	3 "	6,700 " "
" southwestern " "	2 "	5,900 " "
Total, ...	9 acres,	42,000 cubic yards.

VI.—Outlying works of the Grand Square. Just west of and near to the northern corner of the large enclosure, there are two small burial-mounds, one of which is 42 feet in diameter and 2½ feet in height, and the other 45 feet in diameter and 3 feet in height.

Also about 650 feet to the northward of the northern entrance of the square, and on the edge of the same plateau on which the main work is built, there is a small elliptical enclosure. The oblong mound within it is 60 by 128 feet at the base and 4 feet high. The embankment ranges from 30 to 80 feet in width and from 1 to 5 feet in height. The ditch, which is between the mound and the embankment, leaving no berme, has an average depth of 15 inches, and is twenty-four feet wide. At the east end of the enclosure there is a narrow causeway, 6 feet wide, which crosses the ditch.

VII.—Works beyond the S. W. ravine. We now turn again to the S. W., and, crossing the ravine beyond the covered way, there find other earthworks which are different in shape and arrangement from those just described, and some of which are the works referred to in the beginning of this paper as not having been noted by previous explorers.

First, there is part of a circular enclosure, apparently 230 feet in diameter.[2] This would imply a circumference of 723 feet, were the enclosure complete, but, unfortunately, only about one-third of it remains. This fragment is 35 feet in width and 4 feet in height, with a gateway or opening of 8 feet on the S. W. side. At a point less than 40 feet after passing through the entrance, one comes to the snout of an animal-shaped mound, which, fortunately, has not been touched by the encroaching ravine immediately back of it. This "effigy" probably represents a bear, which seems to be leaning forward in an attitude of observation. It is not very large, being but 53 feet from the top of the back to the end of the fore-leg, and its utmost length is 105½ feet from the tip of the nose to the rear of the hind-foot. The greatest vertical height is at the fore-shoulder, where it is 3½ feet.

East of and near the entrance to the ruined enclosure just described, there is a low embankment, 32 feet wide and 1½ feet high, which runs 348 feet in a nearly S. W. direction.

To the east of the southern end of this last embankment lies a small enclosure. The wall is 15 feet wide, 1 foot high, and 92 feet from

[2] The three fixed survey points on the centre of the bank or wall form points on an arc of a circle having a radius of 115 feet.

centre to centre of embankment, but there is no opening in it. Within is a small mound 32 feet in diameter and 2 feet high. This enclosure is probably the small two-feet-high circle mentioned by Mr. Squier.

Nearly south from the animal-mound enclosure there is another circle, 130 feet in diameter from centre to centre of the embankment, which is 32 ft. wide and 1½ ft. high. On the inside there is a ditch 21 ft. wide and 1 ft. deep. The opening in the wall, which is to the eastward, and the causeway over the ditch are both 22 ft. wide. This enclosure, like the preceding one, has a mound inside, but it is situated back of the centre from the opening, and is 35 ft. in diameter and 1 ft. high.

Beyond these enclosures, to the S. W., are a number of ordinary burial-mounds, and traces of some straight embankments that have been cultivated for many years, which I did not survey by reason of bad weather. They undoubtedly belong to this series of works. There are also some stone-mounds, on the spurs of the adjacent bluffs, to the south and southwest.

The above facts were taken from the field-book of a sufficiently close survey, in which 86 bearings were taken and horizontal distances measured, aggregate in all 10,485 feet, or nearly two miles (without including the nearly as many diameters and the offsets for topography), and in which, also, levels for vertical dimensions were taken at 80 separate points.

The site, though by no means as the mound-builders left it, is almost perfect when compared with the remains at Newark, Ohio, and other places. The surface inside the main enclosure and a portion of the N. W. wall, together with both covered ways and the other enclosures and mounds, have either been cultivated or are under cultivation—the first-mentioned, for many years. The S. W. wall is still covered with large trees. Up to the time of the partial destruction of the N. W. wall last year, the embankments of the "fort" had scarcely been disturbed, and were in good condition, their height having been their greatest protection. While the covered ways may have been somewhat higher, they never had the height represented by earlier explorers, for in places the wall has, apparently, never been disturbed, and at such points the height does not exceed 3½ feet: nor do I think that the two isolated mounds were ever as high as six feet each. Under these circumstances, then, it was possible for a judicious surveyor to make a reasonably accurate survey of the "Old Fort" and its surroundings, at this late date, without drawing on his fancy.

Since I made this survey, the Maysville and Big Sandy railroad has been graded between these earthworks and the river, but so close to the former that the N.W. wall is badly injured in its entire length.

Within and around these earthworks, on all the plateaus, in every direction, there are abundant evidences of a former occupancy, especially on the N. and N.W. sides, where the village *débris* is the most abundant. This consists of broken pottery, stone and chipped implements, broken sea and fresh-water shells, disks, ornaments, and, in fact, nearly everything that is usually found on ancient village sites. Near the southern corner of the "fort" itself will be noticed, on the plan, a limited elevation or ridge. Mr. Atwater describes this as "a large elevated mound," and thinks it "to have been designed for uses similar to the elevated squares at Marietta;" but in his description of the Marietta works he does not state what those uses were. Mr. Squier also refers to it, but not so positively: he calls it "a bastion, probably natural, but adapted by art, which commands the hollow way or ditch" on the southeastern side, which "ditch" seemed to him also artificial, or, "at any rate it has been modified by art." There is, however, no doubt that this point is wholly natural, for it is simply a spur of a higher terrace, only modified by the building of the wall across it, and by the grading off of its end where it projected inside the latter. Nor is the ditch anything more than the depression where the natural slope and the artificially placed earth come together.

There is no other statement in Mr. Atwater's account tending to mislead or puzzle the modern investigator, but Squier found "on the S.W. side a sort of run-way resembling a ditch, which loses itself in a deep gully towards the river. It is undoubtedly wholly or in part artificial." Now this "ditch," deepening into a ravine as it extends northwestward, is no more artificial than the other: it is undoubtedly natural, though it afforded a good passage-way to and from the bottoms below.

Mr. Squier also states that "a light wall of some hundred paces in extent runs from the left hand entrance of the main work along the verge of a declivity terminating at the western angle," and he delineates it on his map. There is no artificial wall such as he describes, nor even any natural bank other than the edge of the ravine and terrace. Of the three mounds he describes I could find but two.

It is almost impossible to tell why these elaborate earthworks were erected. In a few matters the explanation is obvious, but in the majority of points every reason advanced would be mere hypothesis. Let us take the main enclosure for example. By placing palisades on the wall

near the south angle, where it intersects the spur, and closing the openings, it would certainly serve as a fort, and could be defended against any weapon that may have been in use at the time the works were built. The absence of ditches or trenches in connection with the fort and its parallel walls may, in some eyes, militate against the theory that the works were erected with a view to warlike operations, but that is not conclusive as regards the old mound-builders, for we are totally ignorant of their method of waging war.

The unattached smaller enclosures were probably for burial purposes, the mounds in the two circular ones being of the same form as ordinary tumuli. In several instances where such mounds have been opened, they have been found to contain human bones. Sometimes these were calcined, and in such cases ornaments, pipes, *etc.* were found with them.

The "bear" effigy-mound described here has never been mentioned in print before, and seems to have hitherto escaped the notice of enquiring scientists—indeed, it was unknown even to the residents of the neighborhood. Its value is, mainly, in that it is the first imitative mound constructed of earth discovered south of the Ohio River, and that it is an important addition to the scanty list of such works already brought to light in Ohio, the nearest of which is but a few miles away from this one, being the peculiar three-legged animal (in profile) on the Scioto River, just above Portsmouth, surveyed by Col. Whittlesey in 1846 and mapped in the *Ancient Monuments.*

Though not brought to public notice, to my knowledge, prior to 1791,[3] this "old fort" was probably known to white men nearly a century earlier. The walls of its central enclosure have yielded, from the time of the earliest American settlements to last year's railroad-grading, all sorts of relics of European origin. Gun-barrels, buckles, crosses, coins, *etc.*, taken thence have found their way into the hands of the curious.

T. H. Lewis.

St. Paul, Minn.,
Sept. 30, 1887.

[3] By Major Jonathan Heart, stationed at Fort Harmar, who, in a letter to Dr. B. S. Barton, of Philadelphia, dated January 5, 1791, speaks of such ancient remains as being found "along the Scioto to its junction with the Ohio, opposite which, on the Virginia side, are extensive works, which have been accurately traced by Colonel George Morgan; and I have been told that there are remains of chimnies, &c." See Vol. 3 of the *Trans. of the Amer. Philosophical Society.*

NOTES.

ASSYRO-BABYLONIAN FORGERY.

For the sake of warning possible purchasers, let me add another to the catalogue of Babylonian forgeries described by M. Ménant in the last number of the *American Journal of Archæology*.

I received three days ago, from a learned correspondent in Constantinople, photographs of a table, or "altar," said to be in "copper bronze," and "patinated so as to leave little room for doubt of its antiquity." Its top is like a box three inches long by nearly two and a half inches wide, and an inch thick. It is supported on four straight legs fashioned like those of an ox. From each end of the two sides there stand out the neck and head of an ox with short curved horns, projecting an inch from the side. The top and at least one of the two ends are adorned with groups of figures in low relief surprisingly like those on some cylinders.

A careful examination reveals the forgery. The figures are evidently taken not directly from cylinders, but from casts of cylinders, the originals not being at the command of the forger. Of the two designs on the top of the "altar," the upper represents Gisdubar holding up in each hand a griffin by the hind leg. Above and about the group is an inscription in cuneiform characters, at the right and left edge is an ornamental design: on being closely inspected this design is that of *one half* of the Assyrian sacred tree. It is evident that the forger had in his possession a cast from the seal which had been carefully made so as to duplicate nothing, and to represent the deity and the griffins in the middle. This required the splitting of the sacred tree vertically through the middle leaving its two halves at the two ends of the cast. It is inconceivable that an Assyrian artist could have so mutilated this tree. The original design may be attributed to the period of Sargon, when these peculiar eagle-headed griffins were much affected. Below this group is another, also evidently taken from a plaster cast. But this time the design is not of an Assyrian type, but Babylonian, and decidedly archaic, belonging to a period not less than a thousand years an-

terior to that of the Assyrian group. The combination of the two is impossible in a genuine antique.

As it occurred to me that I was familiar with the cylinder from which the Assyrian group was taken, I examined the casts in my possession, and soon convinced myself that I could fully identify the cylinder. It is a beautiful red chalcedonic quartz, belonging to the Rev. Henry Fairbanks, of St. Johnsbury, Vt. Not only is the group the same (not otherwise known), but the inscription also has been copied, so that we find on the left the words *Kunuk Zabri*, "Cylinder of Zabri," and, on the right his filiation, *Mar Papari*, "Son of Papari." The forger happens to have duplicated the character *pa*, so as to read *Papari*, in place of *Pari*, as it is on the original cylinder. We thus have this object which, whatever it is designed to represent, table or altar, is certainly *not* a cylinder-seal, designated by its inscription as such a seal. The inscription itself proves the forgery. By a remarkable coincidence, the second of the groups, also, is taken from a cylinder belonging to Mr. Fairbanks. It is not so well copied as the Assyrian one, although that leaves much to be desired. The proportions are not very well kept in either case, and the inscription of the upper group, beside doubling the *pa*, shows other marks of ignorance. Two curious blunders appear in the second, or Babylonian group. Heabani loses his bull-like body, and becomes quite human; and the indistinct inscription between the divine bull and Heabani has become transformed into an absurd short man with a high double pointed mitre. On the end is another group, equally taken from the impression of a cylinder. From the imperfect photograph it is impossible to describe it further than by saying that it is old-Babylonian, of an antiquity much beyond that of the first Assyrian group.

As this very peculiar forgery would be likely to deceive any but an expert, and as it is likely to be the forerunner of other objects from the same skilful workshop, it is well to put the purchasing public on guard against this new and taking fraud.

WILLIAM HAYES WARD.

THE SUN-GOD ON BABYLONIAN CYLINDERS.

Allow me to add one or two points to my paper on "The Rising Sun on Babylonian Cylinders" published in the last number of this Journal. In answer to my question, Mr. T. G. Pinches writes me that the star-headed object to the right of the god in PL. V–VI, *fig.* 1 may designate the god Shamash, the star being the common character for *god*, and the lozenge for the Sun. Now, this same object appears also on *figures* 5 and 10; and as these three cases are the only ones, with a single exception (Ménant, *Les Pierres Gravées*, t. I, fig. 23), among the hundreds of published seals on which I have been able to find this character, I think it may be taken as a further indication that I am right in identifying with Shamash the god whom it accompanies.

Two texts are quoted in Sayce's *Hibbert Lectures* (pp. 180, 469) which connect the sunrise and sunset with mountains. One of these is a hymn to the Fire-god:

"O Fire-god, how were these seven begotten, how were they nurtured?
These seven in the mountain of the sunset were born;
These seven in the mountain of the sunrise grew up.
In the hollows of the earth they have their dwelling;
On the high places of the earth their names are proclaimed.
As for them, in heaven and earth they have no dwelling, hidden is their name.
Among the sentient gods they are not known.
Their name in heaven and earth exists not.
Those seven from the mountain of the sunset gallop forth;
Those seven in the mountain of the sunrise are bound to rest."

Professor Sayce also refers (p. 363) to the same hymn to the sun from which, in a note appended to my article, Dr. Jastrow quoted the lines apostrophizing the sun as rising from "the Mighty Mountain," the place of destinies. The "Mountain of Sunrise" and the "Mountain of Sunset" Sayce regards as the same mythical under-world mountain. I should question this, and should compare another hymn in honor of Adar (*ib.* p. 485):

"O Adar, the lord, the son of Bel, what can rival thee?
From the mountains of Elam may it be fetched.
From the mountains of Magan may it be brought down."

In this passage the extreme eastern mountains of Elam, and the extreme western mountains of Magan (the Sinaitic peninsula), were challenged to bring the equal of Adar. These are likely to be the mountains of the rising and the setting sun.

Another interesting passage tells us that the god Anu, head of the chief trinity of gods, was the maker of the gates through which the sun passes

at his rising and setting (*ib.* p. 389). The hymn describes Anu as fixing the stars and constellations of the zodiac. He made it, we are first told, "a mansion" for the Sun-god. The hymn then proceeds:

"He established the mansion of Bel and Hea along with himself.
He opened also the great gates on either side.
The bolts he strengthened on the left hand and on the right."

We thus have abundant literary evidence for both the mountains and the gates of sunrise and sunset depicted on the family of seals under discussion.

In this Journal for 1886 (vol. II, pp. 261–66), I described several cylinders which represent a god of agriculture. I did not then attempt to identify this deity with any one of the Babylonian pantheon. But the god who seems to have presided over the fruit of the field is the one called Serakh, or, in the later Assyrian, Nirha. For mention of this god see texts translated by Lenormant ("Chaldæan Magic," pp. 45, 69, 120, 171) and by Sayce (*Hibbert Lectures*, pp. 308, 384, 519).

WILLIAM HAYES WARD.

CORRESPONDENCE.

LETTER FROM ROMA.

Among the notable archæological events at Roma, of recent date, are the changes in the German archæological Institute and the project for an Italian Institute; the proposed new law to regulate excavations over the entire kingdom of Italy; the exhibition of Textiles; the establishment of several archæological professorships at the University. Much regret has been felt at the autocratic step by which the great German archæological Institute in Roma was made a mere dependency of Berlin. Ever since its establishment, more than half a century ago, the Institute has been considered by Italians as in great part a national growth, and their interest in it has equalled that displayed by the Germans themselves. Its leading idea was to be an international institution, and the prominent share taken by France is too well known to mention—the outward sign of a French subtitle in the publications being preserved to the end. The great majority of its members and of attendants at its meetings were Italians: its sittings were conducted and its invaluable publications (the *Monumenti*, the *Annali*, and the *Bullettino*) were issued, for the great part, in the Italian language. And this seemed eminently appropriate, for Italian archæology was the invariable subject treated both at meetings and in publications. Unfortunately, there comes to Roma some German visitor, without sympathy with the traditions of the Institution, whose ire is roused because he is requested to speak in Italian, and who forthwith raises a hue and cry in the German press, complaining of the de-nationalization of the Institute. As the result, a hecatomb was made of *Monumenti* and *Annali*, and only the *Bullettino* remained in a changed form and with the addition of a German title and index—the inconsistence of which is made the more apparent by the fact that nine-tenths of the contents are still printed in Italian. In consequence of all this, both Secretaries of the Institute, Professors Henzen and Helbig, resigned—the resignation of the former being sent in but shortly before his death. It would seem as if the result could not fail to be disastrous. One of the effects has been the withdrawal of a large part of the Italian members and the attempt to form an Italian Institute to take the place of the German, though the scheme does not appear to have met with much success.

It is a general feeling that the laws regulating archæological investigations and excavations in Italy should be changed. Firstly, they are too restrictive and unenlightened, and, secondly, each province has preserved its antiquated laws, so that there is no uniformity throughout the land. Owing to the confusion and uncertainty reigning in this question, there are endless law-suits and violations of the laws: such an amount of red-tape officialism is required as effectually to discourage scientific work in many cases, and, notwithstanding the most benevolent of intentions, the letter of the law is made to kill the spirit. It seems unjust, for example, that archæological property to the value of over 200,000 lire, belonging to the late collector Castellani, and now the property of his widow, should be sequestrated by the Government, and that it should neither be willing to purchase it nor allow her to realize its value. It also seems unjust that a man should be so severely treated as was the lucky proprietor near Todi who recently discovered the famous tomb of a woman containing such magnificent jewelry and vases (JOURNAL, vols. II, p. 490, III, p. 189): under TODI (*News*) is published the sentence passed on him by the court because, though he had obtained a regular permit to excavate, he had not thought to renew it before its expiration. For this oversight the man was condemned to pay a fine of 1000 lire, and objects worth several times that sum were confiscated! And yet such are but a few of the difficulties in the way of discovery. I was witness at Corchiano of the petty manner in which permits for sale are doled out to discoverers and proprietors. The permit is given for carefully specified objects, and, if a piece of jewelry happens to be found in the same tomb after the enumeration has been forwarded to Rome, a further report and request has to be made, and sales are often impeded because a lot is thus divided and the permit is slow in coming—for anything official takes an unconscionably long time. Then, the laws which govern excavations in different parts of the country are antiquated, and do not suitably apply in many cases that arise from new methods of archæological research. Both the *Legge Pacca*, which rules the former States of the Church, and the Neapolitan law still in vigor for the whole of Southern Italy and Sicily, are more than a half-century old. They were intended for a different condition of things, for the days before archæological science was born and when all research was more destructive than constructive—more or less a piratical depredation on past civilizations, a digging for objects to sell. Topographical researches, attempts to determine the character of monumental ruins, were not yet in order, and these old laws did not contemplate them. In fact, the idea that such topographical researches did not come within the prohibitory clauses of the Bourbon law of 1822 was what led to the misunderstandings that have grown out of our excavations on the ruins of the great Temple of Hera Lakinia at Kroton (see JOURNAL, III, pp. 181–82;

8th Annual Report of the Archæological Institute, the N. Y. *Nation*, Nos. 1138, 1139, 1140, 1142, 1144), the local opinion being that no Government-permit was necessary for scientific investigations. The result was that all the objects found in the course of these excavations, though regularly declared to the Inspector of Antiquities for the province, Marchese Lucifero, were one fine day seized, thrown into the open trenches, and covered with earth. Of course such violent action on the part of the ignorant subalterns was not approved by the Central Office, but could not be undone.

To remedy these defects, a new law on antiquities has been elaborated by Deputy Cambray-Digny and Senator Fiorelli, the General Director of Antiquities for the kingdom. This law is designed to apply to the whole of Italy and to facilitate excavations for museums and other collections—especially foreign museums. There appears to be considerable opposition to it in the Chambers, for it does not recognize the right of private individuals to excavate on their own property: this is a point on which a large number feel very strongly, for every Italian land-owner hopes that his land will some time bring forth hidden treasures.

To visit Baron Baracco's collection of ancient sculpture, at Roma, is a privilege accorded to few strangers. In giving me a letter to the Baron, Prof. Helbig remarked that, for the illustration of the historical development of Greek sculpture, this collection was more important than even the Vatican museum. It is a collection which cannot fail to excite enthusiasm, for, although small, each piece that it contains is a gem of art and in remarkable preservation; and after seeing it one feels that even in the Roma of to-day it is possible, with time, taste, money and patience, to make a fine collection of Greek marbles. The Baron seldom shows it, and has not allowed his chefs-d'œuvre to be published, proposing himself some day to issue a critical illustrated catalogue. However, it will not be indiscreet for me to simply enumerate a few of the pieces that impressed me most forcibly. Of works belonging to archaic Greek art there were several examples, among them a head in the style of the Aigina marbles and the lower part of a relief comparable to the stele of Aristion, with the addition, on the base, of a scene in low-relief. The second half of fifth century was well represented, the only works found outside of Italy being a female head in relief brought from Attika, which reminds one of the head of Peitho (Michaelis) on the east frieze of the Parthenon. There are interesting replicas of the *Doryphoros*, the *Diadoumenos* and the *Diskobolos*, beside works in the round and reliefs of less noted origin, referable to the same period. Among later works, the two pieces that most impressed me were a magnificent marble portrait-bust of Alexander the Great, and a so-called head of Demosthenes—a most wonderful study of an elderly man with deeply-marked and characteristic features; both these works appear to belong to the third century B. C.

Before this visit to Roma, I had heard much of the important series of terracottas, large and small, lately discovered (of which there were reported to be about 20,000), for the most part stowed away in the various *magazzini* of the Archæological Commission of the city. Some large groups of reliefs from the gables of temples were reported to be of especial interest. I had the privilege of visiting quite thoroughly the various store-houses of the Commission, but my search was not rewarded by the discovery of anything of importance. A fragmentary marble group of small dimensions, which had not, so far as I could ascertain, been noticed, though discovered nearly two years ago, attracted my attention. In the centre was the lower part of a nude male figure, resting on one knee, with muscles distended: on his left were part of the limbs of a more youthful figure extended on the ground, with similar traces of a corresponding figure on the right. Snaky folds were represented entwining and imprisoning the limbs of these figures. The conclusion at once forced itself upon me that here was a miniature reproduction (½ life-size) of the group of Laocoön and his sons. I regret having had no time to make a sketch of this interesting fragment, for, though its debased style showed it to belong to the late-Imperial period, its interest would lie in its being doubtless a copy of some earlier work.

Among the most interesting of the investigations lately carried on in Roma has been the dredging and digging up of the bed of the Tiber. The regular accumulation of mud and sand make it easy to locate the stratum corresponding to each different period in the history of the city; and, in sinking shafts for the piers of the new bridges, the stratum of the early-Kingly period has been reached by passing through those corresponding to the Renaissance, the Middle Ages, the Imperial and Republican periods. Expectations and hopes as to the results of this work, in the discovery of valuable works of art, were raised to the highest pitch. They have not been entirely satisfied. What is the reason? It is not far to seek, and is mainly this: the workmen do not receive the smallest reward or compensation for the antiquities they may find, so that it is not worth their while to give any extra labor to extracting them, except in the case of coins, terracottas, small bronzes or the like, which they are able to conceal and carry off for sale. I have heard from most authentic sources that, in sinking the shafts, the arms or legs of many a bronze or marble statue have been seen protruding, and are simply hacked off to avoid the trouble of digging out the entire figure. Hence, the great majority of objects rescued from the Tiber have been small, almost the only large work recovered being the bronze statue of Bacchus. Among the smaller recent finds, that of greatest importance is a series of the earliest Roman As, several of which are almost unique: unfortunately, this series has been dispersed, being sold to a number of collectors and museums. It is extremely difficult to know what

is really found: the greater proportion are never officially known or their provenience recorded. In fact, in this and in many other instances it is only by getting behind the scenes that any idea can be obtained of the importance of recent discoveries in Roma in the fields of sculpture and the minor arts.

Much has been said of the two new Museums to be opened in Roma, one in the Baths of Diocletian, the other in the Botanical Garden on the Coelian (JOURNAL, vol. I, p. 446). The former is as yet in an embryonic state, consisting merely of five small oblong chambers made in the cloisters of Santa Maria degli Angeli, each of which contains an interesting piece of sculpture belonging to the recent discoveries. The two most important pieces are the bronze statues of the seated boxer and the standing athlete; the others are a fine headless figure of Juno magnificently draped, the bronze statue of Bacchus found in the Tiber (JOURNAL, I, p. 443) and the marble statue of the youthful Ganymedes with Phrygian cap (JOURNAL, III, p. 187). Nothing has been done towards the building of the great Central Museum on the Coelian, which has been the cause of considerable tension between the City Commission and the Central Direction, on account of the unadvised action of the Syndic in promising to hand over to the Ministry all the works of art found which belonged to the city and were subject to the care of the Archæological Commission. The sum of over two millions is to be appropriated for the Museum, according to the agreement recently made, the city paying one third.

A most interesting institution is the Government artistico-industrial school at Capo-le-Case, with which a Museum of considerable value is connected, and which has greatly developed during the last two or three years. It contains a number of collections loaned or for sale, like the famous ivories of the town of Fabriano—one of the finest collections of ivory-carvings in existence: of unusual interest also is a large selection of Etruscan terracottas of both the archaic and free periods (exhibited by Sig. Jacobini of Genzano) which surpass in number and value any similar collection I have seen: some of the archaic terracotta reliefs are unique as to subject. I noticed a long narrow frieze of reliefs in semi-archaic style, and a large series of antefixæ of various dates. The study of these works is new, and might lead to results of value for the history of Etruscan art. For example, if we examine the series of antefixæ with the *apotropaion*-head identified with the Etruscan or the Greek Medusa, we find that examples of the same three or four varieties are found in widely distant localities, like Capua and Chiusi—at the two extremities of a territory within the limits of which the same types occur on other sites. The solution of the finding of these antefixæ, which seem turned out from an identical mould, at points so distant from each other would seem to be found in the hypothesis of a common centre of manufacture to which orders were sent whenever a temple was

erected. I was so fortunate as to secure in Roma the original mould of one of the two or three most-diffused of these types, which was known to have come from a temple at Capua along with quite a number of the antefixæ themselves, several of which I also purchased. This would seem to point to Capua as the centre of this manufacture. Every year shows with greater clearness how important is the part played by terracottas in the history of Italian sculpture before the Augustan age, when marble became for the first time the predominant material; some of the most striking examples have recently been found among the ruins of the two temples that have been brought to light at Falerii, which I shall refer to later.

Finally, there has been a temporary exhibition (at the new Palace of Fine Arts on the Via Nazionale) of Textiles and Tapestries (JOURNAL, II, p. 496; III, 193). Contributions were sent from all parts of Italy: churches, museums and private collections vied in zeal to make the exhibition a success. Perhaps the most remarkable of the early embroideries were the two Gothic pluvials of the early-fourteenth century belonging, one to the town of Pienza in Tuscany, the other to the basilica of S. Giovanni Laterano in Roma: they are quite similar in style, belonging to the French school, and are covered with minute compositions of great beauty. Of immense Belgian and Italian tapestries of the XV and XVI centuries there were many in excellent preservation. On a small scale, there was considerable interest, for a student of the history and technique of the art, in the collection of over eighteen hundred examples sent by the Museum of Modena, extending from the Byzantine times to the present day. In connection, I will mention that a new chapter in the history of tapestry has recently been opened by the appearance in the market of quite a series of works of the early Koptic looms, brought from Egypt to France and Austria. When in Paris, I saw a fragment with the figure of the Good Shepherd, in the style of the catacombs and the sarcophagi—a work certainly not later than the fifth century. A number of similar examples have been purchased by the Louvre and also by the Museum of Lyon. These are therefore the earliest extant examples of Christian tapestry. Purchases of such Koptic tapestries have been recently made, by the *Musée des Gobelins*, Paris (a series found in 1884 by M. Maspéro in the tombs of a Koptic cemetery: see *News*, PARIS), and by the South Kensington Museum, London (*News*, LONDON).

A. L. FROTHINGHAM, JR.

Roma, Italia,
June 20, 1887.

REVIEWS AND NOTICES OF BOOKS.

LES DU CERCEAU, LEUR VIE ET LEUR ŒUVRE, d'après de nouvelles recherches, par Le Baron HENRY DE GEYMÜLLER, *etc.*: 137 gravures dans le texte, et 4 planches hors texte, pour la majeure partie inédites. 4to, pp. x–348: Paris 1887, Rouam (Bibliothèque internationale de l'Art).

There can be no doubt that M. de Geymüller has been for years collecting his materials for this book; but the immediate cause of its being finished and brought out, first in the pages of *l'Art* and then in a quarto, is the acquisition by the Royal Library of Munich of some sheets of drawings, undoubtedly the work of Jacques Androuet du Cerceau. These leaflets, fourteen in number, contain sixty-one different sketches, all of Italian subjects. It would be difficult to disagree with M. de Geymüller in his opinion that all these were drawn in Italy and early in Androuet's life, before 1534. The indications that they were leaves of Androuet's travelling sketch-book, or, at least, the sheets of paper on which he drew out, at night, the day's notes and memoranda, is very strong. No less than eleven of the sketches are made from models, plans, *etc.*, for the great church of St. Peter. These belong to a time when the whole design of that church was in question: when both Bramante and Raphael were dead, and the elaborateness and costly nature of the design made by the latter had caused a suspension of the work and a reconsideration: to the time just preceding the new and vigorous impulse given to the work by Paul III. It appears to be admitted that Androuet's visit to Italy came to an end just before the accession of Paul III, in 1534. M. de Geymüller published, some years ago, a large and important book on the different experimental plans for St. Peter's church. That work finds in chapters I and II of the present one a most important appendix.

Other sketches of the Munich collection give what are claimed to be plans of that palace which once stood where the *Piazza di San Pietro* now is, and was called Raphael's house—the house where Bramante as well as Raphael lived and died; plans of the Palazzo Farnese, too; and, more important still, a series of twenty-nine drawings of the *Cancelleria*, loveliest of Roman civil buildings, and second to no edifice of equal size and cost of all the creations of the Italian Renaissance.

The *first and second chapters* of the book before us are devoted to the above-named drawings; and it is to be regretted that it was not feasible to reproduce more of them. Perhaps this was not permitted: perhaps we have that publication to look for, coming from Munich itself. The *third chapter* deals with the influence of Italy upon Androuet: and here it must be urged that it was not Italy, nor the buildings of Italy, that our studious architect sought and found: but the theories and the attempted practice of a small body of Italians. The burden which the fine-art of architecture has to bear is in no place so visible as in the works of the men of the Renaissance. There are their designs by thousands in the collections of drawings, and by hundreds in volumes and portfolios of prints from engraved plates; there are, to compare with these, the few completed buildings; and from this whole body of enthusiastic and patient work we learn that the noble art of building must always in this world be a vision more than an actuality: one dreams of splendid things—one realizes small and slight things. If, by chance, a single fine dream takes form, if an ideally perfect château rises from the earth, these results follow: the owner is ruined, his family are burdened with debt, the building, not quite finished, passes into other hands, is disfigured, and soon torn down to patch the humbler buildings of the neighborhood or, at best, becomes a barrack, a convent, or, later, a museum. If by chance a church is started on a grandiose scale, it remains unfinished. No man's eye has ever seen a great cathedral complete: in view of this, even the cast-iron uniformity, the dull, modern square-and-compass work of Cologne can be forgiven, for at Cologne at least the spires rise into the rain-clouds, the bells thunder from the belfries, the mass of roofs and towers dominates the city when seen from a few miles off, and we are helped to an understanding of what a mediæval master-builder meant by a church. It is perhaps fortunate that the architecture of the original building, the choir of the fourteenth century and the base of the west tower, is not finer; for no great loss is suffered by the "restoration" of it into perfect harmony with the modern work, and, moreover, it is perfectly within reach of the modern architects to match it by following and piecing out the design which the old tower had left for their guidance. So that, on the whole, we have to be thankful for the modern cathedral. One is helped to conceive what a great cathedral would be, were it ever finished, by taking from Cologne a memory of its mass, its variety, its lofty look as if nothing could ever be higher—its completeness, in a word—and investing with these the loveliness of Chartres or the solemn and noble monotony of Bourges. And so we are brought back to the restatement of the point, that noble architecture must always be a dream, a memory and an aspiration, far more than an actuality.

But in 1534 the world of artists was not convinced of that; and small

blame to them! energetic and full of sense of power as they were! Carpaccio's Saint Ursula pictures at Venice have their ideal architecture, designed for the occasion as freely as the strange, half-oriental costume which invests his figures; but even his arcaded porches are not more fantastically picturesque than the designs which grave men made in the fifteenth and sixteenth centuries for their princely employers, and hoped to be allowed to carry out. The great Cagliari knew what ideal grandeur was, in long perspectives of colonnades, as we can see in vast canvasses which are to some of us the finest pictures on this earth: but even he could not outdream our friend Androuet and his compeers. And what Androuet sought in Italy was, not the external aspect of cities or existing buildings, but the dreams and hopes of the few Italians who were busy idealizing architecture, and whom the disappointments of eighty years had not discouraged. The Renaissance was already an old story in Italy: its earlier epoch was passed, it was in the hands of the pupils of the pupils of Brunellesco and Alberti: but to a Frenchman it was new, as yet, in 1530. To a Frenchman, Gothic art had hardly said its last word: many churches, like St. Maclou at Rouen in style, many city-residences, like the Hôtel de la Tremouille and the still well-known Hôtel de Cluny, at Paris, many country-*châteaux*, like the famous Louis XII wing at Blois, were still new buildings, built during the preceding reign. The Classical Renaissance had shown itself, indeed, but as yet so rarely that it was still in the air, as a branch or offshoot of the new-found classical learning, rather than a controlling style of building. Androuet, more perhaps than any other Frenchman, had charged himself with the task of bringing this Italian conception of architecture, this supposed antique Roman way of building, across the Alps, as the real Roman way had come on a former occasion. And when in Italy he studies, it seems, not the buildings of the men of the first Renaissance, the masters of the *Cinquecento*, but the very latest style, wherever he can find it. He is young, he dreams of a perfect style which will answer all requirements; the days when he will engrave a thirteenth-century *château-fort* as one of a small selection of the Best Buildings of France, and do it faithfully, are yet far off: now, even when he makes a drawing of an existing building, he alters it to his taste: it is not the building he cares for, but the impression made upon his mind of what might be built, say in France. It is quite like Turner painting Lausanne, and putting in towers and grouping the actual towers that the whole may "compose" to suit him. And it is the natural impulse of the man who, indeed, is to be critical and interested hereafter in the comparison of monuments of art as not one of his contemporaries will be, but who is as yet in his youth and thinking of a propaganda, of a true revelation which he must preach to his countrymen.

But to return to M. de Geymüller's book: in *chapters* IV and V, he ex-

amines the manner of Du Cerceau as draughtsman and engraver; and he seems to make a worthy use of the great amount of material which has been at his disposal, in France and elsewhere, his especial object being the identification of the master's work at different periods of his life. In *chapter VI* comes up the old question, often answered with *yes* and sometimes negatively, was Jacques Androuet du Cerceau an architect in the modern sense, a designer and originator of buildings? The claim is a little difficult to establish, and impossible to deny with any certainty: the inquiry takes the reader into pleasant fields of examination, into good buildings that have perished, and others that exist: fields where this comment cannot follow: Charleval, Verneuil, Gaillon, the church of Montargis, the Château of the same name and its appendages, houses in Orléans, and parts even of the Louvre are considered; it seems, too, that Du Cerceau made a design for St. Eustache at Paris, or at least for its west front—the realization of which it would be well for Paris to possess.

Chapter VII consists of a full catalogue of the drawings which are known to be by Jacques Androuet, and of those which may be ascribed to him: and *chapter VIII* deals with his published work, mainly, of course, his engravings; in the course of which a word is said for him as an early master of etching. *Chapter IX* is a *Résumé:* and, as all the volume hitherto has been devoted to the one Jacques Androuet *l'Ancien*, or the Senior, as he was called to distinguish him from another Jacques Androuet who appears later (perhaps a son), so the *résumé* deals with him and his work alone, and includes a very interesting discussion of the mission of engraving in the sixteenth century, a subject which cannot be undertaken here. The rest of the family—Jean and Baptiste, both architects of renown, and the less visible shadows that once bore the name—are the subject of *chapter X:* and, finally, there is a very full Bibliography, in itself interesting reading. So that the handsome quarto before us, though not exactly an epoch-making book, and perhaps missing a chance in not being more decidedly a living-over-again of that New Life on which the sixteenth century prided itself, in France, is yet a book to read through with sincere pleasure, and then to refer to on many an occasion. Like all such French books, yes, practically *all*, it has no index; unlike many, it is so far logically arranged and so free from the vice of writing "about and about" the subject, that what one wants he will generally find, pretty soon. Straightforward and simple presentation of his case seems to be our author's strong point: it is a good thing to excel in.

RUSSELL STURGIS.

New York City.

LES BRONZES DE LA RENAISSANCE. LES PLAQUETTES. Catalogue Raisonné, précédé d'une introduction, par ÉMILE MOLINIER, attaché à la Conservation du Musée du Louvre. [Bibliothèque internationale de l'Art, sous la direction de M. Eugène Müntz.] 8vo, tome premier, accompagné de 82 gravures; pp. XL–215: tome second, accompagné de 26 gravures; pp. 238: Paris, 1886, Librairie de l'Art, J. Rouam.

The study of the smaller arts of the Italian Renaissance, so long neglected, has received of late a strong impulse. It is no longer collectors alone who prize them, but the student and historian of art find them valuable auxiliaries to an acquaintance with works of greater importance, and guides in the study of artistic influence. Medals and coins, enamels and bronzes, ivories and miniatures have in turn been made to contribute their share to a general knowledge of the artistic development of the Renaissance. But we are surprised to find, on taking up M. Molinier's monograph on *Plaquettes*, that this hitherto ignored or despised branch of artistic industry can be made to yield results of the greatest interest, when treated by so masterly a hand. One is tempted to show in detail how this is done in these two interesting volumes: but they cover so many schools and such a multitude of artists that the most that can be done in this short notice is to call attention to the interest of the subject, and to explain this class of monuments, the character and extent of which, probably, but few know. A good definition of the term is given by M. E. Piot:[1] "We call *plaquettes* small bronze basreliefs whose use seems to have been to preserve the memory of the works in metal of the best artists of the Italian Renaissance: paxes, vestment-buttons, clasps, ensigns, *imprese* or *medagliete* attached to hats, ornaments attached to armor or to belts or nailed to the harness of horses on gala-days. Finally, basreliefs for the decoration of coffers, salt-cellars and inkstands; all objects which were executed in silver or gold, hammered or chiselled with the greatest delicacy. Sulphur-impressions were taken of these fine works, and they were then cast in bronze in order to preserve the memory of them and to serve as models and examples." As M. Molinier remarks, the only fault to be found with this definition is that it represents all plaquettes to be simply mechanical reproductions; whereas many are real works of sculpture, and certainly a whole class of devotional tablets were entirely original. The great use of these bronze plaquettes was that they familiarized the sculptors of the XV century with antique models, by innumerable reproductions. This was especially the case with those which reproduced ancient engraved gems, of which the sculptors of the Renais-

[1] *L'Art ancien à l'exposition de 1878*, p. 414.

sance evidently made collections. In this way, antique works of art became known with great rapidity from one end of the peninsula to the other, and the plaquettes were thus made a vehicle for the spread of the ideas of the Renaissance. M. Molinier also proves satisfactorily the important fact, that these minute works were used directly as models by the sculptors of the XV century in executing works of monumental sculpture, and that it is not the larger works which were imitated in the smaller. M. Molinier first gives a list of direct imitations from the Antique; he then presents, in chronological order, the works that can be clearly attributed to various masters; and, finally, classifies the great mass of anonymous works under schools, such as those of Padova, Venezia, and Firenze. The Paduan school is of especial interest for the early date and excellence of the works it produced, many of which show, as is natural, the style of Mantegna. The Venetian school was not far different in style, though in the early period it shows a rudeness and an un-classical Teutonic element that distinguishes it. To show the interest of the subject, it will be sufficient to cite the names of a few artists to whom groups of plaquettes are assigned: Donatello, Filarete, Caradosso, Camelio, Sansovino and *Il Riccio*. The industry seems to have taken its rise in North Italy, and we find it adopted in Tuscany only towards the XVI century. It spread from Italy to Germany, France and Flanders. The plaquettes executed in Germany and Flanders are relatively rare and for the greater part anonymous. Two are attributed, from their signature, to Peter Vischer. As to the subjects employed: during the earlier period, in fact, through the entire XV century, they are divided about equally into classic and religious; the former being generally reproductions of ancient works to serve as models, the latter, of contemporary works to serve as memorials. As we advance in the XVI century, religious subjects vanish almost entirely, and we find introduced a great variety of *genre* and allegorical representations. The plaquettes also become rarer, and more difficult to assign to separate artists, it being necessary in most cases to rely merely on conjecture from similarity of style. It is but recently that any collections of them have been attempted. The museums of Berlin and the Louvre both have quite a number, while several private collections made by French amateurs equal or surpass those in public museums.

M. Molinier has shown us what a multiplicity of uses plaquettes were made to serve: how they formed parts of small works, such as coffers for articles of toilet, how they were imitated in paintings and miniatures, were adapted to bindings or reproduced in keramics. But most important of all is the fact, just alluded to, that they served as models for the great sculptors of the early Renaissance. A very clear and familiar instance is given by Donatello: the most classic of all his sculptures are the ex-

quisite medallions on the Riccardi palace at Firenze, and these can be practically proved to have been copied from bronze plaquettes reproducing antique gems, some of which were already in the Medici collection. This is but an instance, and throughout Northern Italy, even more than in Tuscany, we find many proofs of the custom, as on the portal of the Palazzo Stanga of Cremona (now in Louvre), at the Certosa of Pavia, and at Brescia. Passing from the use of reproductions of the antique to the influence of original plaquettes by artists of the XV century on contemporary monumental sculpture, it is often possible to prove this relationship. Thus, Maderno's plaquettes are imitated by the Rodari in various sculptures executed by them at Como. At Bergamo, in the Colleone chapel, we again find Maderno imitated; at Cremona (Palazzo Stanga) the great Caradosso *l'Antico*, the school of Donatello and Melioli. What is more surprising, we find a repetition of this phenomenon in France, showing how early Italian models, in this portable shape, had found their way across the Alps. At St. Michel of Dijon (about 1500), at Orléans, and at Blois, we find imitations of Maderno; while there are other instances at Pagny (Bourgogne) Arnay-le-Duc (Bourg.), Tours, Chartres, Gaillon, *etc.*

A. L. Frothingham, Jr.

Histoire de l'Art Byzantin considéré principalement dans les miniatures, par N. Kondakoff, professeur à l'Université d'Odessa: édition française originale publiée par l'auteur, sur la *traduction* de *M. Trawinski* et précédée d'une *Préface* de *M. A. Springer*, professeur à l'Université de Leipzig. [Bibliothèque internationale de l'Art, sous la direction de M. Eugène Müntz.] Tome premier, accompagné de 29 gravures; 4to, pp. 202: Paris, 1886, Librairie de l'Art, J. Rouam.

That most neglected of all great historical developments of Christian art—the Byzantine—is treated by Professor Kondakoff in one of its most interesting phases, miniature-painting. In a carefully written and interesting introduction, Professor Anton Springer, the well-known art-critic of Leipzig, discusses the general character and bearings of Byzantine art, especially in its relations to early-Christian art and to the mediæval art of the West. His standpoint is a happy mean between an ex-cathedra denial of any life and movement in Byzantine art and its apotheosis at the expense of autochthonous Western art. Starting with the uniformity of early-Christian art in East and West, Prof. Springer considers that Byzantine art, as a separate development, arose only when, in consequence of religious and political scission posterior to the rise of Islam, the West

separated itself completely from the East. So, instead of attributing certain types to a Byzantine origin, he would derive them from the stock common to both East and West before the separation. Professor Springer is quite right in giving, as one of the causes of our ignorance of the true character of Byzantine art, the reason, that we are out of sympathy with it, and cannot understand it. A few words will show how he regards Professor Kondakoff's work. It presents the history of Byzantine miniature-painting in a new light, far more brilliant than had ever been conceived. The Russian author proves that "classic antiquity lived for a long period under Byzantine forms," and "refutes the preconceived opinions according to which Byzantine art was, in its very essence, invariable, stiff, corpse-like, and bore from its birth the marks of most abject decadence." Up to the close of the tenth century it preserved, intact, technical processes of great perfection, and followed models inherited from antiquity: "Byzantium, besides, derived from the Greeks and Romans the gift of representing in a palpable way, by personifications, the most abstract conceptions." As Professor Springer adds, Byzantine art can be understood only when it is taken as the expositor of general civilization, of the religious sentiment, of ecclesiastical education, and even of popular traditions. This never had been even attempted until the publication of this book. A strong contention, however, is made by the German writer in favor of narrowing the influence of Byzantine art in the West. For him there is no "Byzantine question."

Turning now to Professor Kondakoff's work itself, we find a *first chapter* devoted to the historical role of miniatures in Byzantine art; to the separation, into groups, of the various types of illuminated manuscripts; and to a general sketch of the history of this branch of art in the East. Its main importance lies in its continuity. While in mosaic-paintings, to cite works of monumental importance, there is a gap of many a century between the time of Justinian and that of Constantine Porphyrogenetos, in the illuminated manuscripts we are able to follow every stage of artistic development, and even various contemporary schools. In this study the first step to be taken is *classification*. The great mistake, hitherto, has been that the miniatures have been taken as separate pictures, disconnected from the text they illustrate and from the group of works of which they form a part: this has prevented any true conception of the subject. This is developed in the *second chapter*, on the historians of Byzantine miniature-painting, in which are passed in review all writers who have during the last two centuries paid any attention to these works of art, among whom Agincourt and Labarte are the most prominent. This review makes the insufficiency of their work and their erroneous standpoints only too evident. The author says: "In my opinion the real method of studying Byzantine

miniatures is to take as a point of departure the idea that these miniatures are the very expression of the historical movement of Byzantine art," of which they form a special chapter. In them the "purely external, bibliographical and anecdotic interest must give way to the historical analysis of the inner sense of the manuscripts illustrated, which must, for this purpose, be classified in groups, according to the subjects which they represent. The intimate bonds that unite art to literature will then be evident, or, in other terms, the moral and theological ideals that inspired them both. . . . Many points of the intellectual life of the East, hardly noticed until now, will appear in a strong light, when the history of Christian art is written with as much scientific exactitude as that of classic art."

Thus, important groups of manuscripts can be formed—the Old Testaments, Psalteries, Evangeliaria, Menologia, and Lives of Saints. This grouping explains many obscure facts better than a mere uncritical chronological arrangement, for it was very customary, in miniature-painting, to copy early miniatures executed three or five hundred years before. By grouping together manuscripts of the same class, the original types and the gradual changes in them are more easily noted.

M. Kondakoff makes this study of miniature-painting the basis of a scientific treatment of Byzantine art, its origin and development and its essential qualities. We shall wait until the rest of the author's work is before us before analyzing or criticising his views on the subject, and confine this notice to an examination of the material brought forward in the remaining chapters of this first volume. The *third chapter* treats of the earliest examples—those of the fourth, fifth, and sixth centuries: the *Calendario Filocaliano*, the Milanese *Iliad*, the Vatican *Vergil*, the Viennese *Genesis*, the Cotton *Bible*, the Roll of *Joshua*, *etc.* These are not, properly, works of Byzantine art, but still they are executed by Greeks, and show classic influence. While in the *Iliad* we see Pompeian influence, the *Vergil* may justly be termed the prototype of Byzantine miniature-painting; but most important of all, and the earliest instance of the illustrated Bible, is the Viennese *Genesis*, in which the naturalistic styles of the two manuscripts just mentioned seem to be combined. It is not only from these precious originals that we may obtain knowledge of the art of this early period: in a manuscript of the poems of Nikandros, executed in the eleventh century, there are more than 40 beautifully executed illuminations copied from originals of the third or fourth century; and this is but an instance of quite a common custom. In showing the interest of all these early works, M. Kondakoff seeks to demonstrate that they are the product of a school far more artistic and original than the contemporary school in the West which produced, for instance, the mosaics of Santa Maria Maggiore, at Rome. This school threw off the yoke of debased Roman art,

and linked itself to Hellenic traditions: it was a Renaissance of Greek art in Christian times, but, before the formation of a distinctively Christian art, the producer of original creations. The most obvious departure from classicism, in these early works, is a growing tendency to naturalism; this naturalistic feeling of the art of the period immediately preceding the formation of truly Christian types is nowhere so clearly shown as in the miniatures.

The middle of the fifth century saw the rise of a new art, eminently Christian, and iconographic instead of picturesque. It arose in Byzantion, and its finest remaining monuments are some of the mosaics of Ravenna. Here begins the Golden Age of Byzantine miniature-painting, and it extends from the close of the fifth century to the time of the Iconoclasts. It is still represented by such works as the Viennese *Dioskorides*, the Rossano *Gospels*, the Syriac manuscript of *Rabula*, the *Cosmas* of the Vatican. Naturalism has vanished from these works, and we see—instead of the aim at general picturesqueness, at naturalness of pose and action—a desire to express character, individuality: but the technique is still that of antiquity. The moral and social change to which this artistic revolution corresponds is well characterized by the author, who pictures the contrast between the immorality that was a relic of paganism and the religious fervor that peopled the Thebaïd, until the entire renovation of society on a truly Christian basis was accomplished. It is only in the *Cosmas* and the MS. of *Rabula* that we begin to find an interesting iconographic treatment of religious subjects, while the symbolism of the early period is still in part retained: both these date from the sixth century, the former being the most important Byzantine illuminated manuscript, erroneously considered until now to be a ninth-century copy of a sixth-century original. In reality, it is a most characteristic expression of the art of the time of Justinian. It is a work of breadth and force, full of style and artistic surety, which shows the monumental tendency of the age, as contrasted to the minuteness of the former style.

According to M. Kondakoff, the influence of Iconoclasm on the artistic development has been much overrated, and he narrows down both the period and the extent of the war against images. He is inclined to attribute to this time (about 800) some manuscripts which show a rude revival of the antique, out of hatred to the new or iconographic style. The illuminations in them are naïve illustrations of the text, without order or relation to one another; but they are still executed with the ancient technique in a debased form. This is the last stage before the establishment of the hieratic manner, which is generally understood by the term Byzantine. This anecdotic, didactic, and ascetic direction is the distinctive trait of the eighth and ninth centuries, combined with exceeding rudeness of

execution and poverty of ideas. At this time, arises the important series of illustrated Psalteries: some of the types were early, others were now established, and all were handed down through several centuries. At this time, a strong personal element appears in the miniatures, allusions to contemporary events and personages. M. Kondakoff carefully dissects the works of this transitional epoch, and shows its relations to the early classic period, on the one hand, and to the developed Byzantine, on the other, as to ideas, symbolism, and technique. The author sees, at this time, the strong influence of the barbarous elements of the Empire caused by the preponderance, in the administration and in the army, of the Armenian, Slavic, and other non-Greek nationalities.

The second volume of this admirable book will deal with the reform of Byzantine art. There can be given nothing but praise to the work, so far as it has gone. It is drawn on such new lines that comparative criticism is not possible: but the unprejudiced standpoint of the author and his mastery of the subject have enabled him to handle with great constructive skill a mass of subject-matter extremely difficult of treatment.

A. L. Frothingham, Jr.

Amiaud et Méchineau. Tableau Comparé des Écritures Babylonienne et Assyrienne archaïques et modernes, *avec classement des Signes d'après leur forme archaïque.* Royal 8vo, pp. xvi–148. Paris, 1887, Ernest Leroux.

The reader of old cuneiform and linear texts must face numerous and hard problems. Chief among these are the archaic signs. Upon the proper identification of these depends the reading and interpretation of every text. Not every Assyrian scholar is at home in this field, nor can all hope to be. So then, if these old texts are to be made available for the ordinary Assyrian scholar, he must have the requisite archaic syllabary at hand. Until he has this, the inscriptions of De Sarzec and the numerous and important seals already at hand, and continually being brought to light, are to him a sealed book.

The much-abused and troublesome question of a so-called Sumero-Accadian language must remain a "rebus," until we can read a language purely ideographic, written in characters almost hieroglyphic. Otherwise we can not know whether we are dealing with an Accadized Semitic text, or a Semitized Accadian text. We must go back of this mixture into the pre-Semitic times and language. Here we find a pure text, written, to be sure, in an extremely archaic character. But I venture to say, after all the warm and even personally abusive discussions of this question on the ground

of bilingual texts, that we must take our stand only on the unilingual texts, found in the recent discoveries of De Sarzec, and the early Chaldæan seals. Upon a thorough and familiar acquaintance with the archaic signs hangs the whole question of their original forms and significations. The hitherto erroneous and often ridiculous originals assumed for a large number of the most common signs have been due to the lack of knowledge of archaic forms.[1] The road through the modern artistic and then the older Babylonian to the assumed archaic form is uncertain, and in many cases entirely misleading. But we must work from the archaic downwards through to the simplest modern forms, thus following at once the changes in each period and a study of sign-development.

Our two French *savants* have taken a decided step in the right direction. Their work, at hand, exhibits great familiarity with archaic texts. Happily they had at their disposal, in the Louvre, the immense and valuable De Sarzec collection, besides numerous other small archaic texts. Their work evidently has in view two purposes, (1) to exhibit a development of the signs, (2) to furnish an archaic syllabary. The principle of arrangement of signs is substantially that of Norris. However, it is not according to the modern equivalents, as in all published syllabaries, but according to the archaic forms. This principle, it is true, is not always strictly adhered to. But, in view of the difficulties of such a task, which none except those who have tried it can realize, the order is eminently good, and the principle well carried out.

The work takes up, under successive numerals, 296 signs, also a supplement of eleven signs, making in all 307. Just under the No. is given the archaic or linear form under survey. In a column to the left appear the ancient and modern Babylonian forms of the same, ranged apparently so as to exhibit the development of the late sign. In the corresponding column to the right are found the archaic and modern Assyrian forms. To all examples cited, except the late signs, abundant references are given. No syllabic or ideographic values are assigned, as the work is evidently intended only for Assyrian scholars. But the authors have added to several signs notes of great value (*e. g., cf. ku*, No. 283).

The inscriptions discovered by De Sarzec form the basis of the work; though quotations are given quite freely from Sargon I, Naram-Sin, Nebukadnezzar, Rammân-nirari, *etc.* Out of the 307 signs treated, the Gudea inscriptions furnish the archaic forms of 251. Where the linear archaic form of an old Babylonian form has not yet been found, a *forme supposée* has been made to head the list. By analyzing the elements of analogous signs, the authors have thus filled up 58 places, conjecturing the linear

[1] *Cf.* my Dissertation, *Introduction into the Inscriptions discovered by M. E. de Sarzec*, p. 6, § 9.

form, before the cuneiform character had been developed. In the case of 26 signs, no assimilation into the modern form has been made. In eleven cases, the assimilation is regarded as uncertain or only probable.

One of the first interesting points of discovery in the examination of the signs is the fact that one modern Assyrian character represents two or more archaic forms (*cf.* 21 with 270; 70 with 94; 93 with 99 and 135). This may be a solution in part of the numerous syllabic and ideographic values of a large number of signs. Another point, noticeable at once, is the fact that one original sign or form became in the modern style two separate and distinct forms (*cf.*, especially, Nos. 103, 218).

Let us now look at some of the individual signs and their treatment:

30. The two parts of this sign stand apart on the original, and are evidently two signs.

34. Marked *non assimilé*: is it not another form of *il*?[2]

38. A much better linear form is found in l. 8 of an inscription on a door-socket in the British Museum.[3]

58. The *assimilation incertaine*, I think, is here out of place except in so far as it refers to the author's conjecture. The sign is undoubtedly *Uruk* (ki), Erech: *vid.* Urbau Inscription, De Sarzec, pl. 8, col. II, l. 4.

85. Is this not *tik*, *tiḳ*?

95. Checked *non assimilé*, with a couple of questionable conjectures. Lehmann (in *ZA*, II, p. 251) says Amiaud is now almost certain of its identification with *sun*, *šin*, *rug*. But I am inclined to think that the proper modern form is *mis*, *šid*, *rid*;[4] and that the forms exhibited under No. 134 are explanatory of this form rather than of the one under which they stand.

111. This *non assimilé* should perhaps be replaced by the sign *kár* (*kan*) (*vid.* A. L. S[3]., No. 75).

121. *Non assimilé* should again be crossed out and replaced by *ḳi*.[5] The discussion under No. 294 properly belongs here.

126, 127. The archaic oneness of the two modern forms here given is quite questionable.

134. *Vid.* remarks on No. 95.

181. The modern sign which should here displace *non assimilé* is probably *taḥ*.

199. The Entena inscription (l. 6) furnishes a beautiful linear form.

210. *Non assimilé* should probably be replaced here by *suḥ*, *sur*.[6]

272. *Non assimilé* should here give place to *šeš*, *uru*.[7]

[2] *Cf.* Dissertation, p. 15, col. III, l. 13 (De Sarzec, pl. 16, col. III, l. 13).

[3] Copied by me Aug. 13, 1886. *Entena* is the *patesi* here. The inscription is to be compared with De Sarzec, plate 6.

[4] *Cf.* Dissertation, p. 13, col. II, l. 5.

[5] *Idem*, p. 15, col. III, l. 22.

[6] *Idem*, p. 15, col. III, l. 14.

[7] *Idem*, p. 16, col. IV, l. 3.

294. This is a superfluous *forme supposée*, and the forms and discussion here inserted belong to No. 121.

At the end of the archaic syllabary are given the numerals as found in the Gudea inscriptions. Following these is a list of late Assyrian signs—in Norris' order—referring by Nos. to their archaic originals. Next follows a list of Assyrian signs, not developed in the archaic syllabary. At the end of the book we find a few unassimilated signs, and, in outline, the order of archaic classification followed.

The work is autographed in an admirable style. It is a credit to the firm of Leroux, which puts, at present, so many valuable works into the hands of scholars. The work itself deserves our hearty welcome, and the authors our thanks. It is a substantial step forward to a history of the development of wedge-writing.

IRA M. PRICE.

Morgan Park, Ill.

STRASSMAIER, J. N., S. J. BABYLONISCHE TEXTE. INSCHRIFTEN VON NABONIDUS, KÖNIG VON BABYLON (555–538 *v. Chr.*) *von den Thontafeln des Britischen Museums copirt und autographirt.* Pp. 160. Leipzig, 1887, Eduard Pfeiffer.

The author of the work before us is already well known to the "cuneiform" public through his invaluable *Alphabetisches Verzeichniss*, his *Babylonische Inschriften im Museum zu Liverpool*, and his *Babylonische Verträge aus Warka*. He has demonstrated, by energy and skill, his peculiar fitness for the arduous work of copying texts. At the meeting of the Oriental Congress in Vienna in Sept. 1886, his proposition to publish the inscriptions of Nabonidos was enthusiastically received. *Heft I* is already out, and *Heft II* is in press.

The Preface contains some thoughts that deserve a larger circulation. The author is right when he says that the method of most rapidly advancing the science of Assyriology lies in publishing texts, in putting before the world the material that is now lying in the British Museum, unknown and untouched. The niceties of the language, the proper significance of words, can be better determined after a reasonable amount of literature is published and deciphered, than when we possess so small a proportion of the Museum treasures.

Among the 40,000 clay tablets discovered by Smith and Rassam, the editor has found more than 900 inscriptions from the years of Nabonidos, the last king of Babylon. These he expects to publish autographically in four or five parts—provided the work is well received. At the end of the

text-publication he expects to give in transcription a *Wörterverzeichniss* to the whole work. Each *Heft* is expected to contain 160 pp. *Heft I* contains 265 of these 900 inscriptions; all from the first seven years of Nabonidos' reign. The inscriptions in the parts to follow, as in the one at hand, will be arranged in chronological order.

The matter thus furnished will be invaluable in opening up to us the private and public life of the Babylonian Empire just before its fall, the social condition of the Jews in exile and captivity, and the great moral forces at work in the declining years of one of the world's greatest powers. Father Strassmaier is doing, almost gratuitously, for the science of archæology, history and exegesis, a work of inestimable value. How few men would or could spend the long hours of weary toil which were necessary for copying from all sorts of tablets, and autographing, the 160 pp. before us.

Real and substantial encouragement should be given to the publication of these texts by every friend of Assyriology. Especially, ought this to be the case, since the work is so well done, by one who is an experienced copyist. In honor, too, to the publisher, Herr Pfeiffer, who has assumed the publication of this work, and issued it in so convenient and careful a manner, allow me to bespeak the patronage of all readers of wedge-writing.

IRA M. PRICE.

Morgan Park, Ill.

ARCHÆOLOGICAL NEWS.

Summary of recent Discoveries and Investigations.

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GENERAL REVIEW.

In EGYPT, the most important discovery, during the season of 1886–87, was that of the great temple of Boubastis, made by M. Naville, acting for the Egypt Exploration Fund. It is to be regretted that the season was so far advanced as to make it necessary to abandon work when only a third of the space had been excavated, leaving the rest to be done in the season of 1887–88.

The importance of the discoveries of tombs and sarcophagi at SIDON was such as to bring Hamdi Bey and Baltazzi Effendi on a special archæological mission from Constantinople, and to them is due the discovery of other sarcophagi of great interest. Several of these elaborately sculptured sarcophagi are judged to be by Greek artists, and would therefore be of value for the development of Asiatic-Greek plastics.

In GREECE, the excavations on the Akropolis by the Greek Archæological Society continue to yield excellent results; most interesting is the discovery of the Pelasgic approach to the Akropolis: special attention is called, also, to the researches of Prof. Milchhöfer in ATTIKA, and of Mr. Bent on the island of THASOS. Mr. Bent's thorough acquaintance with the Greek islands has enabled him to make discoveries of considerable importance which give an idea of Thasiote art from the archaic to the Roman period. Excavations are also now in progress at Eleusis, Mykenai, Oropos, and Sikyon.

In ITALY, new excavations in the necropolis of Orvieto are of great interest: of a revolutionary character is the discovery made at Civita Castellana (the ancient FALERII) of the ruins of two Etruscan temples, one of which is

in a good state of preservation as to its ground-plan, and has yielded frescos and a large number of sculptures. As the description in Vitruvius had been until now the only authority for the plan, proportions and decorations of the Etruscan temple, the unexpected and almost contemporary discovery of two monuments will probably change all previously formed theories. The publication of the results by Count Cozza is impatiently awaited.

The characteristic of recent investigations in FRANCE has been the discovery of numerous Gallic cemeteries, and a consequent increase of our knowledge of the industries and culture of that period.

AFRICA.

EGYPT.

MR. FLINDERS PETRIE'S RESEARCHES.—Under the title, *A Season's results in Egypt*, Mr. Flinders Petrie gives, in the *Bab. and Orient. Record* (p. 151 *sqq.*), an outline of his investigations during the winter of 1886–87, which supplements the partial one already printed in the last number of JOURNAL, pp. 143–44. The trip was made partly in company with Mr. Griffith.

"At DEIR EL GIBRAWI, north of Siût, there are ranges of tombs, many of which are white-washed or plastered; those which we could afford time to scrape down a little [by removing the late plaster coating of Koptic or Arabic times], showed long inscriptions of the XII or XIII dynasty; a careful cleaning of these tombs would restore a whole group of inscriptions to light. At RIFA, some miles south of Siût, a range of grand tombs of the same age awaited a copyist; . . Mr. Griffith . . has copied them completely. They have high façades entirely cut in the rock in the splendid bold style of the Middle Kingdom, rivalling and even exceeding that of Beni Hasan. . . A striking feature of the XII dynasty tombs in middle Egypt is the great figure of the deceased, far over life-size, on the wall: sometimes a row of statues of the deceased, his wife and sister or mother, will be seated on a bench in the inner chamber, impressive from their simple largeness and gigantic solemnity.

"At SHEKH GABR two or three tombs of the V or VI dynasty are well worth visiting; being on the eastern cliff, a long tunnel has been cut for each in the rock, parallel to its face, so as to obtain a wall for the false doors, which need to be in the western side leading to the blessed Amenti. These tombs we completely copied. They are of Ka-khent and his wife Khent-kau-s; also of another Ka-khent, who appropriated some titles (*Suten-se, en khert-f, meri-f, semeruakherpah enab neb-f*) which were disallowed afterward and erased. There is a very curious tomb round the corner of the cliff southward, with a sloping side passage and a flight of side steps cut

in the rock; if a later adaptation, it is more elaborate than anything seen elsewhere. . .

"In the range of tombs at HIERACONPOLIS is one with a great quantity of fine coffers and gold-work represented, which were presented to the temple there by the last of the Ramessides, all the objects bearing his name and titles. At EL KAB, opposite, a tomb of the time of Sebakhotep II has had its stone-cut inscription published more than once; but the painted walls had never been cleaned from the blackening by the bats. With water, brushes, and cloths, we went carefully over it and cleaned one of the most thickly peopled tombs I have seen. Not only all the owner's relatives, connexions, followers, and even friends are shown, but also the workmen who excavated the tomb and their families. Altogether over 70 names were copied with their titles. The general family character of the tombs at El Kab and around there is striking; usually the walls show a crowd of relatives, down to first cousin's grand-children; but all, except the nearest, in the female line.

"The great open quarries of SILSILEH are entirely Græco-Roman, as Greek inscriptions and marks may be seen 50 or 100 feet high-up on the quarry-face, close to the hill-top; the earlier quarries are probably in the gigantic subterranean cuttings. Here and elsewhere, the quarry marks have enabled us to identify the quarries of many Ptolemaic temples."

Mr. Petrie spent two months at DAKSHUR surveying the pyramids. After a delay of five weeks he received permission to excavate, and uncovered the original base and casing of the two southern pyramids, but had not time sufficient to find the base of the northern pyramid, which had been much destroyed. He writes, May 23, to the London *Academy* (June 4): "While exploring in the desert west of Dakshur, I found the line of ancient road from Memphis across the desert to the Faiûm, marked out with way-marks. These marks were blocks of limestone, about eighteen inches cube with a shallow socket on the top, holding a pillar about nine inches square, and two and a half feet high. All are now overthrown, and many broken or removed. There is a continuous series of these marks at intervals of about two-thirds of a mile, or just 1,000 Egyptian double cubits of 41.2 inches; and in many places there are intermediate marks at 1,000 single, and 500 single cubits. This abundantly proves the use of this cubit as an itinerary measure. Now I had pointed out in *Naukratis* that the itinerary measure, the *schoenus*, was nearly, and probably exactly, 10,000 double cubits. Spaces of 1,000 of these cubits being marked on a road renders this supposition almost a certainty.

"I have traced the road for eight miles into the desert, finding in all sixteen marks; beyond these there seems to be a blank, but I am told that there are stones along to the Faiûm. There is also another road starting

from the same point at Saqqarah, and running west. It is marked by a line of flints swept up on either side. These lines are fifty cubits apart, but no distance measures are to be discovered. This is the first time that actual roads have been traced in Lower Egypt; but I hear of a fine Roman road, with stations, having been lately found leading to the porphyry quarries from Keneh."

Alexandria (near).—*Early Christian Cemetery.*—The notice of this cemetery given on p. 145 is here supplemented from a letter of Mr. E. Stowe, by whom the pits were frequently visited in 1883.

"There were then visible narrow galleries driven in the solid rock with *loculi*, these latter generally containing but one or at most two skeletons. One chamber, however, was stuffed full of a congeries of skulls and bones: and, as this was evidently an ancient accumulation, I could only come to the conclusion that after a certain period the *fossores*, wanting new space, had emptied the old *loculi* and relet the tenements as new ones. It seemed highly probable that there had been one or more entrances to that series of galleries from the face of the cliff or from the seashore. It should be explained that the rock lies with considerable irregularity, and that on the inland side there were interments in detritus at almost as deep a level as that of the galleries. Often these were mere cells, some of them lined with slight slabs of stone. From the character of the pottery I supposed them to be pre- rather than post-Augustan: but I could not speak with certainty as to that. The following passage occurs in the notice to which I have alluded (*Times*, May 4): 'Some shattered terracotta coffins without inscriptions and without any trace of human remains, have been found irregularly buried in parts of the superimposed rubbish-mounds.' In 1883, there was unearthed at the same spot one of these coffins unbroken. It had no lid at the time of its being found. Its length did not exceed four feet, the sides were perpendicular, and it was rounded at the corners. It presented, in short, the appearance of an ordinary earthenware foot-pan. The form being one which I had not previously met with in the neighborhood of Alexandria (or, in fact, elsewhere), I sent a note to Prof. Maspéro at the time, enclosing a rough sketch and detailing its position, in case he thought it of sufficient interest to have it preserved. There was also exposed to view at the date to which I refer, in an excavation on the hill east of Sheick Shatbi, a series of tombs resembling in elevation old wine-vaults. They were arched in ashlar, the piers being constructed of bricks. Height, to the crown of the arch, 3 ft.; width, 2 ft. 8 in.; width of the piers, 1 ft. 3 in. The bricks were burnt bricks, somewhat rude, roughly ridged on one face, and measuring 9 in. by 2 in. The chambers were recessed to a depth of about 7 ft., and were faced internally with white cement, from a quarter to half an inch thick. Three tiers were visible, the upper one

being but little below the present level of the soil. The archways of the lower tier were 4 ft. high, instead of 3 ft. like the upper ones, and one of the recesses of that lower tier contained a mass of skeletons, the skulls of which crumbled at a touch. I was unable to find anything other than the architecture to give any clue as to date.—*Athenæum*, July 2.

BÛLÂQ.—*Museum.*—It has been decided, by the Egyptian authorities, to remove from its present damp and injurious site the famous museum at Bûlâq, Cairo.—*Athenæum*, Nov. 5.

FAIÛM.—*Ancient Tomb-paintings.*—Dr. Fouquet writes from Cairo to the French *Acad. des Insc. et Belles-Lettres*, describing some ancient paintings discovered during March in a cave in the Faiûm: it contained a large number of tombs mostly accompanied by Greek epitaphs. The walls were decorated with many portraits. Unfortunately, the native discoverers destroyed the greater part of paintings and inscriptions.—*Revue Critique*, 1887, No. 21.

W. M. FLINDERS PETRIE writes to the *Academy* (Dec. 3), "I shall be working in the Faiûm this winter."

KANOBOS.—Mr. Petrie writes: "On lately visiting the apparent site of Kanobos, a mile west of Abukir, with Mr. W. Grant (who is reclaiming Lake Abukir), I found a large site of rock-cut baths in the sea; also pieces of two granite colossi, and two large sandstone sphinxes, thrown into the sea to form a breakwater. On one of the sphinxes I read under the water the name of a Psammetichos; but the great granite fragments are more akin to the colossus of Merenptah found in the ruins by Middlemass Bey a few years ago. Unhappily, a fort has swallowed up nearly all the probable area of the great temple of Serapis; but we now know, however, that both Merenptah and Psammetichos adorned this place. It seems to have been abandoned before the later Roman age."—W. M. FLINDERS PETRIE in the *Academy*, June 4.

NAUKRATIS.—*Controversy regarding the Inscriptions.*—Messrs. Petrie and Gardner claimed for Greek Naukratis an origin early in the seventh century B. C., and the latter considered the earliest of the inscriptions found there to date back to about 650 B. C. and to revolutionize the theory of the early Ionic alphabet. In Germany, both Professors Hirschfeld and Kirchhoff oppose themselves to this view. Prof. Hirschfeld holds that before the time of Amasis (572–28 B. C.) Naukratis was an Egyptian town, though the Milesians and others may have held fortified posts elsewhere in Egypt; and that the series of inscriptions does not begin before 560 B. C., those of Abu-Simbel still retaining their position as the earliest specimens of the Ionic alphabet. The strange forms that occur in the Naukratite inscriptions are referred by the German epigraphists to individual peculiarities or carelessness of the writers. Mr. Gardner still maintains that, "there

is an unbroken series of inscriptions from the dedication of Polemarchos to that of Phanes, *i. e.*, from the reign of Amasis (or perhaps earlier) to the Persian conquest. Before Polemarchos, and at a considerable interval, hardly if less than fifty years, are inscriptions which still appear to me the earliest specimens of the Ionic alphabet. These I would assign to the earliest Milesian settlement of Naukratis, before Amasis gave the town to other Greeks also." Prof. Hirschfeld considers the epigraphic evidence brought forward by Mr. Gardner to be very scanty in anything approaching support of his theory and to be conclusively against it. Mr. Petrie brings forward two strong arguments for a pre-Amasis Greek Naukratis—the scarab-factory which was evidently in Greek hands under Amasis' predecessors, and the archæological strata, apparently undisturbed, which show that even the scarab-factory is not the oldest evidence of Greek settlement in the town.—Prof. Hirschfeld in *Rheinisches Museum*, xlii, pp. 209–25, and *Academy*, July 9 and Aug. 20; Prof. Kirchhoff in his *Studien;* Mr. Gardner in *Academy*, May 14, July 16, Aug. 27; Mr. Flinders Petrie in *Academy*, July 16.

Pi-Bast=Pi-Beseth=Boubastis=Tell Basta.—*Discovery of the great temple of Boubastis.*—The mounds of Tell Basta are situate within a few hundred yards of the railway which connects Cairo with Ismailia, and are about half a mile distant from Zagazig station. Lofty and rugged, their broken and blackened summits standing out against the clear Egyptian sky, they represent the wreck of a once great and famous city—the Pi-Bast of ancient days, the Boubastis of the Greeks, the Pi-Beseth of the Bible.

In the admirable paper on Excavations in Egypt which Mariette published in 1879, the eminent explorer says that, after all the interesting mounds of Egypt shall have been exhausted, then, in order to be quite certain that nothing has been passed over, *par surcroît de précautions*, one might attempt the mounds of Boubastis with the faint hope of finding some few monuments of later times. Despite their great extent, Egyptologists have never given much attention to these mounds. They have been abandoned to the dealers in antiquities, who have thoroughly rifled the large nekropolis of cats, from which they get the numerous bronze figures of that sacred animal which fill the shops of Cairo. M. Naville, has transferred the pick and spade of the Egypt Exploration Fund from Tell-el-Yahoodieh to the neglected rubbish-heaps of Tell Basta, where his exertions have been signally rewarded by the recovery of some remains belonging to what must once have been one of the most magnificent edifices of Egypt.

It was one special point that directed M. Naville's attention to Boubastis. In all the excavations which the Egypt Exploration Fund has made in the Delta, there is one remarkable fact to be noticed. Absolutely no monuments of the xviii dynasty have been found. At Sān, Khataaneh, Pithom,

Nebesheh, Saft-el-Henneh, *etc.*, there are monuments of the XIX dynasty, and sometimes much older ones, of the XII and XIII dynasties; but in that case the gap between the Middle Empire and the XIX dynasty is complete. We are thus led to the conclusion that under the Thothmes and the Amenhoteps a great part of the Delta was still in the possession of foreigners, and not under the dominion of the Pharaohs. During the winter, M. Naville heard that some interesting tombs containing scarabs of Amenhotep III had been found at Tell Basta under ruined houses. Attracted by this reported discovery, M. Naville—accompanied by Mr. F. Llewellyn Griffith, and subsequently joined by Count d'Hulst, both officers of the fund—shifted his camp to Tell Basta about the middle of April. He had but one month left at his disposal, and nothing was farther from his intentions than to commence a great excavation. The tombs proved to be a myth; and—with slight hope of finding anything important at a site unsuccessfully attempted by the late Mariette Pasha—he decided to sink some pits in the bed of the great central depression which marks the area of the temple. This depression is distinctly quadrangular, and is hemmed in by heights composed of innumerable strata of brick buildings: thus exactly verifying the celebrated description written three-and-twenty centuries ago by Herodotos, who says (II. 138):—

"The temple stands in the middle of the city, and is visible on all sides as one walks round it, for as the city has been raised up by embankment, while the temple has been left in its original condition, you look down upon it wheresoever you are. A low wall runs round the enclosure, having figures engraved upon it, and inside there is a grove of beautiful tall trees growing round the shrine which contains the image of the goddess. The enclosure is a furlong in length and the same in breadth. The entrance to it is by a road paved with stone for a distance of about three furlongs, which passes straight through the market-place with an easterly direction, and is about 400 feet in width. Trees of an extraordinary height grow on each side the road which conducts from the temple of Boubastis to that of Hermes."

Such was the great temple in its prosperity; yet so completely has it vanished that archæologists took its utter destruction for granted. The main features of the scene were, however, still traceable. The square hollow defined the temple area. A break in the continuity of the surrounding mounds marked the site of the gateway. The long line of the street leading from the temple of Bast to the temple of Thoth (identified by Herodotos with Hermes) was yet visible. Here and there was to be seen a weather-worn block of granite, or the mouth of one of Mariette's deserted pits. To go to work in a small way upon so large a site would be to court the same disappointment which befell Mariette. M. Naville assembled a gang of some two hundred fellaheen, and attacked the quadrangular enclosure

in three places at once. The results were as immediate as they were unexpected. One excavation disclosed a number of large monolithic columns and massive architraves, all of red granite, and all prostrate and broken. Another brought to light a wilderness of sculptured building-blocks, crowded with basrelief groups and hieroglyphic inscriptions. These also were of red granite. The columns bore the cartouches of Rameses II; the blocks were engraved with the names and titles of Osorkon II, of the XXII dynasty, who reigned some 380 years later.

As the work progressed, the ruins became more intelligible. The temple was oriented from east to west, and the place of columns proved to be the hypostyle hall. Beyond this, further to the westward, the pit of sculptured blocks represented a second great hall which M. Naville calls "the festive hall;" while beyond this, again, the third pit yielded constructions of a still later date, forming apparently the end of the temple. This part also was in red granite; and here was found the name of Nekhthorheb, who ruled about 480 years later still. Hereupon, M. Naville concentrated his forces upon the two older spots, increased the number of diggers to 400 hands, and tasked himself to clear as much as possible of these halls of Rameses and Osorkon. The excavations made rapid progress. There emerged fallen columns of the beautiful clustered-lotus pattern with lotus-bud capitals, architraves emblazoned with royal insignia, heads, trunks, and limbs of colossal statues, some in groups of three together and some in pairs. In the hypostyle hall was a colonnade of magnificent monolithic columns in red granite, with capitals in the form of lotus buds, or palm leaves, or the head of Hathor, with two long locks. That they are older than Rameses II is proved by the fact that on one of them the name of that king is cut across the ornaments of the column. Though Rameses II and Osorkon II have inscribed their names everywhere, it is very possible that we must attribute this fine edifice to the XII dynasty. The style of the work is decidedly too good for the XIX dynasty. Near the colonnade there were also several statues. One, of life-size, sitting, bears the cartouche of Rameses VI, a very rare name in the Delta. By and by, the name of Usertesen III turned up, thus carrying back the date of the temple to the time of the first great Theban Empire; and some days later, a still more important stone was found, inscribed with the cartouche and titles of Pepi Merira, of the VI dynasty, whose name is found also at Sān—one of the last pyramid-building kings of the Ancient Empire, and founder of the earliest temple of Denderah. The name of Pepi reminds us that Boubastis is spoken of by Manetho in connexion with the II dynasty. The cartouche of Pepi is a long one, like that at Sān, and he is said to be *Lord of On and Ant.*

Meanwhile it became evident that there were scarcely any statues in the hypostyle hall, but that the great hall of Osorkon, in which there were no

columns, must have been crowded with groups and single figures. At the entrance lay two shattered colossi of Rameses II, in black granite, wearing the crown of Upper Egypt. Near these lay two smaller colossi of the same Pharaoh, the lower limbs shattered, but the upper halves uninjured; to say nothing of two others in green granite, two in red granite, and several groups representing Rameses enthroned now with a god and now with a goddess.

Several mutilated groups of two or three colossi together have likewise been found, and we shall probably not be far wrong if we attribute these also to Rameses II. Though not one of the foregoing statues is unbroken, many of the heads have escaped without damage: among others, a beautiful and unique specimen in red granite, wearing the helmet of Osiris, and another in black granite with the crown of Upper Egypt. The former, which has fallen to the share of the Egyptian Government, is already on view at the Bûlâq Museum, and the latter is on its way to England. Here also, in the great hall of Osorkon, were discovered a standing statue of a governor of Ethiopia bearing the customary title of *Royal Son of Kush;* a limestone group of a priest and priestess engraved with an interesting geographical inscription (XXVI dynasty); a small statue with the name of Achoris, a king of the XXIX dynasty, who reigned but ten years (B. C. 393–83), and whose monuments are of the rarest; and a fine squatting statue in black granite with the name of Prince Menthuherkhopeshef, a son of Rameses II, who wears the sidelock of youth (a fashion still universal in Nubia) and is entitled *General of Cavalry of his Father:* but it is the work of some earlier dynasty, usurped for the prince, the older inscriptions being erased to make way for the newer. All these are comparatively perfect, and will shortly be exhibited in London by the Egypt Exploration Fund.

Of greater historical interest than the portrait statues are the sculptured blocks which lie piled in inconceivable confusion on the site of Osorkon's hall. These blocks lined the walls, and the basreliefs with which they are closely covered formed, when *in situ*, one huge tableau, or perhaps two tableaux, representing a great festival given by the king, most probably on his coronation day. Though cut up into as many sections as there are blocks, it is yet possible to gather something of the subject. Here were processions of priests bearing standards and offerings; other priests, two and two, carrying shrines and sacred boats supported by long poles upon their shoulders. Osorkon, wearing sometimes the crown of Upper Egypt and sometimes that of Lower Egypt, occurs over and over again, generally with the cat-headed goddess Bast by his side. He offers incense and libations to various gods, or is himself worshipped as a deity by the priests. Occasionally he is seen with his queen, Karoama. Most curious of all are some subjects representing religious dances, or gymnastics executed by the priests, some of whom make fantastic gestures, while others lie flat upon

the ground. Nothing in the least resembling this strange ceremony has previously been discovered upon the monuments. A fragmentary inscription makes record of a festival *which takes place every fifty years.* The entire hall, which M. Naville entitles "the festive hall," was constructed of red granite, all the sculptured surfaces being without polish. Were money, time, and labor of no account, it would be well worth while to rebuild these blocks in their original order and so restore the whole subject; but, as it is, the next best thing is to obtain paper impressions, which can afterwards be arranged in sequence and even reproduced in plaster casts. This, as far as was possible in the time, has been done. The main difficulty was to turn and lift such huge fragments: for this work M. Naville engaged a gang of stalwart *shayalin*, or porters. The near approach of Ramadan made it necessary to suspend the work till next season. One of the very last finds was another fragment of inscription with the cartouche of Pepi—a discovery which possibly presaged others yet more important, and intensified the regret with which the explorers quitted the scene of their labors. It is calculated that they have cleared about one-third of the temple, which Mr. Griffith estimates as being about 900ft. in length from the back of the building to the gateway, with an average width of 150ft. These dimensions do not fall far short of those of the great temple of Sân=Tanis, with which it may be compared.

The historical results thus far go to prove that Osorkon II, of whom little has hitherto been known, must have been the most powerful monarch of the Boubastite line; but that the name of his father Shashank, the Biblical Shishak, who was not only the founder of the dynasty but who is supposed to have been a native of Boubastis, should not once have turned up, is both strange and perplexing. Like the great temple of Denderah, and perhaps also that of Tanis, the original sanctuary upon this spot would seem to have been founded by Pepi I (VI dynasty), whose place in history, according to Brugsch, is about 3,300 years before the Christian era. It was probably rebuilt about a thousand years later by Usertesen III (XII dynasty), again partly rebuilt, or much enlarged and enriched, a thousand years later still by Rameses II (XIX dynasty). Some 460 years after Rameses II it was taken in hand by Osorkon II, who added the festive hall, and perhaps yet more buildings at the eastward end. Last of all, about B. C. 380, we find Nectanebo I making additions at the western extremity of the pile behind the sanctuary. The history of the temple may therefore be said to extend over a period of more than 3,200 years.

On the conclusions to be drawn from these data we quote the following passage from the latest report received from M. Naville: "It is a most singular fact that at Boubastis, as at Tanis, we find traces first of the VI dynasty, then of the XII dynasty, and then occurs a gap which carries us

down to the XIX dynasty. No name belonging to the XVIII dynasty has yet appeared; though some may yet be discovered. Scarabs bearing the name of Amenhotep III have, it is true, been found from time to time in tombs at Boubastis; but, so long as we fail to discover any trace of the XVIII dynasty in the ruins of the temple, we are compelled to believe that the Pharaohs of that line ruled only in Upper Egypt, and that the Delta must still have been in the possession of the Hyksos. Not perhaps till the rise of the XIX dynasty was the strength of the foreign element finally broken; and Seti I may have been the first King who once again actually reigned over both Upper and Lower Egypt."

M. Naville hopes to clear the whole site from end to end next season.—London *Times*, July 1; letter of M. NAVILLE in *Academy*, July 2.

ALGERIA.

NEO-PUNIC INSCRIPTIONS.—In the last number of the *Bulletin de l'Académie d'Hippone*, M. C. MELIX published, with translation and commentary, a number of Neo-Punic inscriptions, found at different periods.

CHERCHELL.—*Excavations continued.*—New fragments of mosaics have been discovered both between the guardhouse and the civil prison and on the neighboring ground belonging to M. Dupont. Among the objects found are a remarkably fine torso of Diana, of white marble, and a colossal marble head.—*Revue Critique*, 1887, No. 24.

The French papers assert that colossal statues of Hercules, Venus, and Jupiter have been found here, and removed to the Museum. At this time workmen are uncovering a buried palace, near the sea, where a mosaic of great size and fine execution has been uncovered.—*Athenæum*, June 11.

TAGREMARET (near).—*Inscriptions.*—The milestones with inscriptions have been discovered to the south of Mascara, near Tagremaret, between Saïda and Frendah. One of these texts names the Emperor Quintilius, brother of Claudius Gothicus, and is the only inscription known to bear his name. These inscriptions make known the ancient names of two localities: COHORS BREUCORUM = *Tagremaret;* and KAPUT URBS, in the same region.—*Revue Critique*, 1887, No. 26.

TUNISIA.

NEW INSCRIPTIONS.—M. A. PAPIER has published in the *Bulletin de l'Acad. d'Hippone* (1887) about fifty inscriptions found recently in Tunisia and the province of Constantine. Quite a number of these are Christian. An important inscription found near Roum-el-Souk (close to the border-line between Tunisia and Algeria) is completed as follows: *Pre salute d(ominorum) n(ostrorum) (quatuor) | Diocletiani et Maximiani perpetuorum | Aug(ustorum) et Constanti e[t M]aximiani nobilis | simorum Cæs(arum) te[m-*

pl]um dei Mercuri | *[v]etustate delaps(um)* [*ab ordine amp]lissimo* | *universi sen[tentiaque] ma[g](istratus)* . . . . . *rensium* | *sumtibus suis restitueru[nt et de]dicaverunt* | *curatores* | *anno Fortunatiani mag(istri).* | *Aridius Primus.* Its date is 303–4, and it commemorates the restoration of a temple of Mercury. Of still greater importance is a Christian inscription found at Philippeville (the anc. Rusicada) in April 1886. MAGNA QVOD ADSVRGVNT SACRIS | FASTIGIA TECTIS | QVAE DEDIT OFFICIIS | SOLLICITVDO PIIS | MARTYRIS ECCLESIAM VENERAN|DO NOMINE DIGNAE | NOBILIS ANTISTES PERPETVV[S] | QVE PATER | NAVIGIVS POSVIT CHRISTI LE|GISQVE MINISTER | SVSPICIANT CVNCTI RELIGIONIS OPVS. Its date is, probably, the fifth century, and it contains a number of unusual expressions. It commemorated the building of sumptuous porticos before the church by the bishop, Navigius.

Recent Official Excavations.—Some more details may be added to those given already on p. 148. In the Christian cemetery of **Leptis** (*Lamta*) four tombs paved with mosaics were found, two with the following epitaphs: ANTI|STA DO|RMIT IN | PACE VIXI|T ANNIS C, and ADEO|DATA| REQVI|ESCIT | IN PAC|E VIXI|T ANNI|S XXV. The remains of the numerous tombs at **Sullecthum** (*Arch Zara*) are compared with certain Phoinikian, Syrian and Jewish tombs, being half-cylinders placed on two or three steps; near this nekropolis, there opens another subterranean one, whose walls are furnished with rectangular loculi, as in the Roman catacombs.—*Gazette Arch.*, 1887, No. 3–4, *chron.* p. 6.

The Stone-Age in Tunisia.—The May number of the *Matériaux pour l'histoire de l'homme* contains an original memoir of importance by Dr. R. Collignon, entitled *Les Ages de la Pierre en Tunisie.* The author spent three years (1883 to 1886) in Tunisia, carrying out investigations for the Anthropological Society of Paris; and a summary of his results, illustrated by maps, is presented in this memoir. It is interesting to note that he has discovered, in conglomerates near **Gafsa**, palaeolithic implements similar in type to those of Chelles and St. Acheul. Worked flints, whether palaeolithic or neolithic, are most abundant in the southern part of Tunisia, if not confined to this area. A limited district, including the mountainous country of **Ellez**, is characterized by its megalithic monuments. There seems to have been a race of dolmen-builders distinct from the workers of the stone implements; and survivals of these ethnic types may possibly be recognized in the present population of Tunisia, each type still being represented in its ancient area.—*Academy*, June 11.

Carthage.—*Report on excavations.*—The aqueduct which in the second century of the Christian era led to Carthage the waters of Zaghouan and Djouggar is known in the greater part of its course, and is still used for

the supply of Tunis. On December 15, 1884, M. Vernaz discovered at La Malga the entrance of a subterranean aqueduct, through which he could pass for a distance of 200 metres. The construction appeared to be of the same date as the aqueduct of Carthage. Here he found a system of cisterns and gates by which the admission of water to the aqueduct might be regulated. The subterranean aqueduct appears, however, never to have fed the cisterns of Bordj-Djedid. Glass, pottery and lamps of Roman make were found, but nothing of special value. This system M. Vernaz attributes with hesitation to the Christian period, in opposition to M. Daux, who regarded it as Phoinikian. Near the cisterns of Borj-Djedid is a system of drainage formed of nine branching conduits opening into a single canal.—*Revue Arch.*, 1877, July–Aug., pp. 11–27.

SFAX.—*Nekropolis.*—The French garrison at Sfax, in the work of fortification, dug a trench to the north of the town, where a strange mode of native burial was brought to light. The body was placed in a large jar of rough pottery and buried just below the level of the ground. Large tiles, rudely marked with cross lines, were arranged to form a gable-covering for the jar. The open spaces at either end were then closed by flat tiles. When a jar was used for burial purposes it was broken around the centre and elongated as much as was necessary. The fractured portions were afterwards cemented, and the jar hermetically sealed. The smaller jars, containing the remains of children, needed no elongation. The jars were unornamented (one only was found marked with parallel circles) and contained only the robed bodies of the richer and unrobed bodies of the poorer inhabitants.—*Revue Arch.*, 1887, July–Aug., pp. 28–34.

ASIA.

CEYLON.

YÁPÁWA (or Subhapabatta).—*Restoration of the Dalada Maligawa.*—A. E. Williams, district engineer, reports to the Government, under date of February 1, 1887, the restoration of this Buddhist monument of the XIII century: he adds a ground-plan, front and side elevation, showing the sculptural decoration. The restoration consisted in digging out the missing stones, resetting them in place, and rebuilding walls in ruinous condition.

The construction is as follows: a flight of 24 steps with a plain balustrade leads to a broad terrace, from which rises another flight of 40 steps leading to another terrace, from which rises and leads to a small palace a flight of 35 steps flanked by heavy balustrades profusely ornamented with sculptured figures and basreliefs: the palace itself is also decorated with sculpture. Mr. Williams says, "that the work is, now, much as it was when first built,

I think does not admit of any doubt. . . . On the rises of some of the steps were found Tamil-figures roughly cut in the stone, from which I infer that the workmen were brought from India."

HINDUSTAN.

Recent publication on the Monuments of India.—The results of the archæological mission to India confided to Dr. Gustave Le Bon by the French Government have been already indicated, in several ways, in the *Revue Scientifique* and the *Tour du Monde*, and the official and scientific report which he has sent to the Ministry is in the shape of five folio volumes accompanied by more than four hundred plates and photographs. Dr. Le Bon has just published,[1] however, a popular summary made doubly interesting by the important series of monuments of architecture and sculpture of all the regions and series of India which is only surpassed in extent by the official series of the English Government. Unfortunately, the author pays but slight attention to Hindu art, in his text, and in many cases leaves his interesting illustrations unexplained.—*Revue Critique*, 1887, No. 17.

Collection of ancient Inscriptions of India.—Steps have been taken by Dr. Burgess (Nov. 1886) for the publication of a general collection of the ancient inscriptions of India. He has lately addressed a circular letter to the different provincial Archæological Surveyors on the subject of the collection of impressions of inscriptions and forming district catalogues of them: "The total number of inscriptions all over India is so large, and the importance of securing the best possible copies of those of historical interest is so great, that it seems very desirable some systematic effort should at once be made to give practical effect to the resolutions of Government, and to secure as exhaustive lists of them as possible. Until such lists are compiled, there must necessarily be a certain amount of haphazard and imperfection in the selection and arrangement of those submitted for translation. The lists ought to contain *all* the inscriptions published or unpublished in each district, and, for convenience, these should be arranged under the following provinces:—

1. (*a*) Bengal Circle including (*b*) Assam, (*c*) South-Western Frontier districts, and (*d*) Orissa.
2. (*a*) North-Western Provinces and Oudh Circle with (*b*) Central India Agency and (*c*) Central Provinces.
3. (*a*) Punjab Circle with (*b*) Rajputana and (*c*) Kashmir.

[1] *Les Civilisations de l'Inde*, par le Dr. Gustave Le Bon, chargé par le Ministère de l'Instruction publique d'une Mission Archéologique dans l'Inde. Ouvrage illustré de 7 chromolithographies, 2 cartes et 350 gravures et héliogravures, d'après les photographies, aquarelles et documents de l'auteur: Paris, Firmin Didot et C^ie^, 1887, VII–743 pp. in fol.

4. (*a*) Bombay Presidency with (*b*) Sind.
5. Haidarabad Territory.
6. Mysore and Coorg.
7. Madras Presidency.

"In the 'Lists of Remains in Bombay Presidency, Sind, and Berar,' completed by me early last season, are included mention of all the inscriptions in the districts that I heard of during the preparation of the work, and translations of a considerable number collected by the survey in Gujrat are added in an appendix. For Madras the survey is also in possession of similar information in the 'Lists' for that presidency, the whole numbering about 3,000 inscriptions on stone and copper; and at the same time with the Bombay lists I completed a volume of about 230 pages of copies and translations of Tamil and Sanskrit inscriptions. Dr. Hultzsch has now been appointed Epigraphical Assistant to the Archæological Survey of Southern India, and on his taking charge he may be expected to expedite the formation of complete lists for the Madras Presidency. For Mysore and Haidarabad the survey is in possession of but little information of the kind required. For Haidarabad what exists is very fragmentary, and returns would have to be obtained for any complete list. And, as there are no satisfactory lists of antiquarian remains, temples, tombs, old forts, *etc.*, these latter might be collected at the same time. For Mysore, returns were made several years ago to Mr. L. Rice, reporting 3,722 inscriptions. Beyond indicating the villages where inscriptions are to be found, these returns were apparently very imperfect; but they might be made the basis of a more exhaustive and detailed list for the Mysore territory. For Upper India I am not aware of any very extensive materials for such lists. Indeed, in this respect it is much behind Madras and Bombay. The inscriptions in the Museums of Calcutta, Behar, Lucknow, Lahore, *etc.*, might readily be described and catalogued, and those that have been published or referred to in the Journals of the Asiatic Societies, the Indian Antiquary, and in General Cunningham's reports might be indexed. These materials are important, and ought to be prepared with all other published information available. But, for all the districts included in the three survey-circles of Upper India, a thorough and systematic series of returns are necessary.

"From these Government resolutions it will be observed that it is made the duty of the surveyors to supply me with tabulated returns of all inscriptions as soon as met with; to include in the annual reports a complete tabular statement of the inscriptions met with, including all such as are already mentioned in the existing reports of the survey; special attention is to be given to discover all inscriptions in the districts under survey; and the surveyors can address, either directly or through the local Governments and Administrations, all district officers for information respecting them.

If the scheme is heartily worked in this way, we may hope in the course of a year or so to have a collection of information which when indexed would be invaluable as a basis for the future systematic pursuit of Indian epigraphy."

EXPLORATION IN SOUTHERN INDIA.—We make the following extracts from a report by Mr. A. Rea.

"On completing the survey of the large temple of Virinjipuram, I proceeded to TIRUMALAI, nearly 30 miles south of Vellore. This village, which is chiefly occupied by Jains, is built at the base of a steep, precipitous mass of huge rocks. Several miles to the east is DEVIKAPURAM, in the Arni jaghir, and on the borders of the Polur taluk. It has a temple in a walled enclosure on the summit of a hill, and another very large one at the base, similar in size and style to the temple at Virinjipuram. All the antiquities at TIRUMALAI are Jaina, and are scattered about the face of the huge rock which overlooks the village. The largest is *the temple*, built on a series of platforms ascending from the base of the hill some distance up its side. The principal *shrines* are two in number, and situated on the west side of the rock. The first, or outer one, has its entrance from the east, and is a complete temple in itself, with entrance *gopura*, porch, shrine and tower. A large courtyard-wall encloses, not only this shrine, but another larger one which is placed almost in a line to the west of it, but on a platform about 25 feet higher up the hill. This last temple is at present being completely restored. The two buildings, though comparatively large, are of no great importance archæologically. They evidently, in parts at least, date from Chola days, or about the XI century; but, as they are very similar to others already examined, it was scarcely necessary to survey them. The chief objects of interest are the rock-cut Jaina sculptures, paintings and rock-inscriptions. Close behind the temple, the rock shelves inwards, forming a series of natural caves. In one of these, some chambers have been built up in brick, forming a number of rooms, which were probably once on a time the residence of the Jaina priests attached to the temple. The brickwork of this portion seems, from all appearances, to date from about the XV century. The walls are built entirely under the overhanging rock, which has subsided slightly, and seems in danger of crushing them. The building is extensive, going inwards beneath the rock for a depth of about 45 feet, and extending along its face for over 90 ft.; none of this has been excavated, the whole being a natural cavity filled in with brickwork. On the left, a stair leads up to a first storey, containing a small shrine dedicated to Dharmadevatha. Its back wall is formed by the rock, which is sculptured with a fine set of four figure-panels; these cover a surface of 12 ft. by 4 ft. 6 ins. The left panel shows a standing female figure richly jewelled, grasping, in her left hand, what appears to be a plantain palm 6 ft. high; her left foot rests on the

head of a lion. Four smaller figures occupy the background. The panel on the right has a typical Jaina-figure standing on a lotus, with a snake beside him, and branches rising up in front. A female figure stands on each side. The next panel has a figure sitting cross-legged; chowrie bearers and ornament occupy the background. A standing figure with snake-hood and attendants occupy the panel on the extreme right. On the right of this range of buildings, another stair leads to the upper storey of the *Vihara*, as it may be called. The most of the rooms are on this level. The brick walls, both internally and externally, have once been completely coated with plaster, and this has been used as the groundwork for a series of remarkable paintings, which have evidently covered their whole surface. Those on the exterior have mostly disappeared through the scaling off of the plaster, but, in the interior, some remain in fairly-good preservation. The ceiling of the upper storey is formed by the under side of the overhanging rock, and this also has been decorated with some pleasing designs in color. Two distinct periods of painting are observed, for in one place some painted plaster has scaled off, and shows another set of paintings on a plaster surface beneath it. The best of the frescos is a circular panel about 3 feet in diameter with a Jaina-figure occupying a disk in the centre; from this radiate a number of lines subdividing the panel into a set of smaller ones. Each of these is occupied by different figures variously grouped; one shows a number of worshipping nuns with white hoods, another, lions, elephants and other beasts, and so on. As a rule, the other paintings are very fragmentary, having mostly either scaled off, or been partially destroyed by the damp. The geometrical and floral designs on the ceilings are bright and effective in their coloring, and are in fairly good preservation. Almost on the summit of the same side of the rock, at a height of nearly 100 feet from the ground, is a brick porch with a small cupola, built on a ledge or natural platform on the hill face. It shelters and forms the shrine for a remarkable, rock-cut, Jaina-sculpture, representing Sigamani Nathar. The image is a large one, being 17 ft. in height; the hands measure 2 ft. 6 ins., the arms 9 ft. 6 ins. in length, and the breadth across the chest and arms is 6 ft. 9 ins.

"There are a number of lengthy inscriptions in old Tamil characters cut on various parts of the hill. In addition to the rock-sculptures, there are a number of fine Jaina-images in different parts of the place. Close to the west side of the hill is a fine tank, and a mound with some stones, marking the site of a previous temple. Some large sculptured stones are near. One stands upright, it measures 4 ft. 6 ins. in height above the ground, and 7 ft. 3 ins. broad: it represents an armed warrior with two females standing on each side, and may possibly be a *sati* stone.

"The head-draftsman while working at SHOLINGHUR, surveyed six temples,

all large. Two of them, evidently from peculiarities of the site, show some very unusual arrangement in their plans; the outer walls are polygonal, and some other interesting features make them specially worthy of note. One temple has some carved pillars rivalling in intricacy of workmanship and design the fine piers in the *Kalyana Mandapa* at Vellore. Another pillar in a mandapa is of a rather original design, and quite different in style of architecture from the building in which it now is. It is not unlike, in some respects, some of the elaborate piers seen in a few of the northern caves. The rock-cut temple at **MAHENDRAVADI** was also surveyed. It is cut out of a single boulder, but is not designed so as to form the outline of a structural building, like the *rathas* at Mamallapuram. One side only is excavated, so that in plan it is exactly like the plainer and earlier rock-cut caves at Mamallapuram. The boulder measures 32 ft. across the front, and 19 ft. in height. The vestibule has four massive piers, and the same number of responding pilasters on the side walls. The shrine is a small rectangular chamber, entered directly from the vestibule; a *dvarapala* is sculptured on each side of its door. On one of the pilasters are four lines of an inscription in archaic characters. The style of this excavation is identical with similar works at Mamallapuram, Mamandur, Narsapalaiyam, Siyamangalam, Pallaveram, and other places. As I expected, its examination fully supports my theory—advanced after I discovered in 1885 that the Mamandur-caves were the work of the Pallavas—that all these rock-cut temples are the work of the ancient dynasty which in the early centuries ruled over the greater portion of the Southern Peninsula."

ELEPHANTA.—*A new cave* has been discovered in close proximity to the large main caves which are usually visited at Elephanta, near Bombay. It is situated on the north face of the hill, and is in a line with the smaller caves on that side of the island. There is no carving or ornamentation about the entrance, the facade being quite plain. The operations now being undertaken may lead to discoveries of archæological importance.

KOSAM.—*The Cave of the Shadow.*—The discovery of a Gupta inscription on the Prabhosâ cave was noticed on p. 153. Dr. Burgess writes to the *Academy* of June 4, giving further details. Dr. Führer, descending the rock, got an impression of the inscription, and at the same time entered the cave, which he has correctly identified as the cave of the Shadow (Buddha's), and found three longer inscriptions in it, and more important than that outside, and four short ones. The contents of these Dr. Burgess hopes shortly to announce. The inscription outside states that the cave was constructed by Râjâ Gopâla; and, if we turn to Beal's *Buddhist Records of the Western World*, vol., I, p. cvii., we find "the cave of Gapâla" mentioned, with an account of the appearance of the sacred Shadow in it, as told by Sung-Yun, who visited it in A. D. 518.

MADRAS (Government of).—**PERIANATTAM.**—*Prehistoric Antiquities.*—Mr. A. Rea, of the Archæological Survey, reports (Aug. 15, 1887) an inspection of these antiquities: "They consist of some fine groups of kistvaens and stone-circles. On the Villiyin hill (Survey No. 349), there are three or four tombs; and on the northern face of the Vallari hill (Survey No. 350) there are about sixty or seventy.

"On the Villiyin hill at least four classes of remains exist: (1) Stone-circles, with megalithic kistvaens or dolmens in the centre. (2) Circles, with no remains in the centre. (3) Megalithic kistvaens or dolmens, without circles. (4) Pottery sarcophagi, without stone enclosures.

"The remains generally are much the same as the megalithic tombs at Pallávaram; but, whereas at that place only occur one or two examples of the dolmens (in the centre of circles), at Perianattam a large number exist in almost complete preservation. Of *Class 1*, above noted, I saw over a dozen. They are formed of a number of large stones laid together, roughly forming three sides of a square, leaving the fourth side—towards the east—open, and the inside clear. A large, flat slab is laid over the top of these as a roof. Close around the central pile is a circle of smaller stones. All these gradually rise towards the centre in a sort of cairn or mound. At a distance of a few feet from the first enclosing circle is an outer concentric one formed of blocks of stone, each stone about two or three feet in diameter; this outer ring completes the tomb. The majority of the remains consist of those noted under *Class 2*. Some of these circles are quite complete, without a stone out of place, and they have no trace of anything remaining or having been in the centre. One, which I measured, had a circle of 27 feet in diameter, with 27 stones closely laid together; the inside level was 2 feet above the surrounding ground. Of *Class 3*, there are a number of examples. For classification they might be included under those of the first, for they are simply the kistvaens or dolmens with their surrounding circles either wholly or partially removed. One had nine large stones laid together, with a flat slab, 6 feet by 5 feet and a foot thick, laid on the top. Of *Class 4*, I saw one partially-complete example, but broken pieces of thick pottery at different places showed that others did, or still do, exist there. The one referred to was almost identical with the pyriform tombs at Pallávaram, measured 1 ft. 6 ins. in diameter, and 2 ft. in depth. It was badly cracked, and had only some broken pieces of earthenware and large stones in the earth inside."

DADAMPATTI. PARAVAI. ANAPANADI. KODAIKANAL.—We extract from Mr. Rea's report of Sept. 22, 1887: "I have inspected and excavated some ancient burial-places at Dadampatti, Paravai near Thovaremon, Anapanadi near Madura, and the cromlechs near Kodaikanal. I made a splendid collection

of ancient pottery, and in some of the tombs found a large number of bones, also a complete human skull." [*Indian items from Robert Sewell, Esq.*]

WYNAAD.—*Prehistoric tombs.*—At a meeting of the British Archæological Institute (London, Dec. 1) Dr. M. W. TAYLOR read a paper *On some recent diggings in Prehistoric Graves in Wynaad, Southern India.* He had this year excavated a number of these barrows and kistvaens, and had found a remarkable identity, even in detail, with British examples. Within the cists, with the remains of the body, were deposited the sepulchral vessels, the "food vessel," and drinking cup; outside, a quantity of pottery and terracotta idols, amongst which the most frequent was the figure of the cow, and the emblem of the cow's horn. Dr. Taylor called attention to the remarkable correspondence between these cow-idols and those which had been found by Dr. Schliemann at Tiryns, Mykenai, and the fourth city of Troy, which had been referred to the worship of Hera and the cow-goddess Io. He claimed to have shown that these special objects found in Indian graves have their analogues in the archaic cities of Greece, and that the cow-worship of which they are the symbols, surviving in India into far more recent times, is the manifestation of a cult the prototype of which arose on the banks of the Nile.—*Athenæum*, Dec. 10.

PALESTINE.

PALESTINE EXPLORATION FUND.—*Publications.*—The society will publish during the year, and present to subscribers, the survey of Jaulân with maps and memoirs; the survey of Pella; an account of the Saida sarcophagi; and Mr. Schick's discovery of Constantine's *agora*, which seems to put an end at last to the Fergusson theory on the site of the church of the Holy Sepulchre.—*Athenæum*, Dec. 24.

Survey of the Jaulân, by Herr Schumacher.—The first *Quarterly Statement* for 1888 of the Palestine Exploration Fund will contain the beginning of a Memoir by Herr Schumacher on his exploration of Jaulân and Ajlûn. "The district of Jaulân, the Golan of Manasseh, which has been surveyed, is 39 miles in length at its longest points and 18 in breadth. It comprises an area of 560 sq. miles. On the best map of Palestine there are found about 150 names: on Schumacher's there are 600, being the names of ruined towns, springs, ancient highways, remnants of oak forests, perennial streams, great fields of dolmens. The district of Northern Ajlûn, also surveyed, contains 220 sq. miles, and shows on the map 334 names of places. There are in the Memoir detailed plans of 100 places—churches, theatres, vaults, mausoleums, temples, walls, columns, capitals, street pavements, sarcophagi, caves, cisterns, birkets, aqueducts, and ornamental work; there are collections of masons' marks, Greek inscriptions, drawings of dolmens and stone walls; and there are detailed plans of Umm Keis (Gadara) and Beit Ras

(Capitolias). The district contains about a thousand dolmens scattered over distant fields."—*Palestine Expl. Fund: Quart. Statement*, Oct., 1887.

AKKA.—The road-works have here brought to light a stone upon which is carved in relief a curious double cross on a stepped pyramidal base. It was found to the south of the present Christian cemetery, half-way between the gardens on the present Haurân (Safed) road.—*Palestine Exploration Fund*, 1887, Oct., pp. 224–25.

JERUSALEM (near).—*A rock-cut Tomb.*—In the Wâdy Yasul, east of the Bethlehem road there are some tombs hewn in a cliff of soft rock. The first has a cave-like opening, about 7 ft. in width and height, leading into a square room (14 by 10 by 9 ft.), with straight walls and nearly horizontal (slightly arched) ceiling: in the S. W. corner is a well-mouth, with a few steps in it, about 5 ft. deep, leading to a cistern that extends under nearly the whole room. At the further end of this chamber a small door, with a recess to receive a closing slab (for which the marks of hinges and bolt still remain), leads into a second smaller chamber about 9½ ft. square, which seems to have been the lodging of a living man, and not a tomb: a smaller chamber opening out of this contained bones and mould. There is a probable connection, not yet verified, between this group and another whose entrance was not far from it. The main chamber, with a slightly arched ceiling, has on three sides a stone bench 2½ ft. broad and 2 ft. 2 ins. high: level with its top, on these three sides, are loculi, three on each side, 7 ft. deep, 1 ft. 8 ins. wide, and 2 ft. high, each arranged to be closed by a slab. From the back of this tomb, by the side of two loculi broken into one, a narrow descending passage with three steps leads down to a rock-wall, 2½ ins. thick, through which a hole is pierced showing a (probably) large chamber containing a "large smooth coffin-shaped stone," probably a sarcophagus, 6 ft. long. The entrance to the chamber has not yet been discovered. "All the work hewn in the rock described above is as nicely and correctly done as it is in rock-tombs round about Jerusalem, except in the tombs of the Kings." —C. SCHICK, in *Pal. Expl. Fund, Quarterly Statement*, April, 1887.

TIBERIAS.—*Ruins of the city and nekropolis.*—Notice was given in the JOURNAL (p. 155) of Herr G. Schumacher's discovery of the wall of Herod's Tiberias. His full *Report* is printed in the April *Statement of the Palestine Exploration Fund*, from which the following is taken.

Jewish Nekropolis.—"The construction of carriage roads in the Liva of 'Acca now and then leads to interesting discoveries. One of these roads was commenced at the western gate of Tiberias, taking a western course up the mountain, and, in cutting through an elevation near the gate, an extensive, very ancient Jewish cemetery, was discovered, which could be followed up to a distance of about 600 yards from the gate. The graves were some 2 or 3 feet below the ground, one built close to the other, in

rows of three and more, and only separated by a wall of 1 ft. 4 ins.: the width of each grave was 1 ft. 8 ins., its length up to 7 ft., and its depth generally 2 ft. The building-material was composed of hewn and unhewn basaltic stones, and a good white mortar; the interior of the grave was plastered. Similar graves were also found within the present city-wall. Large slabs lying about prove that they formed the cover of the graves. Next to these rows of graves, which evidently belonged to a poorer class of people, were found handsome sarcophagi, cut out of a limestone of white color, the rock of which exists near the hot-baths. They were lying about in disorder, 1 to 3 ft. below the surface, covered by large basaltic and limestone slabs; a regular orientation could not be made out, but most of them had the head-end toward the east. Their length varies from 4 ft. 3 ins. to 7 ft. 1 in., their width from 2 ft. to 2 ft. 4 ins., their height from 2 ft. to 2 ft. 3 ins. The head-end shows in its interior a cushion, and is generally round, while the foot-end is square; in some, both ends are rounded. The long sides of the sarcophagus now and then show a relief-ornament with a tablet, but no inscription; the ornamentation is elevated but 3 inches, and is quite primitive. Top and foot are distinguished by a simple moulding. Some of these sarcophagi were taken to the Serail in order to be preserved, others were broken to pieces. The ornaments of these sarcophagi, as well as their entire arrangement, are very closely similar to those which I found at Kala'at el Husn, on the other side of Lake Tiberias, the supposed Gamala of Josephus" (see Schumacher, *Der Djaulân*, 1886, Leipzig).

Ancient walls of castle.—The following supplements the description of the wall on p. 155: "Coming from the western gate of the city of Tiberias, the ancient city-wall can be followed up to the cliffs of the mountain above described. Above the cliffs traces of a well-built wall, 60 yards long, run up the steep slope to a point where it unites with the actual fortification-wall of the Kasr. Here the remains show a wall 8 ft. 6 ins. thick, built up with small basalt building-stones, 1 and 2 ft. square, set in a good white mortar, but which now begins to decay rapidly. . . The construction of the wall is exactly the same as that of the remains found between the city and the hot-baths, along the shore of the lake. The wall now runs in two directions, eastwards and westwards, round the summit; in its western course arriving at the described neck, where the plateau is easily accessible, it ends in a square tower of 23 ft., now fallen to a height of a few yards above the terrain, of the same construction as the wall, and bends nearly to a rectangle southward, and southeastward, showing along its course another square tower; from here . . . the wall . . winds round the natural construction of the mount until it joins the other half, which in a similar way followed the eastern and northeastern slopes." This wall sur-

rounding the hill, called *Kasr bint el Melek*, is 1,040 yards long, and was the fortress or acropolis of Herod, destroyed by Josephus. Few ruins remain within this fortress: they are (1) a large heap of hewn stones and some basalt columns, occupying the summit; (2) a square subterranean building, 26 by 23 ft., with remains of plastering and a projecting pillar, probably of a former vault; (3) a circular basin; both probably used for water-supply; (4) a third square building, 49 by 23 ft., of strong masonry.

City and its wall.—"In passing outside of the acropolis-wall to the south, the general city-wall serpentines along a thin neck, separating two *wâdies;* at this point were remarked another subterranean square basin and, near by, traces of a building. At the eastern foot of the Kasr the most remarkable ruins of the ancient city are found, among which the recently restored and greatly venerated Mohammedan sanctuary of the Sitt Iskeiney rises. It may be hoped that, in constructing the new road across this field of ancient remains between Tiberias and the baths, most interesting discoveries will appear."

The road from the city of Tiberias to the hot-baths is nearly finished. The heap of ruins opened at the construction of the road proved to be, for the greater part, old baths. Roman, Jewish, and Christian sculptured architectural fragments have been brought to light.—*Palestine Exploration Fund*, 1887, Oct., pp. 223–24.

ZIMMÂRÎN (Galilee). *Baths and tombs.*—On this ancient site antiquities of interest are daily brought to light. "On the slope between the actual *Khirbet Zimmârîn* and the S. W. summit was discovered a large building, with remains of arcades, small and large rooms, paved partly with mosaic, partly with marble-plates. The walls, built of large hewn stones of 2 ft. and 2 ft. 5 ins. in length, are set in mortar." It seems to be a bath. Near it, several capitals of Korinthian and Ionic style, roughly sculptured, were brought to light. A cross fills the space between the Ionic volutes. This and other signs point to the Byzantine period for the construction of these baths.

A number of sepulchral caves have also been opened. They generally lie on the slopes of the mountain, having, as entrances, square openings the upper part of which is slightly arched. The interior of these caves consists of square rooms, the sides of which generally show 3 to 4 koka, the end-wall of each having two loculi. Each grave contained human remains, ornaments, such as bronze armlets, utensils of various kinds, and glass vessels. One of the glass lachrymatories of hexagonal form has a handle like a pitcher; another, a double lachrymatory, is strengthened by an inlaid spiral silver wire. Basaltic and marble mortars for pounding spices have also been found. As in some of these cases Jewish and in others Christian emblems are found, it is presumed that the nekropolis was used for both religions.—*Pal. Explor. Fund*, 1887, Oct., pp. 221–23.

PHŒNICIA.

SIDON.—*Discovery of sarcophagi.*—Further details have been recently published regarding the magnificent sarcophagi whose discovery was announced in the JOURNAL, pp. 97–101 and 156–57. No indication of their age or style had been given until a letter from Mr. George Dennis was published in the London *Times* (July 26), in which he attributes the sarcophagi to the third century B. C. The following is an extract: "I have also visited Sidon, to see the Greek sarcophagi recently brought to light there. They are most interesting, as the only proofs we possess that the Greeks in their imitation of nature aimed at truth in color as well as in form. The colors in many instances, when I saw them some weeks ago, were still very vivid, though the more delicate hues were then disappearing, and will probably vanish altogether when exposed to the light of the day. The scenes represented are chiefly combats and lion or boar hunts, though one sarcophagus is unique in showing 18 women in as many compartments in various attitudes of mourning. One of the hunting scenes betrays an undoubted imitation of a portion of the Parthenon frieze, though of manifest inferiority, both as wanting simplicity in the composition and as shirking details which give character. The art is of the third century B. C., but the date can be determined only by the character, for there are no inscriptions. Great freedom but confused composition mark the Decadence. But, as specimens of Greek polychromy, these are most valuable monuments. As no marble is to be found in Syria, they may be the work of Rhodian artists, and imported from the island."

Hamdi Bey, director of the Museum at Constantinople and Mr. D. Baltazzi were at once sent on an archæological mission to Sidon to take charge of the discoveries and continue the excavations. In order to transport these sarcophagi to Constantinople, Hamdi Bey built a road to the sea and drove piles to make a wharf for loading them.

On June 7, a new discovery of great importance was made by Hamdi Bey, by cutting through the wall of one of the previously-discovered chambers. A chamber was found in which at first nothing was remarked but two fine bronze candelabra, each about 5 ft. in height. The flooring of this chamber, however, on examination, proved to consist of a bed of great stones laid with the utmost care. Beneath these was a second bed of stones, and then a third, and under all, thus carefully covered up and hidden away, a great monolith covering an opening in the rock. In this deep chamber was found a splendid anthropoid sarcophagus in black basalt, resembling that of King Eshmûnazar, in the Louvre. It contained a mummy and a golden diadem. The lid is covered with hieroglyphs. Toward the feet of the sort of mummy which forms the lid is engraved a Phoinikian inscription

in eight lines, which is translated by M. Renan, as follows: "It is I, Tabnith, Priest of Astarte and King of the Sidonians, son of Eshmûnazar, Priest of Astarte and King of the Sidonians, who rests in this tomb. Oh man, whoever you may be, that shall discover this tomb, open not my burial-chamber, and disturb me not. For there is neither silver nor gold nor any treasure by my side. I rest alone in this tomb. Open not this sepulchre; for such an act is an abomination in the sight of Astarte. If you open my burial-chamber and come to disturb me, may you have no posterity with the living under the sun, and no resting-place with the dead."

The hieroglyphic inscription has been read by Maspéro. Beside transcriptions from the *Book of the Dead*, it contains an indication that the sarcophagus once belonged to a General Penphtah or Panephtah. The sarcophagus appears to have been made in the XXIX or XXX dynasty, and utilized for Tabnith in the early part of the third century B. C. To the south of the room containing this sarcophagus was found a sepulchral chamber divided into two compartments. The western one was undesecrated and contained a quantity of feminine jewelry: a gold necklace; two gold bracelets of beautiful workmanship; and a bracelet ornamented with colored stones, having in the centre a cat's-eye opal; several anklets, rings, symbolic eyes; and a bronze mirror. Hamdi Bey proposes to recommence operations in the early spring of 1888.—London *Times*, June 21, July 21, 26; *Revue Critique*, 1887, No. 24; *Revue Arch.*, July–Aug., 1887; *Palestine Exploration Fund*, Oct. 1887.

M. HALÉVY, the Orientalist, member of the French Institute, has arrived at Constantinople for the purpose of inspecting the lately found Sidon inscriptions, which have been transferred to the Imperial Museum. The Sultan has given 2,000*l.* from his privy purse for a new kiosk to house these antiquities.—*Athenæum*, Sept. 17.

MESOPOTAMIA.

The brick columnar-pier invented by the Babylonian artists.—It has been considered that in the massive constructions of the ancient Babylonians the knowledge and use of supports were wanting. In 1881, M. de Sarzec discovered at Telloh, not in the palace but in another part of the ruins, a remarkable pier composed by the union of four circular columns. This is very important for the history of ancient architecture. The pier is built of circular, triangular, or semi-circular bricks, whose *appareil* is masterly. The inscriptions on these bricks contain two lines more than the ordinary ones of Gudêa, and these supplementary lines mention a new construction of this *patêsi*, supposed to be a place where decisions or oracles were given, and forming part of the sanctuary of the great local divinity *Nin-Ghirsu*, who has been identified with the Assyrian *Ninip*. It is described as being

made of cedar-wood, a fact confirmed by finding in the excavations a certain number of fragments of this wood. M. de Sarzec found two other similar piers, preceded by a broad platform with two steps, indicating a monumental entrance.

On March 25, M. HEUZEY read a paper on this discovery before the *Académie des Inscriptions et Belles-Lettres*, comparing the above-mentioned entrance-piers with certain details of Jewish architecture, such as the two columns at the entrance of the temple of Jerusalem; the Porch of Judgment, with a cedar-ceiling, in Solomon's palace; *etc.* In regard to the shape of the piers, he recalled the Egyptian columns representing a quadruple lotus-stem, and the grouped piers of mediæval churches. These comparisons give the idea of a far more highly developed architectural science in Babylonia than could have been supposed.—*Revue Arch.*, 1887, pp. 356–57.

SIPPARA.—*Tablets from the Temple of Šamaš.*—A collection of Babylonian antiquities of great interest is at the present time in the hands of a private collector in England. It consists of a series of about 300 inscribed terracotta tablets relating to the revenues and tithes of one of the most ancient of the Babylonian temples at Sippara, dedicated to the Sun-god. In the work of exploration carried on at Sippara by Mr. Hormuzd Rassam, large numbers of inscribed stones and terracotta cylinders and over 20,000 inscribed tablets were obtained from the chambers of this vast edifice and were deposited in the British Museum. These monuments vary in date from B. C. 3800 to B. C. 300, and represent every class of literature, sacred and secular. On the return of Mr. Rassam to England, native overseers were retained on the site for a short time, but were last year removed. Arab antiquity-hunters from Baghdad then commenced their irregular diggings on the site, and the collection which has just reached England was thus obtained. While regretting that the recovery of those records and the excavation of so important a site should be due to so unscientific a source, the new collection will be welcome to all students, as several of the inscriptions are of great importance. The majority of the tablets relate to the collection of the revenues of the temple, which were derived from tithes and dues imposed on corn and dates, as well as contributions from pious donors. In addition to these sources of revenue, large grants of land had from time to time been made to the temple by kings and others, and were farmed, like the Wakif estates of the Mahomedan mosques or the glebe lands of the English Church. Thus, we find that, in the twelfth century before the Christian era, the king gave to the temple "a farm adjoining the city of Al-Essu (New Town), which is within Babylon, and placed it in the charge of Ekursum-ibassi, a priest." The new collection of tablets affords very clear indications of the wealth of the land of Babylonia in the seventh and sixth centuries before the Christian era. Thus, from one tablet we learn that 4,600 sheep

were given to the temple as sheep-dues in one year, the owners being allowed to redeem them on payment of certain sums. In one tablet, 10,000 measures were received in the third year of Nabonidos (B. C. 553); in another, 500 measures from one man. In addition to corn, we find the receipts for quantities of barley, dates and other fruits, oils and honey. The persons paying these dues are gardeners, farmers, boatmen, scribes, weavers, and the master of the camels, and also women, who thus appear to have been taxpayers. The collection of the taxes was appointed to certain persons, and in the reign of Nabonidos the chief-collector was Nabu-sum-iddin, while in Babylon the Egibi-firm were the tax-gatherers. In addition to these receipts for revenues, these tablets mention the reception of various material for the repairs or adornment of the temple. In the eighth year of Nabupalassar (B. C. 616) a quantity of wood and stone was received; in the seventh year of Nebuchadnezzar II (B. C. 547) a quantity of wood, furniture, and bricks; in others, straw and reeds for building purposes; while in the first year of Cambyses (B. C. 529) we have the memorandum of the reception of five minæ worth of cedar and cypress wood. In the reign of Darius we have the entry of 54 shekels of gold, a metal rarely mentioned in these tablets. One of the most interesting features of these tablets is the great care with which the accounts are kept. The names of the payers are entered in full, and sometimes the name of the father and the trade are given. The amount is entered in ruled columns, and separate payments in other columns, the total being given at the foot, and the whole sometimes countersigned by witnesses. Independent of their value as indicating the flourishing condition of the land of Babylonia and the richness of the temples, some of these tablets are of great historical value as connecting links in the chain of documents on which Babylonian and Assyrian chronology is based. Every one of these tablets is dated in month, day, and year of the king's reign when the transaction took place, and they are, therefore, a most valuable aid to the construction of the chronology of the period. The first of these tablets is dated in the tenth year of Kindalanu, the Kinladinos of the Canon of Ptolemy (that is the year B. C. 637), and forms a valuable record of this last of the Assyrian Viceroy-Kings ruling in Babylonia and dependent on the Court of Nineveh. This king's reign of 22 years terminated with the revolt of Nabupalassar and the death of Assurbanipal or Sardanapalos. On the death of the latter king several claimants arose for the Assyrian throne, among others two sons of Assurbanipal—two of these tablets give dates in the reign of the second and third claimants, named Sui-sar-iskun, a name hitherto unknown to us. This name, in the abbreviated form of Sariskun, bears a nearer resemblance to the Sarakos of the list of Berossos, the last king of Assyria. The reign of this king lasted but three years, and terminated with the suc-

cess of the revolt of Nabupalassar. In a tablet dated in the first year of Darius Hystaspes we find the Persian king claiming only the title of "King of Countries," and not the full title of "King of Babylon and Countries," because Babylon was at that time in the hand of Nidintu-Bel, the rebel. These tablets prove very clearly that, great as has been the harvest from the fields of Babylonia, much remains to tempt us to renewed efforts in the work of exploration.—London *Times*, Aug. 9.

ASIA MINOR.

LATE DISCOVERIES.—The *Levant Herald* speaks of several discoveries. A correspondent (Mr. Calvert) states in a long article that a mollah had by a dream secretly excavated in a tumulus at CHOBAN TEPESSE (Shepherd's Hill), on the Bali Dagh, in the Troad. The mollah found a tomb with some ornaments of gold and gold leaf weighing about five ounces, which were recovered for the Crown. It is here Mr. Calvert placed GERGIS. A statue has been found near MANISA (*Magnesia ad Sipylum*), in Asia Minor, but of late Roman date, and sent to the Constantinople Museum.—*Athenæum*, May 14.

ASSIM (Gulf of).—In extracting stones to transport to Constantinople for building purposes, the commandant of the Turkish frigate *Rehberi-Tevfik* discovered the remains of an ancient construction which, on being excavated, turned out to be the ruins of a Greek temple. Some statues and a large number of columns were discovered and placed on board.—*Revue Arch.*, 1887, II, pp. 93–4.

BUNARBASHI.—The *Moniteur Oriental* (April 4, 14, 29) reports the finding of some very valuable articles in a grave at Bunarbashi, consisting of a richly ornamented crown with decoration of oak-leaves and fruits, a broad girdle, a long chain, a female head-dress of gold in imitation of roses, plates, and two staves, all made of pure gold. It is expected that this find, which has been sent for examination to Constantinople, will revive the archæological war about the site of Troy.—*Athenæum*, Aug. 20; *Revue Arch.*, 1887, II, p. 95.

IASOS (Karia).—*Ancient Inscriptions.*—Mr. W. R. Paton writes in *The Classical Review* (June, 1887, p. 176): "When I visited Iasos in the month of March, a vessel of the Turkish navy had just left, which had been engaged for some weeks previously in shipping large blocks of marble extracted from the ruins for use in public works at Constantinople. This and other accessible sites in the neighborhood have for many years past furnished their tribute for the dockyard and other constructions of the capital. In order to find suitable stones the captain destroyed a portion of the mediæval wall which surrounds the peninsula, and in the foundations he came across a series of inscribed bases lying on their sides. With a care, which,

had it been exercised by others charged with a similar mission, would have preserved many valuable documents, he had them extracted whole and deposited on board. I trust they are by this time in the Imperial Museum. Some gentlemen in Choulouk obtained copies of these inscriptions, and I presume they are those published by Contoleon in the *Bull. de Corr. Hell.* for March... The wall in question is entirely composed of ancient remains; and, were it carefully destroyed, we should probably possess more inscriptions from Iasos than from any site in Turkey."

KOLOPHON.—Mr. Schuchhardt published in the *Mittheilungen des d. archäol. Inst.*, 1886, pp. 398–434, the account of an exploration of the ruins of Kolophon, Notion, and Klaros, made by him in conjunction with MM. Kiepert and Paul Wolters.

LYDIA.—*French Exploration.*—M. Fontrier's exploration of the plain of the Hermos in Lydia has led to interesting results, as shown by P. Foucart's article in the *Bull. de Corr.* Hellén., 1887, pp. 79–107 (*cf. Summary*, p. 212), in which his geographical and epigraphic discoveries are given. One of these results has been the identification of the cities of Apollonidea (*Palamont*), Mosteni (Tsobanissa), Hyrkanis (Papasli), Hierokaisareia (Sasoba), and also that of the Lykos with the Gurduk-Tchai. The entire region north of Sardis is thus made perfectly known. M. Radet has determined (*ibid.*, pp. 168–77) the site of the Lydian city Attaleia at *Yenidje-Keui* (*cf.* JOURNAL, p. 214).—*Revue Arch.*, 1887, II, p. 96.

MAGNESIA.—The *Moniteur Oriental* (March 28) announces the discovery, E. of Magnesia, near the statue of Niobe, in the probable ruins of a temple dedicated Μητρὶ Πλαστήνῃ, of a number of early sculptures: (1) a marble statue of Aphrodite, almost intact; (2) a bronze statue of the Asiatic divinity Lunus or Mên; (3) a marble statue of Kybele; (4) a basrelief of two little Erotes giving drink to geese; (5) a large bronze (?) candelabrum. All of them have been taken to Constantinople.—*Revue Arch.*, 1887, pp. 96–7.

Frieze of the Temple of Artemis.—It is announced that M. Demosthenes Baltazzi has recently discovered, here, fifteen new slabs of the frieze of the temple of Artemis, representing a combat of Greeks and Amazons, the greater part of which were brought over to the Louvre by Texier in 1835. —*Athenæum*, Nov. 5; *Revue Arch.* 1887, II, p. 122.

MYLASA.—The ship Assir, which conveyed the newly discovered Sidonian sarcophagi to Constantinople, stopped opposite Mylasa, Karia, where Baltazzi Bey secured two marble statues of the best Greek period. They had been bought for the Louvre for several thousand francs, but the transaction was broken off on account of the difficulties of transportation. From the port Iasos a short time since some blocks of stone from an old wall had been brought to Constantinople for building purposes; but, when it was discovered that they contained 140 interesting Greek inscriptions, they were seized

by the Government. Baltazzi Bey took advantage of the ship's stopping at Iasos to reconnoitre the ruins from which these inscriptions were taken.—*Pal. Explor. Fund*, 1887, Oct., p. 212.

PERGAMON.—At the April meeting of the Archæological Society of Berlin, Prof. Bohn gave an account of the results of the third campaign at Pergamon. The most important discovery was that of the ruins of the Royal palace (*cf.* JOURNAL, p. 162). Being on the very summit and guarded by earth-mounds, the remains found are few: its famous mosaic pavements were spoken of in antiquity.—*Berl. phil. Woch.*, 1887, No. 27.

KYPROS.

Professor SAYCE and Mr. FRANCIS PERCIVAL will leave England next week for Kypros, where they intend to spend a month in archæological researches.—*Academy*, Nov. 19.

Discoveries at Arsinoe.—The many important antiquities discovered at Arsinoe, and already mentioned on pp. 163–64, were sold in May at the Hotel Drouet in Paris, bringing high prices. On this occasion, M. Reinach (*Revue Arch.*, II, pp. 87–89) gives a careful description of them.

IDALION=DALI (near).—*Phoinikian Inscription.*—On pp. 164–65 of the JOURNAL, the discovery of this inscription was spoken of and a first reading given. A scientific study of this inscription was read before the *Acad. des Insc. et Belles-Lettres* (April 6) by M. Phillippe Berger. It is at present built into the walls of the church Hagios Giorgios, and consists of a single line, 1.20 m. in length. It is the dedication of a metal tank, offered to the goddess Anath by a king of Kition. The most important difference in the reading is, that the name of the king seems to be Baalmelek instead of Baalram. The translation of M. Berger is as follows: "In the . . . day of the month of Merpaïm, in the third year of the reign of Baalmelek, King of Kition and Idalion, son of King Azbaal, King of Kition and Idalion, son of King Baalmelek, King of Kition, this is the tank which Baalmelek, King of Kition and Idalion, son of King Azbaal, King of Kition and Idalion, son of King Baalmelek, King of Kition, has dedicated to the goddess Anath; may she bless him."—*Revue Critique*, 1887, No. 16.

EUROPE.

GREECE.

AMORGOS (island of).—*Prehistoric nekropoleis.*—An article by Dümmler, in the *Mitth. des d. Instit.*, 1886, pp. 15–46, calls attention to the pre-Hellenic nekropoleis of this island, in whose tombs of marble slabs the bodies seemed to have been buried doubled-up. The obsidian tools and the rude

pottery recalling the types of Hissarlik, Tiryns, and Mykenai, the fibulæ, bronze poinards, marble caps, amulets, and pearls, *etc.*, the small flat marble idols (sign of pre-Hellenic population through the Archipelago) indicate to Dümmler that the civilization of the Kyklades is intermediary between that of Hissarlik and that of Mykenai, and belongs to the Leleges, who were subdued by the Karians (who founded Mykenai), and thus serve as the connecting link between the barbarous remains of Hissarlik and the culture of Mykenai.

ATTIKA.—*Archaic Attic Statue.*—At a recent meeting of the *Acad. des Inse. et Belles-Lettres*, M. Collignon called attention to an archaic Attic statue whose fragments have lately been purchased by the Louvre. It represents a naked standing male figure, with hands clasped, of a type like that of the series to which the "Apollon of Tenea" belongs, but which is new in Attic sculpture. According to M. Collignon, it may have rested on a base similar to many Attic funerary monuments which probably supported, not stelai with basreliefs, but statues.—*Revue Critique*, 1887, No. 18.

PROF. MILCHHÖFER'S DISCOVERIES IN ATTIKA.—In view of the text which he is preparing for the *Karten von Attika*, Prof. Milchhöfer has made careful researches throughout Attika for ancient inscriptions of topographical interest. He has not only succeeded in naming with certainty a large number of ancient Demes, but among his discoveries have been many sculptures of the greatest interest. He has found rich material in the abandoned and ruined chapels. Among the objects discovered by him was the interesting pedestal of a statue from Kropeia, described on p. 176 of our JOURNAL.—*Berl. phil. Woch.*, 1887, No. 18.

An archaic domical tomb.—A letter from Prof. Milchhöfer, published in the *Berl. phil. Woch.* of June 11 (No. 24), gives one of his latest discoveries. "Near Thorikos, on the West coast, at a point where I have excavated in vain, there is, on the saddle between the high pointed hill 'Viglaturri' and a neighboring lower hill on the north, a high tumulus (marked as such even on the still unpublished map of Laurion of Captain von Bernhardi); its circumference is about 150 of my paces. The hill is pierced in three places, and one can look into it by an artificially hollowed space at the north end. This appears to be a kind of pointed-arched gallery of primitive construction in which the flat slabs of limestone (rather rough and not large) are arranged so as to approach as they rise and then join at the summit. The northern end is rounded off in apsidal fashion, the southern end is not covered. Though evidently high, the interior is filled in with rubbish and stones so that the original height cannot even be approximately determined. It still measures 2½ metres; at this height the interior, which must grow far wider below, is hardly more than two metres wide. The length from north to south equalled about 20 of my paces. Towards the middle the construction is somewhat crushed in by the weight of the hill.

"There is no analogous construction to this in *Greece*. It reminds one of some tombs in Etruria, especially the Regulini-Galassi. The pointed style is repeated, though in later and more artistic form with regularly cut stones, in Thorikos itself at the back of the theatre.

"I have urged the clearing out of the interior on Dr. Schliemann and the general Ephor of Antiquities, Kavvadias."

Sanctuary of Dionysos in Ikaria.—On May 9, as Prof. Milchhöfer was returning from Marathon to Kephisia, he took the road that leads from Vraná to the northeastern declivity of Mt. Pentelikon. At its foot lies the place called *Dionysos*, now in the midst of pine woods. There are here the ruins of a church of remarkable ground-plan with remains of a small fore-court, a square wide portico with unsymmetrical door, having in its centre a large marble urn, then a sanctuary with a single large apse. Some beautiful Byzantine ornamented slabs, either lying about or built in, show that a still earlier and probably larger church stood on this site. The tolerably well-preserved walls are almost entirely built of ancient blocks of Pentelic marble, generally of large dimensions, taken from some ancient circular construction; others from the jambs and supports of the doors; others lie about. The largest, once 2.80 met. long, bears the inscription in large letters, Αἰνίας Ξάνθιππος Ξανθίδης νικήσαντες ἀνέθεσαν (*C. I. G.*, 237). It is the epistyle-beam of a large choregic monument. A similar stone, still 1.67 met. long, bears the letters ΕΥΤ▪ | ΚΑΙΤ▪. The circular building from which came the stones of the apse call to mind a choregic monument like that of Lysikrates in Athens. The remains of an altar and a number of bases with hollows for votive offerings show that a famous sanctuary stood here. Besides Athens, Eleusis, and the Temple of Sunion, there is no ancient centre of worship which showed such considerable remains *before any excavations*.

That the sanctuary was of Dionysos is shown by the name of the site, and is confirmed by an inscription in letters of the IV cent. B. C.: Κηφίσιος Τιμάρ(χου?) | Ἰκαριεύς | εὐξάμενος ἀνέθηκε | τῷ Διονύσῳ. A monument of such importance—as is shown by the remains—cannot be unknown to fame. Prof. Milchhöfer considers the site to be without doubt that of Ikaria, the Demos of Ikarios, where the god first visited, and he brings forward various proofs of the fact. Leake placed Ikaria in this neighborhood.—*Berl. phil. Woch.*, 1887, No. 25.

ATHENS.—EXCAVATIONS ON THE AKROPOLIS.—The following archaic marble sculptures have recently come to light on the Akropolis: a statue without head or ends of feet, more than life-size; another, life-size figure without head, of polished marble; an indeterminable statue; the upper half a statue belonging to the earliest style of art; a small head of archaic style; bases of columns which served as supports of statues. Besides, there were

found two bronze statuettes of Athena about 25 centim. high (?) of beautiful execution. According to the Ἐστία (Δελτίον 541 of May 10/22) one of these, found near the Erechtheion, represents Athena Promachos, and is evidently that described on p. 169, though there described as 35 and not 25 centim. high. The figure wears a long robe, girdle and crested helmet; the right hand is raised as if to hurl a spear, the left carries a shield with which she protects herself. The period is pre-Pheidian.—Ἑβδομάς, 1887, No. 15, May 9 (21).

Among discoveries made during the year are (1) a male bearded bronze head of archaic style and great value, and (2) some inscriptions bearing the names of two famous artists, Archermos of Chios and Onatas of Aigina (*cf.* Professor Merriam's paper, p. 315).

Pelasgic remains on the Akropolis.—North of the Erechtheion there have been found some vases of Mykenaian style, and remains of houses similar to those of Mykenai and Tiryns. The importance of this discovery for the history and topography of the Akropolis is evident: these are remains of the Pelasgic period, when the Akropolis was not a sacred spot but was occupied by dwelling-houses.—Δελτίον τ. Ἐστ., No. 530.

The design is to continue the excavations till the whole surface of the Akropolis has been investigated to the bed-rock.

Pelasgic approach to the Akropolis.—Just east of the Erechtheion a discovery has been made, during the summer, which is of great importance to the early history of the height. This is a Pelasgic approach to the citadel, hitherto unsuspected, somewhat like that at Mykenai on the N. E. side of the hill. Two low walls of the Pelasgic type run northward inclosing a narrow passage which gradually enlarges and slopes downward by an easy descent till it approaches the wall of the Akropolis; then they turn abruptly to the east and the passage falls by a quick descent, part of the way by steps, and partly through a cutting in the rock, till at a considerable depth it emerges from the present wall where the latter has turned to the S. E. The low wall on the east side of the passage is continued for some distance eastward from the angle, and may have inclosed the ancient palace on the hill. The so-called Themistoklean wall of the Akropolis blocked up this Pelasgic approach entirely; and the part within appears to have been covered in during the levelling process that followed the construction of that wall.

Archaic male statue.—The wall itself was here composed of a great variety of material, large and small stones, a portion of a small column, *etc.* Embedded in these, near the bottom, was found an archaic male statue of white marble in so good a state of preservation that even the polish is visible in some parts, though the breast is deeply corroded in places. It lacks the head, a great part of the arms, and the legs from

the knees. The shoulders are broad and square, the waist and hips narrow; and, while archaic, it bears much of the charm of the later stages of development. It now lies on its back in the Akropolis Museum.

The Pelasgic entrance makes the third which has now been discovered within the walls of the Akropolis on the north side. The two others are west of the Erechtheion, one the long-known staircase leading to the Grotto of Agraulos (see *News*, p. 169), and the other a short distance to the west of this in the angle of the same bastion: this came to light last winter. To the east of the Pelasgic approach, the rock has been laid bare for some distance along the wall, and several capitals, drums of columns, and other architectural members have appeared in the wall and beside it. They are of poros stone and belong to the same epoch as others already known, imbedded in the wall. Some maintain that they belong to the old temple on the site of the present Parthenon, and others, to the complex of walls adjacent to the Erechtheion on the south. Some show very plain indications of having suffered from fire.

The building at the S. E. corner of the Akropolis, long known as the Chalkotheke, a name now transferred to the diagonally opposite side of the plateau near the Propylaia, has been completely excavated, and its fine walls laid bare to the bed-rock. Nothing was found to determine the character of the structure, so that it still remains a problem. But a head, smaller than life, was unearthed, together with many potsherds and a few bits of bronze. The head is in a remarkably good state of preservation (even to the nose), and represents a male, with hair arranged in two long braids crossing each other behind and brought up over the front, but there hidden by the hair brought down in all directions from the crown. The hair and eyebrows are painted a golden hue, and the pupils of the eyes dark, with a line of dark red under the edge of the lids. The lips are colored red; the eyes quite natural; and the mouth, while possessing a short upper lip, has passed beyond the typical archaic smile. Indeed, if the head is pre-Persian, it must belong to the latter part of this period, and is one of the most pleasing yet known. Adjacent to the north wall of the structure, where this head was found, a part of the old Pelasgic wall was uncovered, forming the northeast defense in the earliest days. It is built of large rocks of Akropolis-stone, without any attempt to fit them closely, and gives one the best idea of the old fortification that can be obtained on the hill. In the northeast corner of the walls were unearthed the substructions of a small building composed of very diverse materials, among them a plinth of poros stone about a yard square and a foot and a half thick, set on end, the inner face bearing the remains of a portion of foot and the traces of another upon a piece of marble let into the plinth and fixed with lead. The foot, which is preserved as far as the instep,

from the tips of the toes, is of excellent workmanship and well proportioned. On the upper edge of the plinth is an inscription in the Attic alphabet, running across from one edge to the other, reading ὄνβος : ἀνέθηκεν : ὁ Πάλου.

The closed H of this inscription and the archaic form of the other letters would place it in the first half of the VI century B. C. or earlier, while the impression produced by the foot is of something later: one of those charming paradoxes of archæology.

About 40 feet east of the steps of the Parthenon, a platform had been uncovered, composed of large blocks of Peiraeis stone, originally, as it would seem, two layers thick. The supposition that this was the foundation for the round temple of Rome and Augustus, a block of whose inscribed architrave lies close by, seems reasonable. A portion of this platform is to be removed in order to examine the mass of *débris* upon which it rests.

ADDITIONS TO THE CENTRAL MUSEUM.—During the last months of 1886, the following objects were added to the Museum. (1) The most important statues discovered at Epidauros, including seven statues and one basrelief of Asklepios; four statues of Aphrodite; three statuettes, each, of Athena and Hygieia; four of Epheboi; a number of basreliefs with Asklepios, Hygieia, *etc.*: (2) a tombstone with inscription and a basrelief from under the S. wall of the Akropolis: (3) a funeral stele with inscription and a basrelief from Sepolia: (4) a fine youthful head from Pharsala. The following arrived during Jan–Feb. 1887: (1) a fine relief representing a naked Ephebos in a chariot driven by a woman, from the Amphiaraion: (2) another, from the same site, representing a sacrificial procession: (3) the interesting bases found by Professor Milchhöfer at Kropeia.—*Revue Arch.*, 1887, II, pp. 71, 73, gives a full list and description.

BRITISH SCHOOL.—The Earl of Carnarvon presided over the first annual meeting of the subscribers to this School, held June 6 in the rooms of the Society in London. Valuable gifts of books have been received from the delegates of the Oxford University Press, from the Syndics of the Cambridge Press, and from many private publishers, including Messrs. Bentley, Bell, Macmillan, Murray, Kegan Paul and Trench, and Messrs. Calvary & Co., of Berlin. Some private individuals have also made valuable gifts to the library, and it is hoped that their example may be widely followed. The committee have expended a sum not far short of £250 upon the purchase of the books which it was considered most important for the school to possess. The appeals for aid made last year after the meeting of subscribers in October did not produce very much result. The new donations amounted to no more than £115; new annual subscriptions were promised to the amount of £70.15s. a year. Donations toward the establishment of a capital-fund or annual subscriptions will be received by the hon. treasurer, Mr. Walter Leaf, Old Change, E. C. As Mr. Penrose's suc-

cessor, the committee have been fortunate in securing, for two years at any rate, the services of Mr. Ernest Gardner, who is a thoroughly trained archæologist, and has had the great advantage of working under Mr. Penrose as a student during the past season, so that he will take up the work with full knowledge of what is required. It is proposed next session to provide board and lodgings at a moderate rate in the school building for a limited number of students. Information upon this point may be obtained from the hon. secretary, Mr. George Macmillan, 29, Bedford-street, Covent-garden, London, W. C., to whom all applications for admission to the school should be addressed.—London *Times*, June 7.

BARDARION (Thessaly).—*Early Roman Sarcophagus.*—Near this place a marble sarcophagus has been found, covered on all sides with fine reliefs: on the front are a man and woman surrounded and accompanied by Cupids: on the back is a man with two garlands and, close by, two eagles and lion-heads: on either end are sphinxes. Inside were found a number of gold ornaments and a coin. The latter belongs to the pre-Christian Roman period.—Δελτίον τῆς Ἑστίας, March 8 (20).

KEPHALLENIA.—The Museum and Library at Argostoli founded by Archbishop Kalligas has been enriched by a collection of 109 gold, 876 silver and 1,597 copper coins found at Same, Kephallenia, and presented by Dr. Milearesis.—*Berl. phil. Woch.*, Oct. 22.

KYTHERA.—Dr. SCHLIEMANN returned to Athens, November 27th, from Kerigo (anc. Kythera), where he attained his main object of discovering the ancient temple of Aphrodite mentioned by Homer and Herodotos; but except some Cyclopean walls there are no vestiges of antiquity.—*Athenæum*, Dec. 10.

MANTINEIA.—The excavations at Mantineia undertaken by the French School and directed by M. Fougères have been most successful. The plan of the town-walls with the gates and towers has been drawn up; the theatre and the plan of its *scena* made out; and remains of buildings discovered near the theatre; also the site of the temple of Hera, mentioned by Pausanias. The position of the Agora has been determined and the porches which surround it brought to light. A street leading from the centre of the city to the southern gate, paved with large blocks worn by cart-wheels, has been recognized. There have been found, architectural fragments, including a series of Doric capitals of various periods; marble sculptures; bronzes; terracottas; stamped bricks; inscribed tesseræ; and several interesting inscriptions. Among the sculptures may be mentioned an archaic stele on which is represented a female figure almost life-size, holding a flower (?) in her right hand; also three marble panels containing nine figures in relief. The subject represented is the musical contest of Apollon with the Satyr Marsyas. Six Muses accompany Apollon, and

hold in their hands musical instruments and manuscripts. The last panel containing the three remaining Muses has not yet been recovered. These are thought to be the reliefs spoken of by Pausanias (VIII. 9. 1) as decorating the pedestal of the group of Leto and her children. They will be published in the *Bulletin de Correspondance Hellénique*. Of the inscriptions found, one contains an archaic legal text in the Arcadian dialect; one, a list of the companions of Philopoimen, and a third, of the Roman period, relates the liberality of Epigonos who enriched the Agora and added the beautiful porticos.—*Courier de l'Art*, Nov. 4; *Chronique des Arts*, Nov. 19.

MYKENAI.—*Akropolis.*—The exploration of the summit of the akropolis has brought to light a series of walls which, by their arrangement, construction, and colored decoration, recall those of the royal palace at Tiryns. Diggings were also made on a lower level near a large tower with polygonal walls. Many walls of the Roman period were brought to light at this place. Several precious objects were picked up, notably a bronze female statuette, with chiton and diploïdion, of archaic workmanship (0.093 m. high). M. Tzountas is in charge of the excavations.—*Revue Arch.*, 1887, II, p. 76.

OROPOS.—*Theatre.*—In July and August, 1886, the clearing of the *scena* of the theatre near the sanctuary of Amphiaraos was finished. The wall of the *hyposcenion* is adorned with ten Doric half-columns whose lower portion is in some places preserved; around the orchestra were found seats with inscriptions. The *scena* is even better preserved than at Epidauros. The architraves of the upper colonnade bear inscriptions important for the terminology of theatre-architecture.—*Revue Arch.*, 1887, II, p. 76.

SIKYON.—*Excavations by the American School.*—During the spring, excavations have been carried on at Sikyon under the auspices of the American School, interesting from the fact that they were the first systematic excavations made there. Numerous ruins still exist upon the site, consisting of the theatre; the stadium; considerable remains of a large brick structure, probably Roman baths; many foundations of buildings; aqueducts cut in the rock; and traces of streets. There are extensive remains of the wall surrounding the akropolis, which was constructed by Demetrios Poliorketes. Fragments of columns also are found in and about the churches of the modern village of Vasiliká. It was thought best to confine the work mainly to the theatre. The chief object was to discover its complete plan; but at the same time it was proposed to do some digging on the foundations of other buildings, for the purpose of identifying, if possible, some of these structures with the temples or other buildings mentioned by Pausanias. Little of importance was accomplished outside of the theatre, finding no inscriptions, and only a piece of marble upon which were the toes of a statue, and an Ionic capital of ordinary stone: but the results of the work in connection

with the theatre are of great archæological value. It was one of the largest in Greece; the plan of its structure can now for the first time be studied.

The plateau upon which Sikyon lay is separated by a rocky declivity into two portions, a larger one nearer the gulf and a smaller one in the rear. The theatre was cut out of this rocky declivity. When excavations were begun, there were to be seen slight traces of the stage-foundations of the stone seats, and two large arches, one on each side of the cavea, leading from the outside to the higher rows of seats. Over the orchestra was a layer of earth, from three to nine ft. deep. The excavations have brought to light three main walls belonging to the stage foundations. The one nearest the orchestra is about seventy-two ft. long and three ft. high. At its foot, in front, an ornamental marble border extends nearly its entire length. The blocks composing this border have at the ends the masons' marks, in the form of Greek letters. Upon one of them is one of the inscriptions found. This front wall has three doors in it, the middle one being double. It is evidently of Roman construction, being composed of not very large blocks of stone, and having bricks built in it. The second wall is of a different character from the first. It is made of large blocks of stone, well laid, and is without doubt of Greek construction. Its length is about 48 ft.; its height the same as that of the first wall. It has in it only one door. The third wall is of mixed construction, part being like the first one and part like the second. It has the same length and height as the second wall. In it are two doors. At the distance of about 21 ft. from the east end of the stage a cross-wall extends between the second and third walls at right angles to them. The orchestra has an elliptical form, but the ellipse is not complete. There are five rows of seats cut out of the rock, and fourteen stairways extending upward, dividing the seats into fifteen divisions, or *kerkides*. The front row is of more elaborate construction than the rest, each seat having a back and arms.

The drainage system of the theatre seems to have been elaborate. A deep drain extends around the orchestra to the entrance, having stone bridges opposite the stairways, precisely as in the theatre at Athens. An aqueduct passes from the centre of the orchestra to the stage, and out under the middle door of the first wall. Another extends from the western side of the orchestra to the one just mentioned. In various places earthen pipes were found, which evidently served as drains. Two arches, which afforded entrance and exit to the people in the higher rows of seats, are interesting, as adding another to the very rare examples of Hellenic arches. The old theory that the Greeks did not construct arches until after they came under Roman influence must be abandoned. Another arch of Hellenic construction was found by the Germans at Olympia. That the arches at Sikyon are not Roman is manifest from their construction. There is in them no

trace of mortar or brick. In the dimensions of the blocks and the manner of laying them, the arches are exactly like the portions of the stage walls that must be attributed to the Greeks. In addition to the three main walls of the stage-structure were found two others in the rear, of Roman construction, running parallel to them. A portion of a column, apparently *in situ*, upon the outer wall, would seem to indicate that it was the foundation wall of a colonnade adorning the front of the theatre. In following up the wall last mentioned, was found a structure the nature of which is obscure, though it seems to have been a fountain of somewhat elaborate construction. In front are portions of four columns, still in position, channelled only upon the outer side. Back of the columns, at a distance of about three ft., is a semicircular enclosure, with plastered walls and a smooth floor. A great number of fragments of tiles found within would seem to indicate that the structure was roofed.

The artistic remains found are not of very great value. The most important are: the arm of a statue of more than life-size; a piece of the leg of another statue; the lower part of a draped statue found in the earth covering the stage; numerous architectural fragments, among others an Ionic epistyle of common stone, a Doric epistyle of marble, pieces of Ionic and Doric capitals, and of lion-head waterspouts (some bearing traces of blue and red paint); numerous copper coins having upon them the dove, the well-known symbol of Sikyon; a number of small earthen lamps; two inscriptions, one of the Roman period, incomplete, relating to honors to be bestowed upon certain ambassadors, the other of the Alexandrian period, recording the victories gained in various games by one Kallistratos, the son of Philothales.

A detailed report of the work done at Sikyon, accompanied by a plan of the theatre, and illustrations, will appear in the volume of Papers of the American School for the present year.—New York *Nation*, Aug. 18.

Recent discoveries: two marble heads and four nekropoleis.—We have advices from Sikyon, under date of December, which speak of the discovery of two marble heads of good Greek work, which are very important as examples of the famous Sikyonian school of sculpture: they are the first heads found at Sikyon. One was unearthed in the orchestra of the theatre: it was at first thought to be a female, but is concluded to be a Dionysos of the extremely feminine type: the pupils of the eyes are painted red, the hair golden. The other head was found in the possession of a peasant: it is half life-size, and the face is excellent.

Four different nekropoleis have been found on the slopes of the hill, and will probably yield good results.

THASOS (Island of).—*Discoveries by Mr. Bent.*—Mr. Theodore Bent makes the following report on the important excavations he has carried on here.

"During a period of seven weeks I have been engaged in excavating in the island of Thasos on behalf of the Hellenic Society and the British Association, and the results have been satisfactory, more especially in marbles and in inscriptions, of which latter I found about forty. Thasos was independent and a place of considerable importance even down to the later days of the Roman empire, owing probably to the fact that Thasiote marble was in great request in Rome and in Athens at the time of Hadrian. I propose to devote a few remarks to the chief buildings which we dug out, and the principal marbles and inscriptions which came to our hands in the course of our work.

"1. *The Roman Arch.*—About a quarter of a mile from the principal gate of the city, the gate on which the basrelief of Herakles was found, and in a direct line with what must have been the chief street of the city running from west to east, we saw two large stones appearing about 2 ft. above the present soil level; and on digging down a short distance we found a portion of a long inscription which identified the building as a Roman arch erected by the Thasiotes to the honor of the imperial family and to commemorate the victories over the barbarians, who were at that time threatening the outlying provinces of the empire. Its destruction had been complete, and the *débris* lay 10 ft. below the surface, only the four bases on which the arch had rested and the platform joining them remaining in their original position.

"The arch was 54 ft. in length, and consisted of three entrances, the central one being 20 ft. in width; the bases of the two exterior columns were the largest, being 5 ft. 3 in. square, the bases of the inner columns being only 4 ft. 8 in. square. One of the inner columns was intact, and stood 9 ft. 5 in. high, and had a pretty scroll-pattern running down one angle. The whole structure rested on a marble pavement 6 ft. 11 in. wide; capitals decorated on two sides only had adorned these columns, worked with different floral devices in very high relief, with an egg and tongue pattern below. Of these capitals we found the fragments of six. Above these appears to have run, both behind the arch and in front, a very rich frieze, 2 ft. 6 in. wide, in huge blocks of marble ranging from 7 to 10 ft. in length, the top of which was decorated with a deep egg and tongue pattern, and below this in front ran the inscription, 19 ft. 7 in. long, in two lines, and in Greek letters 3 in. deep. The legend is as follows: 'The reverend and great city of Thasos to the greatest and most divine Emperor Cæsar M. Aurelius Antoninus, well deserving of his country, great Bretannikos, great Germanikos— The city of Thasos to Julia Domna— The city of Thasos to the god L. Septimius Severus and to Pertinax.' The inscription to Julia Domna and Severus and Pertinax has the appearance of being added later, as the letters are not so well incised.

"Above this frieze was a projecting cornice, and on the top of this rested a large statue of a man struggling with a lion, doubtless a double allusion to Herakles, the traditional protector of Thasos, and the Roman triumph over the barbarians. We found all the fragments of the body of the man and the lion beneath the *débris* of the arch; but the man's head was missing and the lion's much damaged. The man had his left arm round the lion's neck; his right arm, which is missing, he held up, and doubtless had a weapon in it; he had one knee on the ground and the other leg bent forwards towards the lion: he wore a Makedonian tunic, and evidently had a scabbard by his side; the lion's haunches rested on the ground, the forepaws being fixed in the man's flesh.

"In front of the two central columns of the arch stood four pedestals, two behind and two before, carrying statues, and with inscriptions. In front of the northern columns nearest to the city, and consequently in the place of honor, stood a prettily adorned pedestal 6 ft. 9 in. high, with an inscription which tells us that the statue which surmounted it was erected by the senate 'to their mother Phloucibia Sabina, the most worthy archpriestess of incomparable ancestors, the first and only lady who had ever received equal honors to those who were in the senate.' The statue we found at the foot of the pedestal, luckily preserved by falling into a bed of sand, so that only the tip of the nose and the right hand were missing; the left hand, which hung by her side, is adorned with a large ring, and the whole body is covered by a gracefully hanging robe; the face is that of a young and lovely woman. Although not resembling statues to the same person, it is highly probable it was erected to the honor of the Empress Sabina, wife of Hadrian; the name Julia is sometimes given to her, but it is more probable that the above is a Greek attempt to spell Fulvia, a name so intimately associated with the imperial family at that time.

"Of the statue which stood on the corresponding pedestal in front of the southern column we only found fragments of drapery of highly inferior artistic merit, and an inscription on the pedestal telling us that it was erected to the 'most worthy archpriestess Memmia Belleia Alexandra, whom the solemn assemblage of the senate designated as mother.' Doubtless she was another of the same imperial family, most probably Julia Mamæa, niece of Septimius Severus and mother of Alexander Severus. The pedestal and inscription are greatly inferior in execution to those below the statue of Sabina. At the back of the arch were two pedestals, around which we also found fragments of statues; but only that on the northern side had an inscription, recording that in honor of a most worthy Macedonian certain most sacred Bacchic rites had been celebrated.

"In the neighborhood of the arch and amongst the *débris* of it we found splendid fragmentary remains of a Doric building of much earlier date. On

one stone was an inscription to Keraunian Zeus, with a thunderbolt underneath it, pointing to a temple in honor of that god having existed in the vicinity of the arch.

"2. *The Theatre* occupied a bend in the hill just inside the walls, and about five hundred feet above the level of the town. The lines of the seats, the semicircle of the orchestra, and the colonnade behind the stage erections were alone visible; and the former two were entirely covered with soil and with a thick growth of bramble, which rendered our work somewhat difficult, and which had created such havoc amongst the seats that it was impossible to follow out the circles. The inhabitants told us that, a few years before, a Turkish ship had removed all the marbles from here which bore any traces of ornamentation, and which appeared above the soil. Commencing at the western edge of the semicircle which bounded the orchestra, we discovered that below the seats, and dividing them from the orchestra, had been a wall of huge marbles, twenty-seven blocks in all, the average size of which was 5 ft. 9 in. high, 4 ft. 8 in. wide, and 10 in. thick. On each of these marbles had been inscribed two large letters, well cut and of a good period, 8 in. high. As some of the blocks were missing we were unable to recover all these letters in their order, but we got sufficient to prove that they did not form part of an inscription running round the orchestra, but doubtless were letters indicating the number of the seats. Along the top of this wall ran iron railings to protect the seats, the front row of which appears to have been so placed that the knees of the spectators would be on a level with the top of the wall. On uncovering the seats we found that names, initials, and letters were cut on all of them. One of the front seats had the letters ΡΕΙΞ, doubtless for the priests, ΙΕΡΕΙΞ; another was the seat of Theodoros, another of Onesimos, another of Herakles. Some of the names were of a much later period, scratched on the top of older ones. One seat had a large *omega*, 2 ft long, cut upon it, whilst its next neighbor had only a tiny *alpha*. All the seats were much worn, and were on an average 1 ft. 4½ in wide, 7 in. deep, and with a groove underneath for the spectator's heels. From the disturbance of the rows through the roots of the brambles it was impossible to trace more than the central passage, which was reached by steps from the orchestra through an opening in the surrounding wall. The διαζώματα were in no way recognizable, and it was impossible to decide how many grades of seats there had been, for the upper part was lost in the dense jungle of fir-trees and brambles. The orchestra and stage fittings had been subjected to serious alterations during the Roman period. Behind the proscenium had run an elegant Doric colonnade with light columns, 2 ft. 9½ in. round, and fifteen flutings supporting the triglyph, 1 ft. 6 in. high, with plain metopes, 1 ft. square; and behind this colonnade were the bases of six massive columns,

which had evidently supported the exterior decorations towards the town, which have altogether disappeared. Underneath the stage buildings, and entered from outside, was a narrow passage 2 ft. 5 in. wide, which opened into the orchestra, and was evidently one of the means of entrance for the spectators. The orchestra was 10 ft. 8 in. below the level of the stage building, which from the colonnade projected into the orchestra 15 ft., and was an erection of Roman date, as was evidenced by pieces of the Doric colonnade being used in its construction. From one extremity of the semicircle to the other was 76 ft., and it appeared as if sloping walls from these extremities to the stage had originally formed part of a longer extension of the circle, which had been reduced to suit later requirements. The diameter of the circle was 74 ft.

"Near the western entrance we found several inscriptions and three basreliefs with prayers to Nemesis attached. Two of the figures represent the usual virgin-deity, whilst the third basrelief has three figures—two females with swords in their hands, and the third the Rhamnusian Nemesis, crowned with strange headgear, with wings, scales in one hand, and standing upon a wheel.

"3. *The Temple of Apollo at Alki.*—The marble quarries of Thasos are to the south of the island. At a spot now called Alki by the Thasiotes, and some three hours' distance from the nearest village, are remains of a town of considerable size, built on an isthmus which joins the hilly promontory on which the marble quarries are situated to the land. This town was joined to the capital of the island in ancient times by a road, portions of which have lately come to view owing to the extensive burning of a forest; and about a quarter of an hour's walk from Alki we found a quarter of a mile of this road intact. It is in the bend of a hill, and is built of irregular blocks of marble, one of which is 7 ft. long by 3 ft. thick. These blocks are placed lengthways, so that the roadway is composed of only two blocks, and is of a uniform width of 13 ft. 3 in., and forms a splendid specimen of ancient Hellenic engineering skill. In the town itself, doubtless inhabited by merchants and workmen engaged in the marble trade, we saw traces of many interesting buildings; but as time was limited we devoted our attention solely to one of them, the *débris* of which rested on five grades of steps, the lowest grade coming down to the water's edge, and built of some of the largest blocks of marble I remember to have seen. The block at the northern edge of the lowest grade measured 16 ft. 11 in. in length; it was 5 ft. 3 in. wide, and 2 ft. 4 in. thick; the block at the northern angle of the top grade was 12 ft. long. The remains of the temple which stood on this platform were buried in several feet of earth, and the following is the plan of it as far as we were able to proceed in the time at our disposal. The length of the top grade facing the sea was 54 ft., and 2 ft. 4 in. from the

outer edge we found the foundation of the temple building with a façade of 45 ft. 9 in. The width of the chamber towards the sea was 32 ft. 7 in., and at the southwest corner of this we found a raised platform on which had undoubtedly stood an archaic statue of Apollo, the trunk of which we found at a little distance from the platform. It has fifteen braids of hair down the back, and measures from the neck to below the trefoil-shaped knee-cap 4 ft. 5 in.; round the shoulders it measures 4 ft. 10½ in., and round the waist 3 ft. 4 in. Strength is curiously shown by a rude development of the chest and the leg-sinews, and an inscription to ΔΑΟΞ ΑΠΟΛΛ was on the base of the pedestal on which the statue stood. Is this the wolf-god Apollo, or is it simply the dedicator's name? Several inscriptions came to hand on large stones in front of this pedestal—votive tablets from mariners thanking various gods for a good passage, *etc.* There was one to Artemis, 'who gives fair voyages,' from Eutychos the captain, Tychichos the mate, and Jucundus the helmsman of a ship; and another to Sminthian Apollo, 'who gives good voyages,' tells how the offerer had sailed round 'the misty island' (*ἀερίην νῆσον*), a curious allusion to the old name of Thasos, Ἀερία, which was given it in answer to a Delphic response to the early colonists who sought for advice from Apollo, and the god replied, 'Go to the misty island;' and, Thasos appearing to them more misty than the rest, they decided to go there, and called it Ἀερία. Amongst these inscriptions we found also an archaic head and a curious well-cut stone, 3 ft. 1 in. by 1 ft. 3 in., down the front of which was carved a head with long beard in five braids, which seemed as if it had been one side of a seat.

"The wall which divided this outer chamber from a second, was built of huge blocks of marble fastened together with iron rivets set in lead. The first two blocks on the northern side, respectively 12 ft. 2½ in. and 3 ft. 2 in., formed the base of a square-cut pattern which had evidently adorned the whole of this wall of the temple; the entrance was 5 ft. wide, and against it on the southern side stood a long inscription with the names of various Archons, Polemarchs, and *Apologoi*, a peculiar Thasiote name for the *logistai*, or auditors of accounts.

"Close to this was the pedestal of a small statue, no traces of which we found; but about 3 ft. from the wall stood the pedestal of a statue of Athena, with two inscriptions from grateful mariners on it; and near to this we found fragments which appeared to belong to a statue of that goddess. In close proximity to this we found a circular fluted pedestal of archaic date, 6 ft. 2 in. round at the base, 1 ft. 6 in. diameter at the top, 3 ft. 2 in. round the neck, and 3 ft. 5 in. high; it had twenty flutings. On the southern wall of this chamber ran another raised platform, on which we found a small altar to Dionysos, and in the wall behind it was a stone with the inscription, 'The Dionysian sacred herald of love.' This second chamber was 14

ft. 8 in. wide, and the outer-wall formed a curious conglomeration of the old Doric edifice and later Roman alterations. On the central slab were the bases of two Doric columns, 2 ft. 8 in. in diameter, and 6 ft. 6 in. apart. They stood on a platform 3 ft. 1 in. wide; but, to the south, this was continued by a narrower platform, with traces on it of a later colonnade, and before which stood two circular bases of columns of debased art. The wider platform between the Doric bases was covered with names, scribblings, and phallic designs, such as 'Aristogeiton,' 'Simos the gay, the good at heart,' and many others.

"Between the southern wall of the temple and the hill ran a narrow passage, with steps leading down to the sea. On the southern side ran a wall composed of extraordinarily long and narrow blocks of marble, doubtless a facing to the rough rock, the first we uncovered being 11 ft. 5 in. long, 1 ft. 7 in. high, and only 7 in. thick. This passage was 7 ft. 4 in. wide, and at forty feet from the entrance was divided by a wall and door. On one of the stones of the wall of the temple we found an inscription to Poseidon, 'who gives good voyages,' coupled with the names of Asklepios and Pegasos; also another stone, with the word 'Anteros' scribbled in very large letters, and some smaller scribblings.

"Undoubtedly, in the first instance, this temple was dedicated to Apollo, from the archaic statue and inscription; but evidently in later times it was the recognized shrine of many gods, where the mariners who carried the Thasiote marble to other parts placed their votive tablets.

"*Thasiote Tombs.*—One of the natural results of possessing an unlimited supply of marble was that the Thasiotes lavished it to an immense extent on the mausolea and sarcophagi for the reception of their dead: the vast cemetery of the ancient capital of the island must have been perfectly magnificent to behold in the days of its splendor, as an account of slight investigations we made amongst the ruins will testify. On quitting the western wall of the old city, which is still easily traceable, one enters a large plain, bounded on three sides by mountains, on the other by the sea. It roughly forms a parallelogram, two miles in length along the coast, and a mile and a half from the coast to the mountains. The whole of this plain is now covered with olives and brambles, but in ancient times it was covered with massive marble tombs, all erected in straight lines radiating from one point, namely, a gate in the city wall, which is still adorned on the northern side with a fine *stele*, standing against the wall, 15 feet in height, and decorated in the centre with a handsome basrelief representing a man seated on a chair and a woman playing some instrument which is unfortunately damaged but looks as if it had been a barbiton. This was in all probability the gate of the tombs through which the dead were carried.

"Of these straight lines of tombs I was able to distinguish ten quite dis-

tinctly. The finest tombs appear to have been erected on the two outer lines, namely, the one immediately at the edge of the sea, and the one running along the first spurs of the mountain. Numbers of fine sepulchral monuments, large sarcophagi with long metrical and other inscriptions, have from time to time been brought to light amongst the olive trees, notably, the so-called tomb of Antiphon, built on a small projecting rock, on which was found a figure wearing a tunic of gold, which was unfortunately stolen by a Bulgarian workman in excavating the tomb; and the colossal eagle, which is now in the museum at Bûlâq, was found amongst a nest of these tombs at the edge of a stream which runs through this plain.

"At the end of the line nearest the sea, just at the edge of the mountains and nearly two miles from the town, we were attracted by the *débris* of what proved, on excavation, to have been a handsome mausoleum surrounded by a group of sarcophagi; but, owing to its having been converted into a church in later times and thickly overgrown with brambles, it required much work before we could restore the original plan. On commencing our work at the eastern side, where the ground began to rise towards the mound, we soon came across two huge marble sarcophagi, the lids of which had been broken in, centuries ago, to extract the precious metal which the Thasiotes invariably in some form or another put into their tombs. Vases are extremely rare in Thasos, gold objects being more frequently found; and this is accounted for by their possession on the opposite mainland of the gold-mines in mount Pangaios. One of the sarcophagi had no inscription; but the other, which was 7 feet long by 3 feet 4 inches deep, and which was covered by a lid adorned at each corner with a boss, 1 foot 5 inches high, and a roof sloping up to the same elevation as the bosses, bore the following inscriptions:

ΦΙΛΟΥΜΑΙΝΗ ΚΩΜΕΙΔΟΞ ΠΡΟΞΦΙΛΗΞ ΧΑΙΡΕ
ΤΡΥΓΗΤΙΟΝ ΚΩΜΙΔΟΞ ΠΡΟΞΦΙΛΗΞ ΧΑΙΡΕ

"These inscriptions are interesting from the fact that *φιλουμαίνη* is spelt, instead of *φιλουμένη*, which goes far to prove that *αι* in those days as now was pronounced as *ε*, and the use of the diphthong suggests that then, as now, the long syllable followed the accent; and again we have *αι* and *ε* similarly confounded, which would make it appear that they were pronounced then, as now, similarly. On many Thasiote tombs *χαίρε* is spelt *χέρε*, proving incontestably that in those days the pronunciation was the same as it is in modern Greek.

"On pursuing our work, we found the fragments of another pretty little sarcophagus, adorned at one corner with a female figure with wings, holding in her hand a crown; above it and at each of the four corners were ram-heads, and a garland ran all round, supported in the front by the figure of a naked child. Close to this we found fragments of another small

sarcophagus, also adorned with ram-heads and a garland, and carrying the inscription: ΕΡΜΗΣ ΘΕΟΔΩΡΟΥ ΠΡΟΣΦΙΛΗΣ ΧΑΙΡΕ.

"The large mausoleum itself, around which these tombs were grouped, stood on a platform approached by five grades of marble steps, the platform being 27 ft. long by 11½ ft. wide at the edge of the highest grade.

"In the lowest grade of steps we found an incision had been made and a large sarcophagus inserted underneath the building; this was approached by a narrow passage between two walls, 18 ft. long; without destroying the whole superstructure we could not uncover the sarcophagus so as to see if it had an inscription on it, and, as we saw that it had been opened at the side to extract whatever of value it had contained, we deemed it best to leave it as it was. Evidently this was the tomb of the individual in whose honor the mausoleum had been erected, for it was the only sarcophagus we could find actually under the building.

"On the top of the platform there had once stood a very handsome and massive building, the lower chamber of which was formed of huge blocks of marble, with a corniced edge on the side facing the sea, namely that 27 ft. long. Apparently there had been only two blocks of marble on this side, one of which bore the inscription, ΦΙΛΟΦ | ΦΙΛΟ, in letters of a good period, suggesting that the name of the man in whose honor the mausoleum had been erected was one Philophron, son of Philophron. On the other large block we found a long metrical inscription, evidently added at a later date.

"Concerning the building which surmounted this lower chamber, we can of course offer only speculations from the nature of the fragments of marble columns and decorations found amongst the ruins. Apparently, huge stones with corniced edges formed the roof of this lower chamber, on the top of which stood an open Doric building supported by columns, of which we found many drums; these columns had been very fine, 2 ft. 7 in. in diameter at the base, and with 22 flutings; the drums had been fastened together by neatly-made iron rivets soldered into the marble with lead.

"We also found the body of a well-formed marble lion, with traces of a mane down the back, and with a girth of 4 feet 1 inch. This fragment of the lion was found on the side towards the sea, and doubtless there had been another or others at the corners of the building.

"A close examination of this one mausoleum enabled us to form some faint idea of the magnificent effect which this plain of tombs by the sea-shore must have afforded in the days of Thasiote splendor. Amongst the thickly-growing brambles are many indications of mausolea of equal magnificence, the excavation of which we did not undertake. The whole plain in which is the olive-plantation is covered with 12 feet of soil above the original level on which the tombs stood, making it of course a matter of impossibility to recover the form and dimensions of many of them.

"Tombs of the poorer class seem to have been altogether excluded from this plain, and we found many of these in lines running up a narrow valley at the back of the town. Most of them consisted of small terracotta sarcophagi about 3 feet square, some decorated with a pretty pattern, others perfectly plain, and each having in it nothing but a small vase of rude workmanship. The presence of golden ornaments in a few of the tombs which have lately been found is sufficient to account for the general rifling of them before the fall of earth had covered them, and before certain erections of later Roman and Byzantine date had been constructed above them.

"The marble-quarries of Thasos, as I have said, were situated to the south of the island, and, on a narrow tongue of land joining the marble promontory to the island, was situated a town which seems to have been the second in importance in the island, and probably wholly devoted to the commerce in marble. Here we found, buried in the sand by the shore, other tombs and fragments of beautifully-worked sarcophagi; one lid had bosses 1 foot 10 inches wide by 1 foot 3 inches high, decorated with female heads; another had the bosses decorated with wreaths of flowers, and the sloping roofs of the lids were occasionally decorated with well-worked diaper patterns. In the centre of the village stands a very large sarcophagus with a metrical inscription, which M. Perrot published in his monograph on Thasos; and on a tomb we dug up in the sand we found an inscription to the memory of a lady: the tomb was 6 feet 1 inch long by 2 feet 8 inches wide, and edged with a neat border.

"On the top of the hill overlooking the sea we found, amongst broken sarcophagi, the fragments of several inscriptions—some plain, some metrical. A thorough excavation of this spot would undoubtedly bring to light interesting and varied devices in marble sarcophagi; the ground is full of them, but owing to the accumulation of soil they are at a great depth."—J. T. Bent in *The Athenæum*, June 25, July 23; *Classical Review*, July.

Tiryns.—A special meeting of the Hellenic Society was held in July of last year to discuss the antiquity of the remains at Tiryns and Mykenai, when Mr. Penrose raised various points that seemed to him to tell against their prehistoric character. Dr. Dörpfeld, in reply, invited Mr. Penrose, or any other archæologist, to examine the site with him, and undertook to dispel by such examination all doubts as to the soundness of his (Dr. Dörpfeld's) theory. Mr. Penrose, who has recently finished his duties as Director of the British School at Athens, accepted this challenge, and the following letter will be of great interest to all who have followed the discussion so far:—

Oct. 8, 1887.

My dear Mr. Leaf,—I have just returned from an expedition to Nauplia, whence I visited Tiryns and Mykenai and also Epidauros. At Tiryns and

Mykenai I had the advantage of the company of Dr. Dörpfeld. This visit enabled me to clear up certain doubts which a previous hurried visit in the spring of 1886 had led me to entertain relative to the great antiquity of the dwelling-house, called the palace, of Tiryns and the tombs at Mykenai. The suspicious points were sufficiently brought forward in the discussion which took place in the summer of 1886. My late visit convinced me that they were all capable of explanation, and that both at Tiryns and at Mykenai the parallel antiquity of Dr. Schliemann's recent discoveries and the great Pelasgic works can be established. An important point in the controversy related to the use of the stone-saw. It was argued that the evidence of this instrument on some of the stones in the palace proved it of later date than the walls of the citadel; but I found that this argument broke down, for there were evident marks of its use on the pillars of the great gateways both at Tiryns and Mykenai.

Another very natural difficulty arose from the badness of the construction of the palace walls and the smallness of the stones used. The walls are certainly more carelessly built than one would have expected, and are generally composed of small stones; but there are exceptions, and one remarkable stone, which forms the floor of the bath-room, would have required as difficult handling as any of the stones of the fortress. There is also a harmony both in direction and extent, as marked by special quoins and returns, between the external walls and those of the palace, which very strongly points out their contemporary construction. But perhaps the strongest argument of all comes from the dwelling-house or palace very recently discovered on the summit of the akropolis of Mykenai. There are the same features almost exactly as at Tiryns, the same and even clearer evidence of destruction by fire; and upon the top of the ruins of this ancient building are the foundations of a regular Doric temple, which shows by the character of its architecture that it must have been as old as 450 B. C. Moreover, between the foundations of the temple and the remains of the palace walls some ruder dwellings had been constructed, which necessarily send back the date of the original palace considerably further. A point which at first seemed to offer much difficulty was the evidence of burnt bricks and mortar in the walls at Tiryns. I could, however, find no kiln-burnt bricks in the walls of the original structure—there are some walls clearly of later date, which interfere with the proper ground plan—and the mortar admits of the explanation that it was formed by a natural slaking of limestone calcined by a conflagration.

As to the antiquity of the tombs at Mykenai, the only argument against it is the badness of the building, which, if disproved as an argument at Tiryns, fails here also. But one proof suffices to establish their great age. The wall of the citadel has been deflected into a curve to conform to the

line of the conical mound, so that this Pelasgic work must have been either contemporary, or else the tombs are older still, and existed as an extra-mural cemetery before that portion of the citadel was enclosed.—*Athenæum*, Nov. 12. *Cf.* W. J. STILLMAN's letter to S. Reinach, *Revue Arch.*, July–Aug .,1887, pp. 76–78.

VOLO (near).—*Domical Tomb at Dimenion or Dimini.*—With regard to the early domical tomb, whose discovery was mentioned on p. 178, the following further particulars may be given. It resembles that of Menidi: the tholos is somewhat higher, measuring 9 met. with a diameter of 8.50 met. (instead of 8.35 at Menidi). The method of construction, with small stones superposed without mortar, is identical in both. The interior was filled in from above. The corridor or *dromos*, 13.30 met. long, was first cleared, and in it were found bones of men and animals, gold plaques, and fragments of vases of Mykenaian type. Similar remains were found in the tomb itself, but also several important objects, as follows: (1) *gold objects;* an engraved ring, two earrings (Schl., *Myc.*, fig. 162), a tiny pitcher (*cf.* Menidi), pearls, shells, and spirals (*cf.* Menidi), seven lilies, fourteen rosettes, many sheets of gold (*cf.* similar objects found at Menidi, Mykenai and Spata): (2) *glass paste;* sticks, shells, plaques, lily-form ornaments, rosettes, pearls, earrings, analogous to objects from Menidi and Spata: (3) *bone;* buttons, some with rosettes, square plaquette with 2 rosettes; *cf.* Menidi: (4) *bronze objects;* five arrow-heads and several rosettes: (5) *stone;* cone of black stone (*cf.* Schl., *Tir.* fig. 15), lapis-lazuli seal with figure, and two beads,—one of blue stone, the other of agate: (6) 20 *conus* shells (neolithic period), and fragments of vases sometimes with ornaments, sometimes simply with broad bands.—*Revue Arch.*, July–Aug., 1887, pp. 79, 80.

KRETE.—The Greek Syllogos has made some large acquisitions for its newly founded museum at Candia, which has been further enriched by a collection of bronzes and other antiquities from the cave of Idæan Zeus and the grotto of Hermes, presented to it by Signor Trifilli, Consular Agent of Great Britain and of Austria at Retimo.—*Athenæum*, Aug. 20.

The Museum of Candia has been enriched by the acquisition of all the objects found in the excavation of the temple of the Pythic Apollo in Gortyna, undertaken for the Italian Government by Dr. Halbherr, and of which a description was given in the *Athenæum* of July 30th. Moreover, twenty pieces of marble sculpture have been purchased. To these are to be added the 9 objects, found at Phaistos, belonging to the *Inselcultur*.

Catalogue of Kretan Coins.—A publication very important for ancient Kretan history will be the catalogue of ancient Kretan coins, which is shortly to appear at Athens at the expense of the National Assembly of the island. This work will be compiled by M. T. N. Svoronos, assistant to the well-known Herr Postolacca, Keeper of the King's Cabinet of Coins at

Athens. M. Svoronos has recently visited Krete, and has found there abundant materials for the completion of his studies.—*Athenæum*, Nov. 26.

GORTYNA.—Dr. Halbherr's new researches, here, brought to light inscriptions of the Makedonian period: notably, two fragmentary treaties concluded between the cities of Gortyna and Knossos, and another fragment which contains the beginning of a treaty of alliance between King Eumenes II of Pergamon and thirty Kretan cities.

In the treaty between Gortyna and Knossos is a final clause in which it is directed to be set up at Gortyna in the temple of Pythian Apollon. The fact that this inscription was found in the area of the public building which Dr. Halbherr has excavated here, apparently a temple (see description and plan, in *Athenæum* of July 30), leads to the opinion that this building was the temple of Apollon. That the primitive structure belongs to the Hellenic period is shown by remains of the Hellenic wall in the anterior part or vestibule (6.08 met. wide by 16.8 met. long): in the posterior part (14½ met. wide by 16 long) nothing of the primitive structure remains but the foundation: all the wall, together with the apse, being of Roman Imperial times, when the ancient building was rebuilt and modified.

Various fragments of statues were found: a fine headless bust and various fragments, thought to belong to statues of Apollon; and a foot of a colossal statue of Dionysos.—*Athenæum*, July 30.

LEBENA.—Recent epigraphical researches in Krete have resulted in the discovery of various interesting inscriptions at Ledda, a spot on the coast south of Messarà, where stood in ancient times the little city Lebena (then regarded as the harbor of Gortyna, from which it was distant only ninety stadia) celebrated for its sanctuary of Asklepios. The texts refer, for the most part, to various miraculous cures effectedby the god, and, like those recently discovered at Epidauros, are very peculiar, and interesting for the history of medicine. The longest inscription found is an *ex-voto* of a Roman of distinction, Publius Granius, who, after being afflicted for some years with a cough that was wasting him away, avers that he recovered by the use of a singular prescription, which is set forth at length upon the stone. These epigraphical discoveries will shortly be published in the *Museo Italiano*, edited by Prof. Comparetti at Florence.—*Athenæum*, Nov. 26.

PHAISTOS.—Toward the end of October last, led by the chance-finding of a fragment of gold, the peasants began excavating in this ancient city (near Gortyna), and soon brought to light a large number of objects belonging to the so-called "Worship of the Isles" (by the Germans, *Inselcultur*). The principal objects discovered (which have been acquired for the Museum of the Greek Syllogos of Candia) are the following: (1) marble statuette of a woman, nude, with her arms crossed upon her breast, after the fashion of the idols described by Thiersch in the *Abhandlungen der Münchener*

Akad. Philos. Philol., Cl. I (1835), and like the examples brought from Amorgos, and now placed in the Polytechnic Museum at Athens; (2) another copy like the above, rudely worked and without arms; (3) marble head with well-ridged nose, but without eyes or mouth; (4) gold ornament, twelve grammes in weight, in the form of a *sepia* or *octopodion*; (5) small ornamental disc of bronze with a broad rim of gold all round; (6) perforated ball of gilt bronze, channelled or fluted on the exterior; (7) terra-cotta cylinder with figures engraved on both ends, to be used for sealing; (8) head of a man sculptured in relief upon a common stone or river-rolled pebble; (9) lance-head in bronze. This is the first time that any objects relating to this pre-Hellenic culture have been found in Krete. Objects of worship that might be identified with this period have been found in the islands of Melos, Amorgos, Keros, and Thera; and Mr. Bent has made analogous discoveries in the island of Oliaros.—*Athenæum*, Nov. 26.

ITALY.

Direction of Antiquities and Fine Arts.—The Minister of Public Instruction has decided that the service of the General Direction of Antiquities and Fine Arts, at whose head is Senator Fiorelli, shall be divided into three distinct sections. Comm. Felice Barnabei will be at the head of the department of Excavations and Classical Antiquities; Cav. Francesco Bongioannini will direct that of Mediæval and Renaissance Art; and Comm. Giuseppe Costetti will oversee the Institutes of Fine Arts, Musical Conservatories, *etc.*—*Arte e Storia*, Oct. 30.

Prehistoric Museums at Susa and Domodossola.—The increased interest taken in the prehistoric antiquities of Italy is shown by the recent establishment in the mountainous region of the North, where these remains are so abundant, of two civic museums, one at Susa, the other at Domodossola.—*Bull. di Palet. Ital.*, 1887, p. 131.

PREHISTORIC AND CLASSICAL ANTIQUITIES OF ITALY.

Bologna (anc. Felsina).—*Necropolis.*—An intact tomb, found in the public *Giardino Margherita*, contained a large number of important antiquities. Among these were: two fine black-figured amphorae and several other vases; a beautiful unbroken flask of light green glass with two handles, 22 cent. high; four feet of an ivory chair joined by bronze fastenings. Other remarkable vases were collected in fragments—all archaic, some being entirely black, others with black figures: the most interesting of the figured vases are a voluted krater, two amphorae, a kylix, and an oinochoë. An interesting fact is the association of archaic black-figured vases with others belonging to a very late style, and this seems to prove Brunn's theory of the

archaistic character and late use of these black-figured vases.—*Not. d. Scavi*, 1887, p. 340.

BRACCIANO.—*Discovery of the site of Forum Clodii.*—Near Bracciano has been found the following inscription: C·CLODIO·C·F·VESTALI | PRO ·COS | CLAVDIENSES·EX·PRAEFECTVRA | CLAVDIA·VRBANI | PATRONO. This confirms another inscription found there, by which the *Claudiani* commemorated the acqueduct built for their city by Trajan, and one dedicated to the Emp. Licinius Valerianus by the *Ordo Forocloudiensium*, and gives weight to the opinion that the ancient city of *Forum Clodii* (Plin. *H. N.*, III. 52) was situated near Bracciano, on the hill of S. Liberato.—*Not. d. Scavi*, 1887, p. 107.

BREONIO (Veronese).—*Palethnological researches.*—Cav. Stefano de' Stefani recommenced palethnological researches in the commune of Breonio Veronese, during the first part of June. Among his discoveries is that of a centre of manufacture of lithic objects: "selci," arrow-heads, lance-heads, knives, chisels, *etc.* A number of the "selci" found are worked in that peculiar form which caused some non-Italian archæologists (esp. De Mortillet) to regard them as modern mystifications. The discoveries confirm fully all the observations already made on the various groups of lithic material existing in this region and on their relation to each other. The work is not yet finished.—*Bull. di Palet. Ital.*, 1887, Nos. 5–6, pp. 98–9.

BRESCIA (province of).—*Ibero-Ligurian antiquities of the neolithic age.*—Professor Pigorini had already, some time since, shown that the Ibero-Ligurian populations, spread over Italy during the neolithic period, had the custom of placing in their tombs, from ritualistic reasons, a vase like a *bicchiere a campana*, which in form, ware, technique and style is characteristic of the ware of the dolmens. Such a vase, together with objects of similar style, has been found in a tomb discovered at *Cà di Marco* in the province of Brescia. An important consequence is that, this tomb being attributed to the Ibero-Ligurians, it follows that the great necropolis of Remedello, only three miles distant, those of Cumarola (prov. of Modena), Sgurgola and Cantalupo (prov. of Roma) also belong to the same tribes, though referable to a later period, when objects had been introduced which were foreign to original Ibero-Ligurian manufactures.—*Atti R. Accad. dei Lincei, Rendiconti*, vol. III, fasc. 8, April, 1887.

CIVITA CASTELLANA=FALERII.—*Discovery of two Etruscan Temples and of a Necropolis.*—Important discoveries have been made during the last year at Civita Castellana, the site of the ancient city of Falerii, founded, according to tradition, by an Argive colony, whose great sanctuary of Hera was famous even among the Romans. These excavations have brought to light monuments and antiquities that cover the artistic history of the city from the VI to the III cent. B. C. The most important discovery was an

Etruscan temple, the first yet discovered. On account of the extent and variety of the excavations carried on, it will be convenient to reproduce from the *Notizie degli Scavi* the plan of the modern town and its neighborhood, on which the various excavations are marked: (*a*) temple of Celle, (*b*) road of *Cava del Lupo*, (*c*) *vigna Rosa*, (*d*) Etruscan road to Clementino bridge, (*e*) temple area in the *fosso dei Cappuccini*, (*f*) road from the temple of Celle towards Corchiano, (*g*) Vignale property, (*h*) plateau of Etruscan Falerii, (*i*) entrances to the city, (*l*) Terrano, (*m*) Montarone, prob. inhabited in Italic period, (*n*) necropolis of *vigna Rosa*, (*o*) necropolis *Morelli* (*p*) necropolis of *La Penna*, (*q*) necropolis *Valsiarosa*, (*r*)

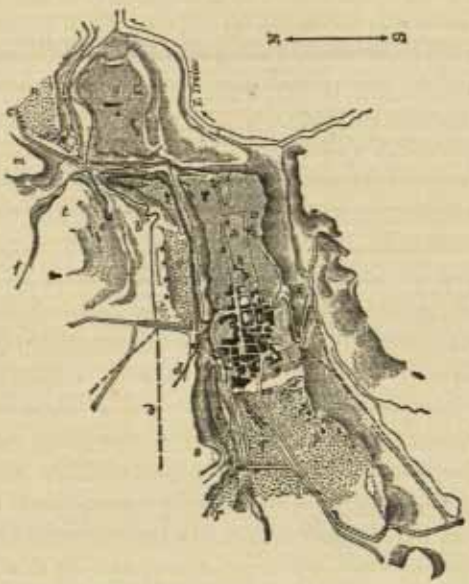

FIG. 20.—*Plan of Civita Castellana and its neighborhood, showing the area of the ancient city of Falerii and its necropoli.*

necropolis *Gori*, (*s*) group of tombs N. of Terrano, (*t*) group of tombs E. of Cappuccini, (*u*) temple of *Lo Scasato*.

Temple at Celle.—Until now, the description of the Etruscan temple in Vitruvius has been the main authority for its form and the details of its architecture. This is changed by the discovery at Celle, in a low place at the foot of a hill, of the remains, in excellent preservation, of a large temple of which there were found not only the ground-plan, the mosaic pavements, part of the walls in the rear, but a large portion of the sculptural and pictorial decoration, and the ornamentation of the interior and exterior: unfortunately, the front part had been destroyed by the passage

over it, from early times, of a rapid torrent. Its central position is indicated by the fact that more than four ancient roads led to it. The rear part of the temple is built against a rocky cliff: the narrow space preventing a perfect orientation of the temple, it was built from N. E. to S. W. The construction is of three cellæ, according to the traditional arrangement; the main difference being in the existence of a closed chapel or *sanctum sanctorum*, which contained the archaic image of Hera. A platform of blocks of squared tufa, put together without mortar, formed the stylobate, and on this were found the remains of a rear-wall, forty-three met. long, built, apparently, parallel with the cliff, but at a little distance from it, so as to allow a passage between the wall and the rock. This rear-wall was three met. thick and ended in two antæ, projecting somewhat along the sides. Four partition-walls, each 1¾ met. thick, projected forward from it, dividing the building into three parallel cellæ, leaving at the sides space for the wings of the peristyle. The latter are 7 met. wide, as is the central cella, while the two side-cellæ are 4 met. in width. This is known to have been the usual disposition of the Etruscan temples, but an unexpected variation from the descriptions was found in the shape of a sort of chancel, or quadrangular apse, formed by extending the central cella about eight met. beyond the main rear-wall, and raising the pavement of the extension a step above that of the rest of the building. If we could suppose the partition-walls between the middle and side cellæ to be replaced by columns, this disposition would, without further change, be substantially that of the Christian basilica. In the centre of this apse there rises a large quadrilateral base, formed of squared tufa, sustaining a large stylobate, evidently the pedestal of the archaic statue of the deity, the head of which was found lying beside it. This head, carved in peperino, represents a perfect type of the most archaic Etruscan art. It is of large size, with low forehead, arched eyebrows and almond-shaped eyes, flat nose and prominent chin. The hair is divided into four masses, separated on the forehead, two of which surround it and fall down behind, while the others are drawn back on the occiput. The head was encircled by a bronze *stephane* or circlet of most archaic technique, composed of plates fastened together with nails. Just behind the pedestal of the statue was a pit in the floor, partly filled with votive offerings; and attached to the rear-wall of the apse was a basin, into which spring-water from the mountain was brought by a conduit through the wall.

The walls were decorated with frescos, of which, unfortunately, only small fragments have been discovered. These frescos were executed on plaques of whitish terracotta covered with a thin white plaster, of which about fifty pieces were found: these were fastened to the wall. The large-figured compositions are not comprised within a continuous frieze, but are

in separate compartments bordered by white palmettes on a black ground: under them was a painted base with Greek rectangular pattern in red on a red and black ground. Part of a female bust, drapery, the profile of a youth on a black ground, are nearly all that remains, but these are sufficient to show that the art was correct and developed—similar to that of the first Golini tomb at Orvieto and the earliest part of the Tomb of Polyphemos at Tarquinii, where the Etruscan element is already transformed into Græco-Roman art. The cellæ were lighted by large windows which had been closed by openwork terracotta slabs, of which many fragments were found: some of these were modelled in relief on one side, and painted on the other, the former probably facing inwards, the latter outwards. The greater part of the fragments found belong to the decoration of the friezes and the gable. Two elements constituted the continuous frieze that encircled the front and sides of the building: (1) a strip with palmette and spiral decoration, stamped and colored white on a black ground, and (2) a strigiled cornice of slight projection, about 0.45 met. high, with a tore at its base. Holes in this terracotta decoration go to prove that it was fastened by nails to a wooden background, and that the skeleton of the frieze, gable, and perhaps of the atrium and peristyle, were of wood. Of the decoration of the gable there only remain four fragments of figures in high relief, applied to terracotta slabs which were in turn nailed to the framework of the gable. These fragments are: the right leg of a youthful male figure, with a piece of the chlamys: two large fragments of rich drapery of a female figure in a thin tunic that shows the forms of the body, and a himation that rises from the back to fall in front over the left shoulder, a piece of the garment preserving its red coloring; this fragment, which belongs to a figure half life-size, gives a front view of thighs and chest up to the neck, including the left arm: another fragment is of the nude right breast of a female figure. These beautiful fragments are examples of Græco-Roman art at its highest perfection, and contrast with the above-described decoration, which belongs to a decaying local art. To this local art belong also the antefixæ found, among which is especially to be noticed that with a *protome* of a faun with long red beard, red face and white eyes, crowned with a vine-garland; it is in low relief and of marked Etruscan style: all the antefixæ represent fauns and nymphs. There were also found fragments of the roof-covering of the temple that corresponded entirely with the antefix-openings.

A reconstruction of the temple is made easier by Vitruvius, and by the known arrangement of the temple of Jupiter Capitolinus, of which the division into three parallel cellæ, pronaos and peristyle, and the early terracotta decoration, are entirely similar to this temple. The approximate measurements would then be: width, 43 met.; length, 50 met.; depth of

atrium and of sacellum, 25 met. each. It is probable that our temple was hexastyle, *i. e.*, had six columns on the front. That portion of the middle cella which is raised and lengthened in the shape of a quadrangular apse, forming the unusual feature, leads to the conjecture that this part of the building belonged to an earlier construction, and that being of peculiar sanctity, because containing the archaic image of the goddess, it was respected at the time of reconstruction in the third century B. C.

The size, magnificence, and position of this temple lead Gamurrini and Cozza to believe it to be the identical famous temple of Juno *Curitis*, the patron goddess of Falerii. Its festivals and the splendor of the temple were described by Ovid and Dionysios of Halikarnassos, and their descriptions are strong evidence for this identification.

Ruins of a second Temple.—While the temple above described was being discovered at Celle, Count Cozza began to explore that highest uninhabited part of Civita Castellana, near the hospital, which is called *Lo Scasato*. At a depth of only half a metre, the ancient level appeared: it was everywhere strewn with fragments of terracotta sculptures whose size and number indicated that the temple they adorned was large. Unfortunately, no trace of the plan of the temple remains; its total destruction being due to the continuous succession of buildings on this site. An examination of the fragments make it possible to distinguish the elements that formed the trabeation, the friezes, the gable, *etc.* The frieze repeated the common decoration of spirals alternating with palmettes colored white and red on a black ground, as in the temple at Celle. This frieze was divided from the crowning cornice by a small tore. The cornice resembles that of the other temple, has a slight projection, and is divided up by strigiled leaves with traces of coloring, being covered with whitish stucco. The tympanum was crowned by another tore that framed the reliefs, above which was again the strigiled cornice finished with a quarter-circle moulding, with trilobated leaves colored yellow on a red and black ground. The antepagmenta of the trabeation and the upper part of the tympanum have holes at regular intervals in which the nails still remain: this, combined with the absence of mortar, confirms the supposition, suggested for the temple at Celle, that the ossature was of wood. Of the tympanum-sculptures there remain: (1) head of a young woman, two-thirds life-size, with tightly-curled hair held by a high *sphendone*; the face is covered with whitish stucco, and the hair is colored dark red: it was attached in profile: (2) fragments of a nude male statue—right eye and temple, thorax, arm, sword-handle, left leg, and portions of flying drapery: (3) fragment of the forehead of a youth: (4) the more usual antefixæ are represented by a *protome* of Faunus with rounding curly beard and hair covered with a tiger-skin, the paws of which are tied around his neck: (5) a large number of antefixæ containing small figures in relief.—*Not. d. Scavi*, 1887, pp. 137–39.

Necropolis of La Penna.—The large necropolis of Falerii has been explored in several of its parts: near the city-limits are two sites with traces of tombs, one on the left, called *La Penna*, on the road to Nepi, the other on the right, called *Valsiarosa*, on the Tarquini estate. The tombs excavated at *La Penna* are the earliest yet found: their content corresponds with that of the so-called Egyptian tombs at Tarquinii, and among them are many objects with graffiti that recall the period of the case-tombs at Tarquinii, Visentium, *etc.* The tombs explored are chamber- and trench-tombs: all the former, with two or three exceptions, were found to have been despoiled; the latter contained objects that varied but little from those found in the chamber-tombs. The trench-tombs occupied the highest and flattest part of the ground, and consisted of rectangular trenches, 1.40 met. wide by 1.70 met. long, cut to a depth of about two metres. On the bottom-level, on the long sides, there were opened two *loculi*, about a metre wide, ending at the head in a round niche: after the body and the funerary objects had been placed in them, these niches were closed by large parallelopipeds of tufa, leaving the central trench free. The tombs are orientated so that the head of the defunct is always turned toward the east, *i. e.*, toward the walls of Falerii. The dampness of the ground has led, in great measure, to the destruction of the contents. The group of vases surrounded the head in the circular niche; a small number were placed at the feet. There is no indication of the archaic age in the eight tombs opened. The four hall-tombs opened are situated on the tufa-front which surrounds the plateau on the south side. One of these is of especial interest, as evidently it had been transformed several times, and showed traces of burial at three distinct periods; as is proved also by the three classes of vases it contained. To *the first period* belong (1) a large vase with cylindrical body and hemispherical bottom, two long handles ending in goat-heads, and some graffiti, especially two confronting horses; (2) a vase of similar style, somewhat smaller; and (3) a number of fragments of vases of the same class, covered with graffiti filled in with red ochre. These vases belong to the most archaic period, when the first attempt at drawing figures was made. In *the second period*, the tomb was doubled in size by opening up the left side: belonging to this time are only five small and unimportant vases, which repeat the form of the *Villanova* cinerary urn. *The third period* contributes some good vases: a krater, whose paintings show it to belong to the Campanian school, has two Fauns with circular shield; richly robed females with a sceptre, before one of whom stands a male genius; Bellerophon on horseback, casting a lance at the flying Chimæra, *etc.*; the back contains a Bacchic procession. Among other vases found in different tombs are, (1) a bucchero vase with two inscriptions; (2) a red-figured vase, with Latin inscriptions, belonging to an artistic

development that now appears for the first time, and around which can be grouped some other vases of similar style but without inscriptions.

Later excavations were concentrated on the hall-tombs, in most of which the traces of three successive tumulations, as noticed above, were evident, the last of which corresponds to the close of the third cent. B. C. A large number of vases of various styles were recovered from these tombs: among them are some rare archaic examples, and some good Campanian red-figured vases among many of poor local style. Beside vases, the excavations yielded inscriptions, bronze candelabra, mirrors, strigils, and other utensils, ornaments, and arms, in bronze, terracotta and iron.—*Not. d. Scavi*, March, April, May, July, 1887.

Valsiarosa Necropolis.—The plateau of the ex-*vigna Tarquini* was divided into "islands" by streets of tombs, cut deep in the tufa, so as to ensure a passage and to open up the entrances: one of these streets is now entirely uncovered. The excavations were begun in September, 1886: the first two archaic tombs explored had been anciently pillaged, but their contents were still interesting, as were those of the *Penna* necropolis, for an historical study of the necropolis, and as a proof of the opulence of the Faliscan people. *Tomb I* is cut out of the tufa, and is without artificial masonry: it has an almost-flat ceiling supported by a heavy pier. By later owners, three rows of *loculi* were cut in the walls, and the tufa mortuary-couches were cut away. Among its contents are three nude male bronze statuettes of early Etruscan art, and a quantity of small bronze objects, of vases and terracottas. *Tomb II* had a round-arched entrance and two piers supporting its roof, which had fallen in. It also had been devastated, and contained only some objects in one corner which were overlooked: they are mostly of bronze or bone; several pieces of gold jewelry—earrings, fibula, clasp; of silver jewelry—amphora, spinther; bucchero vases; *etc.* "Taking into account the discoveries in the *Penna* necropolis described in two preceding papers (*Notizie*, 1887, pp. 170, 262), it clearly appears that the period to which the earliest tombs of the Faliscan necropolis belongs is the *archaic Etruscan*, in the same way as the trench-tombs or *Egyptian deposits* of Tarquinii and Chiusi are Etruscan. A distant reminiscence of the Italic period is represented by the hand-made pottery, which in these tombs has reached its highest point of development, both for elegance of form and for technique. It is remarkable, among the most perfect Italic productions, for attempts at figured decoration. The remains hitherto discovered belong entirely to the Etruscans, not to Italic culture. Cell-tombs seem to have been universally employed after the destruction of ancient Falerii; and this explains the absence of a real necropolis near the new *Aequum Faliscum*, as well as the presence of loculi in the archaic tombs."

The excavations from Oct. 15 to Dec. 15, 1886, led to the discovery of

six more tombs, giving a mass of material for the study of Faliscan archæology at different periods. Remarkable are fragments of large vases with figures in relief like the fine vases from Orvieto now in the British Museum. When discovered, a number of the figures had a polychromatic decoration. There are many painted vases of the late decadence; and others (such as a large krater where each figure has its Greek inscription) are of good Attic art. Many bronzes, also, were found in these tombs.—*Not. d. Scavi*, 1887, pp. 307–19: *cf. Bull. Istituto arch. germ.*, 1887, 1.

CIVITELLA D'ARNA (near Perugia).—*Etruscan tombs.*—On this site, between Perugia and the Tiber, were found a number of so-called Etruscan tombs, of the III century, containing quite a number of precious objects, especially jewelry. *In the first tomb* were two small circular gold earrings, one end pointed, the other ending in a lion-head; also a mirror engraved with four figures. *The second tomb* yielded nothing but a silver ring. The contents of *the third tomb* were rather rich: the mortuary bed was of wood sustained by six fine bronze bases adorned above and below by three concentric circles. The jewelry, *etc.*, which show the occupant to have been a woman, consist of the following: a pair of gold earrings with rosette, from which hangs a small amphora with chains; a fine gold ring with a garnet; two silver bottle-shaped unguent-boxes; another silver spherical unguent-box with a cover and ornamented with festoons hanging from ram-heads; fragments of silver necklace. Besides, there were a few objects in bronze and bone and a sextant of Todi, of the second series with the anchor and toad. *The fourth tomb* was rich in jewelry and glass, as follows: two gold earrings, with rosette, from which hang a series of chains held together at the bottom by three undulating chains; a large ring; two finely-preserved *unguentarii* of dark blue glass; probably also two strigils, fragments of mirrors, *etc.*—*Not. d. Scavi*, 1887, p. 86.

CONCORDIA.—*Military Cemetery.*—In the cemetery of Roman soldiers has been found the following Christian-Greek inscription of an Asiatic soldier who probably belonged to one of the armies sent by the Emperors of the East to Italy, early in the fifth century: ΕΤΟΥϹ $\overline{\text{Β}}$ $\overline{\Pi}$ $\overline{\text{Υ}}$ ΕΝΘΑΔΕ ΚΑΤΑΚΙΤΕ | ΛΕΞΕΤΑΧΟϹΑΥΡΜΑΡΚΙΑΝΟϹϹΑΛ | ΛΟΥϹΤΙΟΥΚΩ ΜΗϹΦΙϹΩΡΟΥΟΡΑΝΤΙΟ | ΧΕΩΝΕΤΩΝ $\overline{\text{ΙΘ}}$ ΕΑΝΤΙϹΤΟΛΜΗϹ ΗΑ | ΕΤΟΝϹΟΡΟΝΤΟΥΤΟΝΑΝΕΥΤΩΝΙΔΙ | ΩΝΑΥΤΟΥΔΩϹΗΤΩ ΤΑΜΙΩΧ //// ΛΜΙΑΝ. On each side of the inscription was the square Constantinian monogram $\frac{\text{P}}{\text{A}\,|\,\omega}$. There has been considerable difference of opinion as to the dates given in these Concordia inscriptions. Mommsen considers them to be reckoned from the era of the Seleukidai, while Usener starts with the Cæsarean era (706 A. U.). The latter hypothesis would best suit this inscription, as it would date it from A. D. 434, which is late enough, instead of from 470.—*Not. d. Scavi*, 1887, pp. 305–7.

CORCHIANO.—*Discovery of a necropolis.*—The modern village of Corchiano is built on the *arx* of an ancient city, thought by the majority of archæologists to be the ancient Fescennia, the neighbor of Falerii. During the last year, in consequence of a lucky discovery, many of the landowners whose properties lie on various sides of the village have been excavating for tombs, and have brought to light a large number, belonging for the greater part to the fourth and third centuries B. C., though some are of an earlier date. The contents may be divided into three classes: vases; bronzes; and jewelry. Aside from a few archaic specimens, the majority of the vases belong to the late red-figured style, and appear to be of local manufacture. Among the bronzes is the first known example of the *kottabos*, a game played by Greeks and Romans (illustrated by Helbig, *Bull. Inst. Germ.*, 1886, pp. 234–42), a number of engraved mirrows, candelabra, *etc.* The jewelry belongs to the well-known class of Etruscan gold-work, and comes from the earlier tombs.

FAENZA.—*A Terramara.*—Near the Villa Abbondanzi, at Faenza, a vast *Terramara* has been discovered by the Signori Gallegati and Panzavolta. The objects unearthed up to the present are the usual vases with nail and band ornament, and some lithic arms.—*Not. d. Scavi*, 1887, p. 166.

FERMO (Piceno).—*Bronze helmet.*—An archaic bronze helmet, spherical in shape and of a single piece without joinings, has been found here. Its ornamentation consists in a series of lines of raised balls, hammered out, between which are lines of points. These lines are interrupted by four disks formed by concentric lines of points around a raised circle. Except for this peculiar decoration, it is similar to other helmets of this simple form found in the earliest necropoli, especially at Tarquinii.—*Not. d. Scavi*, 1887, p. 156.

FRASCATI.—There has been recently discovered, here, a tomb in which was found the skeleton of a man having a bronze collar on the neck: on the back part of the collar was engraved the following inscription: *Teme me | et rebocca me ad Aproniano palatino | ad mappa aurea | in Abentino quia fuggi.*—*Moniteur de Rome*, Oct. 5.

GOLUZZO (near Chiusi).—*Archaic bronzes.*—The collection of archaic bronzes discovered at Goluzzo, a half kilom. S. of Chiusi, in 1882 and now preserved in the Prehistoric Museum in Rome, are for the first time described in the *Bullettino di Paletnologia Italiana*, 1887, pp. 109–17 (pl. III). These bronzes were all refuse pieces broken up in preparation for melting down. This series may be compared with the corresponding but richer one of the *fonderia di S. Francesco* of Bologna. They belong to the first iron age, though one form of the *ascie ad alette* is intermediate between the bronze and the iron age. They are not related to the most archaic Villanova strata or to the most recent, but to that flourishing middle

age determined at Bologna by the *predî Benacci primi*, and in Maritime Etruria by the well-tombs (*tombe a pozzetto*), *i. e.*, not posterior to the IX–VIII cent. B. C.—*Bull. di Palet. Ital.*, 1887, pp. 109–17.

GRUMELLO.—*Consular Coins.*—About 800 Roman consular coins were found here lately, all silver *denarii*. Only 180 of these were examined: they were in fine condition and belonged to the following families: Antonia, Antestia, Aquilia, Caesia, Calpurnia, Crepusia, Cupiennia, Fabia, Fontcia, Fouria, Herennia, Julia, Licinia, Lucilia, Maenia, Mamilia, Manlia, Memmia, Minucia, Norbana, Papia, Pompeia, Porcia, Postumia, Procilia, Sergia, Servilia, Terentia, Titia, Tituria, Vibia.—*Not. d. Scavi*, 1887, p. 166.

LIMONE-MONTENERO (near Livorno).—*Archaic bronzes.*—In 1879, a lot of early bronzes were discovered hidden in a grotto. They have lately been donated to the commune of Livorno, and are described in the last number of the *Bull. di Palet. Italiana* (1887, pp. 117–26, pl. IV). They are in many cases well preserved, and may be divided into three groups. Among the objects are: hatchets, lance-heads, knives, chisels, fibulæ, a belt, hair-pins, armlets, spirals, rings, bits, *etc.* Compared with the bronzes of Goluzzo described above, this Montenero group presents, chronologically speaking, a greater archaism of forms, showing a slightly earlier date. The fact that a number of pieces are new or but little used, and that they were found in a grotto, suggests that these bronzes might have been an offering to some divinity, though it is more likely that they formed a movable stock of bronzes.

LUCANIA.—*An ancient City.*—Cav. Ferd. Colonna reports his discovery of the site of an ancient city in the commune of Accettura on the mountain called *Croccia Cognato.* The city had a double wall; one, 1340 met. in perimeter, inclosing the entire city; the other, 679 met. long, surrounding the acropolis. It has the shape of an irregular trapeze with a lower acute angle. The walls are between four and six metres in thickness, formed of a mixture of large blocks and rubble without cement. Close to this site, on another spur of the same range, is a village with walls of similar construction.—*Not. d. Scavi*, 1887, p. 332.

MANDURION.—*City and Necropolis.*—About midway between Lecce and Tarentum is the site of the ancient city of Mandurion, founded at a very early date, and rendered famous by its desperate resistance to Archidamos of Sparta (who was killed before its walls), to Hannibal, and to Fabius Maximus. Of the Messapian (pre-Roman) period its famous and strong double walls remain, with a perimeter of about three miles, built of local calcareous sandstone in regular isodomic construction. Though rich in antiquities, the ground within and without the walls has never been regularly explored. In 1872, an important find of prehistoric bronze arms

and utensils was made. During this year, discoveries were made in its necropolis. The 13 tombs unearthed are all within the walls, on the property of the Signori Gigli. They are rectangular in shape, generally about 1.60 by 0.90 met. in size, cut in the sandstone to a depth of about one metre, and covered with large slabs. No inscriptions were found in the tombs, but many vases, some gold ornaments and iron strigils. The figured vases have white or yellowish figures on a black ground.—*Arte e Storia*, 1887, No. 17.

MARINO (near).—On a property belonging to the Signori Vitali, on the *Via Appia*, has recently been discovered a magnificent statue in Greek marble, which some archæologists think represents Julia, the daughter of Titus Vespasianus.—*Moniteur de Rome*, Oct. 9.

NEMI.—*Temple of Diana.*—The excavations undertaken on the site of this temple by Sig. Boccanera were continued during the month of March and brought to light many votive objects as well as coins. Of special interest are two bronze tablets with archaic inscriptions as follows:

(1) ⊓OVBLILIA·TVR⊓ILIA·CN·VXOR·
HOCE·SEIGNVM·⊓RO·CN·FILIOD
DIANAI·DONVM·DEDIT·

(2) C·MANLIO·AC(*idino*)
COSOL·PRO
POPLO
ARIMINESI

It is suggested that the C. Manlius Ac(idinus) of the inscription is the same who was consul 575 A. U. = 179 B. C.—*Not. d. Scavi*, 1887, p. 120.

ORVIETO.—*Discoveries in the Necropolis.*—Excavations have been continued in the following localities.

1. *Terreno Baiocchini*, outside Porta Maggiore. This site is close by the ancient road that led from Orvieto to Bolsena in Etruscan and Roman times. On the left (towards Orvieto) were many remains of Etruscan tombs, some *a camera*, many *a cassa*: on the right were immense walls of squared tufa, remains of a large building. Even in Roman times this locality was used for burial, as is shown by tombs with coins and inscriptions. One of these fragmentary inscriptions belongs to the II cent. B. C., and is the earliest Roman inscription found on this territory: it would indicate the date of the return to the destroyed city, and to this time belong also three uncial As. For the present, the use of the building mentioned above (perhaps a Bath), as well as that of another not yet excavated (probably a Temple), has not been ascertained. The greater part of the tombs seem to have been in the shape of trenches with walls built of tufa and containing one or two funerary urns. One of these tombs was covered with

a large square base of whitish tufa with a simple but elegant base, measuring 0.88 met. each way (= 2 Etruscan feet?), on which, it is possible, stood one of the two funerary columns found near there, one being ornamented, the other plain. That with ornamentation is of special interest, as stelæ of this kind are extremely rare in Etruria. It is of the Doric order, imported from the East, is channelled and is 1.60 met. high. It is not regular, but at the middle it begins to curve outwards, growing broader toward the base. A branch of ivy and a meander worked with masterful elegance adorn the top and bottom. Instead of a capital it probably sustained a kind of pine-cone or egg (*cf.* two stelæ in Canina, *Etr. Mar.*, tav. CXXX). The plain column is larger, being 2.30 met. high. Stones were placed to show the position of each tomb: some are of the ovoid form on a square base, as at Vulci; others are of black stone of lenticular shape on a raised base. Of especial interest is a large one, with its abacus, neck, lintel and base, and with the black stone placed in the centre of the abacus, while two plates of bronze were fixed on the sides, in one of which was a horse, and in the other a mastif, both of bronze and of the III cent. B. C. As the contents of the tombs were removed without any order or proper supervision, it was not possible to make a satisfactory classification. Still it is evident that this part of the necropolis is not very early, the earliest objects found being some fragments of vases with black figures, of a somewhat severe style. The main period is the third cent. B. C., as is shown by the many small cinerary urns, vases, bronzes, and terracotta pyramids of this time. Then, there come some traces of the close of the second and beginning of the first cent. B. C., while, above, the Romans of the Empire erected their tombs. The vases are not of great value, the majority being of Etrusco-Campanian ware.

II. *New excavations in Contrada Cannicella.*—In March, the entrance of a tomb was uncovered on Signor Palazzetti's property. Among the contents were a large number of vases and mirrors; but of more importance were the coins, which showed the date of construction to have been 230 B. C., about 40 years after the destruction of Volsinium Vetus by the Romans, and that the tomb was used until the second century, that is, for at least two generations. Both rites—inhumation and cremation—were used. The eleven mirrors found, show that eleven women were buried in it. What makes this tomb interesting for the history of keramics is the series and kind of the two hundred or more vases found in it, which are all of local manufacture: none are painted. This would seem to prove that there was no longer any importation of painted vases into the territory, and that local industry had ceased making them.—*Not. d. Scavi*, 1887, pp. 87–91.

Important discoveries in the Fondo Bracardi and Prioria S. Giovenale.—The necropolis of Orvieto extends to the S. W. across the plain and up the

hills towards lake Bolsena. The furthest portion has been explored in two sections, one at the *Cannicella* already several times referred to, the other on the properties called *fondo Bracardi* and *prioria di S. Giovenale*. The results of excavations on the latter site have been extremely important, and they are reported at length, in the September number of the *Notizie degli Scavi* (1887, pp. 344–72) by Comm. Gamurrini, Count Cozza and Signor Pasqui. Seven plates from beautiful drawings by Count Cozza illustrate the discoveries. This part of the necropolis is divided into rectangular islands by streets of tombs which it has been the object of the Government Inspectors to preserve intact. In a number of cases, the fronts of the tombs bear Etruscan inscriptions giving the name of the deceased owner: this special group of seven tombs is of particular importance as presenting the architectural features of the best Etruscan period. The tombs are well built of great masses of tufa: the inscriptions are archaic and important for the names mentioned. The abundance and variety of the contents of these tombs are such that a review and classification of them by Count Cozza and Sig. Pasqui make it possible to clearly establish certain general facts regarding the kinds and styles of vases, *etc.*, that were placed in the necropolis. The writers first give a complete descriptive catalogue of the objects, tomb by tomb: they then proceed (1) to establish the principal types of vessels: (2) to classify them in the order of the progressive succession of technique and forms. The main object is a study of the vases according to the uses to which they were put. Three general classes are made (*a*) Etruscan *bucchero* pottery; (*b*) Greek pottery; (*c*) utensils, ornaments and arms. In the *bucchero* category of black ware the vases are classified under the following heads: I, vases for mixing; II, for pouring; III, to contain liquids; IV, for drinking; V, vases for comestibles; VI, for cooking. Examples of all the various forms of vases included in these classes are given in the plates that accompany the report.

PERUGIA (near).—*Excavations at Monteluce.*—During the second half of April, excavations were carried on in the property called *Ara*, near Monteluce, close by Perugia. The tombs contained the following objects:—(1) ordinary vases; an iron lance; an iron battle-axe; an iron dagger; a bronze helmet with linear decoration; a mirror with engraved figures; two small gold earrings; a bronze hair-pin: (2) a bronze helmet; metal cuirass and greaves; a *kottabos* with its statuette; some metal vases; a lance and other arms: (3) a bronze vase with round mouth decorated with a chiselled meander, and with a semicircular handle ending in an elegant chiselled mask; a *kottabos* with its statuette; a metal vase in remarkable preservation and of elegant shape, with a mouth in the form of a laurel-leaf, with a foot, and a handle that reaches from the edge to the body, decorated with a superbly chiselled rosette; a finely-preserved bronze hel-

met with elegant decoration; an iron sword; *etc.*—*Not. d. Scavi*, 1887, pp. 167–70.

POMPEII.—*Recent finds.*—Fresh discoveries of interest have recently been made at Pompeii. Some waxed tablets have been brought to light, which, however, by the action of the water that has filtered through the earth have been reduced almost to a state of decay. It is only in a few places, where the injury has been less, that the characters impressed on the wax can be deciphered. Besides these tablets were found, at the foot of a staircase, a *tazza* of elegant form, standing on a little foot, and having two handles; also four other *tazze*, a bowl, with simple decorations round the edge, and five other bowls of a like character, four well-preserved plates, a large cup, and a small statuette on a square basement, with the figure of Jupiter seated on a throne, holding the lightning in his right hand, but lacking the left arm. The upper part of the body is nude, whilst a mantle falls over the legs and the loins, and the border hangs from the shoulder. A circular dish was also found, but in fragments; and some earrings in the form of a clove of garlic, and others with "pensile" rods. Another report says that, at the beginning of September, many surgical instruments and two speculæ were found; and, so late as last week, a lot of small vases in terracotta, and a plate or two of silver. Near these were found the remains of some *tavolette cerate*, on one of which was read a great portion of a contract for the sale of some young boys (*pueros*), the price of whom was to be paid in the Forum.—*Athenæum*, Oct. 15.

ROMA.—*The New Central Museum.*—The great national museum, the construction of which has been discussed for several years, is soon to be erected. A convention has been signed between the syndic, Duke Torlonia, and Sig. Coppino, the Minister of Public Instruction, according to which the city obliges itself to hand over to this museum, on perpetual deposit, all the antiquities which it already possesses, and all those that may be discovered in future, with the exception of the contents of the Capitoline Museums. The State will also place there whatever is found on property belonging to it in the city or province of Rome.

The Museum is to be erected between the Coelian and the Esquiline, and will cost, according to the estimates, 2,204,989 *lire*, including 246,525 *lire* for the land: of this the city is to pay one-third, the Government the rest. The Communal Council approved this convention. Work will be at once commenced (June 1887) on the construction of the part which is to contain the antiquities already discovered, and which is to cost 510,000 *lire*. The entire building is to be finished in less than three years.—*Moniteur de Rome*, May 22.

Ethnographic collections at the Kircher Museum.—Several important ethnographic collections have been added to the Kircher Museum. First in

size is that made by Dr. Finsch, composed of objects from Melanesia, Polynesia, and Micronesia, collected mainly from the Caroline, Marshall, and Gilbert archipelagoes, New-Ireland and New-Britain, and the S. E. of New Guinea: they number over 1800. Two other collections, each comprising about 500 objects, have been purchased, both formed in Western Africa; one by Count Brazza, the other by Cav. Bove. Finally, a collection of several thousand specimens was secured by Professor Lanciani while in America, consisting mainly of objects illustrating the civilization of the Zunis.—*Atti d. R. Accad. d. Lincei, Rendiconti*, vol. III, fasc. 8.

Lectures on Epigraphy.—Dr. HALBHERR, well known by his discoveries in Krete, has been entrusted by the Italian Ministry of Public Instruction with the delivery of a course of lectures on Greek epigraphy, for the year 1887–8, at the Roman University.—*Athenæum*, Dec. 24.

Archaic tombs.—Four archaic tombs belonging to the early series already discovered in this region—between the Via Merulana and the church of San Martino—have been found in digging a drain. They were dug in the ground and covered with rough slabs of tufa. *The first* contained, beside remains of the unburnt body, only two vases of the well-known Latial type; *the second* had three vases, two of which had scratched decoration, the second a raised decoration *a cordoni*. In *the third* was a complete skeleton. Two of the tombs contained some small bronzes.—*Not. d. Scavi*, 1887, p. 372.

ARCHITECTURE.—*Early Capitoline walls.*—The remains of very ancient walls, recently uncovered on the eastern side of the Capitoline hill, consist of two pieces built of rectangular masses of tufa, somewhat more than two metres apart. About twelve metres have been unearthed: it is still uncertain whether these walls formed the substructure of a peripteral temple or whether they are remains of the very early fortified encircling wall of the Capitoline *arx*. At a distance of some 40 met. has been discovered another wall, almost parallel, also built of large parallelopipeds of tufa, but perhaps belonging to a somewhat later period: it extends from the side of the Aracoeli church to the top of the hill overlooking the Via Giulio Romano.—*Bull. d. Comm. arch.*, July.

Temple of Minerva Medica.—The vexed question of the identity and site of this temple—whose position was up to the present unknown—has probably been settled by a recent discovery. In opening a new street parallel to the Via Merulana (between the Vie Macchiavelli and Buonarroti) there was found, at about two metres below the street-level, the remnant of an ancient construction in squared tufa, and near it an immense deposit of votive terracottas—statuettes, arms, legs, hands, feet, and other parts of the human body, animals and birds. The fragment of a vase has an archaic inscription which may be read as follows: *(Me)nerva[e] dono de(det)*. The site is within the Augustan *Regio V*, where the temple of

Minerva Medica is placed by the regional books; and the offerings to a health-giving divinity must be attributed to that sanctuary, whose site is determined by the construction in tufa. Among other objects found was a small male figure in bronze wearing a helmet and carrying a patera in its right hand; also a terracotta head of Minerva with the ancient Greek helmet (*αἰλῶπις*).—*Not. d. Scavi*, 1877, p. 179; *Bull. d. Comm. arch.*, May.

Porticos in the VII Region.—Sig. Borsari seeks to increase our scanty knowledge of the monuments of the *Regio VII* (*via Lata*) by examining the results of excavations made between the *via Frattina, piazza Colonna, Corso,* and *piazza Poli.* These show, taken in connection with previous finds, that the whole of the north part of this *regio* was filled with noble and spacious porticos forming an uninterrupted series that joined on to those of the *Regio IX.* These porticos were built of large blocks of travertine. The previously-discovered remains had been identified by most archæologists with a group of buildings erected by Domitian: still it is likely that these porticos were built in the time of the Flavii. In the southern part were the porticos of Vipsania Polla built by Agrippa, and that of Constantine. —*Bull. d. Comm. arch.*, May.

Building near the Chiesa Nuova.—Portions of a grandiose building have been found between the courtyard of the Sforza Cesarini palace and the square of the Chiesa Nuova. Four travertine columns were found: then, at a depth of 5 met., a large marble doorway, 1.90 met. wide: at a distance of 2.30 met. from it, were uncovered three steps of a broad marble staircase. Two more doorways of similar style were found, the distance between each being the same—13 metres. It was not possible to widen the trench so as to discover more of the building.—*Bull. d. Comm. arch.*, Sept.

House of Æmilia Paulina Asiatica.—Between the Via Genova and the Palace for Art Exhibitions, remains of a large building have been found which was once owned by Æmilia Paulina Asiatica, doubtless a descendant of the Æmilii Pauli. A violent fire melted all the bronze objects, as is proved by several molten masses, but, in one corner, a number of utensils and other articles in bronze were found, which had fallen from above. The ruins had been anciently pillaged.—*Bull. d. Comm. arch.*, Sept.

Tombs on the Via Portuense.—In the Vigna Jacobini, about one mile on the Via Portuense, was found one of the ancient tombs that flanked the Via Campana, well built of bricks, with external angles decorated with elegant pilasters of the Augustan age. Its chamber had been devastated *ab antiquo:* under its pavement were other tombs for inhumation. Near it were found numerous fragments of sculpture, decoration and inscriptions. Five other tombs were afterwards opened, the pavement of the fourth consisting of the mosaic of the Rape of Proserpina described below (p. 477). The second tomb was about six metres square and built of rectangular

masses of travertine: its peculiarity consisted in having three tombs excavated and regularly built up in the pavement of the chamber, which were originally covered with slabs of travertine. In the fifth was found the fine basrelief of Pentheus and the Maenads described below. A large number of pieces of sculpture and of epitaphs came from these tombs.—*Bullettino d. Commissione archeologica*, July.

Via Salaria.—The excavations continue to bring to light numerous tombs and inscriptions belonging to this immense necropolis, already several times mentioned in the JOURNAL.

Mausoleum on the Via Nomentana.—A sepulchral monument of fine construction and in perfect preservation was found here, but destroyed at once. It was built of large rectangular slabs of peperino, and consisted of two chambers.—*Not. d. Scavi*, 1887, p. 327.

Discovery regarding the "Aqua Augusta Alsietina."—Near the Via Clodia, about 15 miles outside the Porta del Popolo, an inscription has come to light which Prof. Barnabei reads as follows: *Imp. Caesar. divi. f.* | AVGVSTVS | (*p*)ONTIF · MAX | (*for*)MAM · MENTIS · ATTRIB · | (*in r*)IVO · AQVAE · AVGVSTAE | (*q*)VAE · PERVENIT · IN | NEMVS · CAESARVM | (*et*) EX · EO · RIVALIBVS · QVI | (*per b*)VCCINAM · ACCIPIEB- (*ant*) | (*aquam perennem dedit*). This stone was used as a covering to a water-conduit leading from the lake of Bracciano. This is the first epigraphic evidence of the *aqua Alsietina*, which the Emperor Augustus had brought from the *lacus Alsietinus* into the Trastevere, not for drinking purposes, but to feed the *naumachia*—the surplus being destined for irrigation, especially in the neighboring gardens and fields. An important question is, whether the canal was used for irrigation also along the tract of the Campagna through which it passed. This inscription is a record of a work undertaken to assist the irrigation by supplying a constant flow of water from the aqueduct above, which until then could only be used at certain limited hours.—*Not. d. Scavi*, 1887, pp. 181–86.

SCULPTURE.—*Relief of the myth of Pentheus.*—A basrelief found in May on the Via Portuense is illustrated in the July number of the *Bull. Comm. archeologica*. On it is a young man defending himself with a short sword against two maenads armed with the thyrsus, who are on the point of overcoming him. The subject is considered by Borsari to represent the last moments of Pentheus, who succeeded Kadmos on the throne of Thebes and opposed the introduction of Dionysiac rites. Having gone to Mount Kiteron to spy out the mysteries, he was discovered and killed by the Maenads. Representations of this subject are extremely rare in classic art. This basrelief probably belongs to the first century B. C., but is evidently copied from some Greek original.

Relief of the Gigantomachia.—While excavating in the *Via San Pietro-*

in-Vincoli, were discovered two marble fragments of a relief with figures which, in the opinion of Comm. Visconti, represented the *Gigantomachia:* they evidently belonged to an ancient monument. The site of the discovery was in the ancient *Regio V* of the city.—*Moniteur*, Oct. 6.

Statue of Fortuna.—On the Via Merulana there has been found a statue of Fortuna which is in a perfect state of preservation except that the extremity of both arms is missing. It is similar to the statue found a few years ago at Ostia, now in the Braccio Nuovo.—*Moniteur*, April 10.

Archaistic Sculpture.—In the Villa Ludovisi a piece of sculpture was found of peculiar shape and style, similar to the front and sides of a sarcophagus, with a relief on each face. The face has suffered by the destruction of its upper part, thus cutting off the head and shoulders of two female figures dressed in long chitons with fine folds, who stoop over and hold a third female who is on the point of sinking through the ground in the centre. On one end, a graceful naked female figure seated, with crossed legs, on a cushion plays on the double pipe, while on the opposite end a fully draped female, with himation covering her head, seems to be making an offering. The style is severe and correct, and decidedly archaistic: it is probably a work of the Augustan age.—*Bull. d. Comm. arch.*, Sept.

Mosaic.—*The Rape of Proserpina.*—A mosaic pavement found outside the Porta Portuense, in the *Vigna Jacobini*, represents, in black and white figures, the Rape of Proserpina. It formed the pavement of a sepulchral chamber 3 met. long by 87 cent. wide. Mercury holds the reins of the infernal chariot with his right, standing in front of the horses, while in his left, from which the chlamys hangs, he holds the caduceus. The next figure is that of Minerva who advances rapidly, wearing a helmet and carrying an Argolic shield and lance in her left: she gazes at Proserpina and with her right makes a gesture to Mercury commanding him to stop. Proserpina is on her knees, surprised in the act of gathering flowers: she turns imploringly to Minerva, while Pluto bends over and takes her in both arms. This is one of the few instances in which the subject is represented at the time when the maiden is surprised, not after her capture.—*Bull. d. Comm. arch.*, May.

Inscriptions.—*Inscription at the Sette Sale.*—The following important inscription has come to light: *Mag(istri) et flamin(es) montan(orum) montis Oppi(i), de pe[c]unia mont(anorum) montis Oppi(i), sacellum claudend(um) et coaequand(um), et arbores serundas e[u]raverunt.* It is the only written monument referring to the *mons Oppius*, to the ancient *sacella* of the Septimontium, and to the internal administration of the city before the regional division of the year 747 and the new institutions of Augustus. Hence, its great historical importance (pl. VIII). In the Republican period, when the city was divided into the four Servian regions, the inhabi-

tants of the old Septimontium were called *montani*, while those dwelling in the neighboring *pagi* were called *pagani*. The early religious rites were confined to the former, were *non populi, sed montanorum*. This inscription shows that the religious fêtes were regulated not only by the flamens but by the *magistri*, as heads of the *Compitalic* association, and that the inhabitants of each mount had a common fund for religious worship. The *sacella*, of which one is mentioned in the inscription, were open courts surrounded by walls and sometimes by woods, within which was an altar. There were four of these *sacella* on the Oppian mount, each having one *flamen*. The entire Septimontium contained twenty-four chapels divided into four groups. This inscription, of the last century of the Empire, records the restoration of one of these, the surrounding of it with a wall, the levelling of the ground about it, and the planting of trees inside.—*Bull. d. Comm. arch.*, May.

Inscription of Virius Lupus.—An inscription found in a very fragmentary condition gives for the first time some of the offices of that distinguished man, Virius Lupus, who was prefect of the city in 278–80. It reads: [. . . *Viri*]*o Lupo cl*(*arissimae*) *m*(*emoriae*) *v*(*iro*) | [*consuli*], *praef*(*ecto*) *urbi, pontif*(*ice*) *d*(*ei*) *S*(*olis*) | [*iudici s*]*acrarum* [*co*]*gnition*(*um*) | [*per Asiam?*] *et per ori*[*e*]*ntem, praes*(*es*) | [*prov*(*inciae*) *Syriae*] *coeles et Arabiae* | . . . . |.—*Bull. d. Comm. arch.*, July.

Inscription regarding the Tiber and the Bridge of Agrippa.—On the left bank of the Tiber, behind the church of *S. Biagio della Pagnotta*, there came to light, *in situ*, a cippus of travertine, belonging to the series relating to the river-banks. The bridge of Agrippa is here mentioned for the first time, and its epigraphic and topographical importance is very considerable. It reads: PAVLLVS · FABIVS · (P)ERS[*icus*] | C · EGGIVS · MARVL-L[*us*] | L · SERGIVS · PAVLLVS | C · OBELL[*iu*]S · RV . . . . | L · SCRI-BONIV[*s*] . . . . . | CVRATOR[*es*] [*Riparum*] | ET · ALV[*ei*] [*Tiberis*] | EX · AVCTORIT[*ate*] | TI · CLAVDI CAESA[*r*]IS | AVG · GERMANIC[*i*] | PRINCIPIS · S · [*C*] · RIPAM · CIPPIS · POS[*itis*] | TERMINAVERVNT · A · TR[*ig*]AR[*io*] | AD PONTEM · AGRIPP[*ae*]. It shows, by the names of the four senators, which are quite new, that the college of four senators, presided over by a consul, renewed yearly, which had the care of the banks and mouth of the Tiber, which was instituted by Tiberius in 15 A. D., lasted up to Claudius, 34 A. D., the year of the consul Paullus Fabius Persicus. The inscription also indicates for the first time the exact site of the Trigarium, a part of the *Regio IX*, as being along the banks of the river. The *terminatio* made by Claudius extended then from the Trigarium to the *Pons Agrippae*. The mystery as to whether the bridge of Agrippa could be either the Ponte Sisto or the ruined *Pons Triumphalis*, was settled, shortly after the finding of the inscription, through the dis-

covery, by Sig. Borsari, of the ruins of a bridge 160 met. to the north of the Ponte Sisto. The superbly constructed fragments of the head and one of the piers, formed of great blocks of travertine, indicate the Augustan age. This seems to be the *Pons Agrippae.—Not. d. Scavi*, 1887, pp. 322–27. *Cf.* R. LANCIANI's letter in *Athenæum*, Dec. 24.

RUSELLAE (near Grosseto).—*Archaic antiquities.*—Near the ancient Rusellae, a countryman discovered, in February, a tomb which, from the nature of the objects, must have been a rich one, strongly related to those belonging to the primitive Italic civilization. The arms, ornaments, horse-bits, and various utensils that constitute its contents have their counterpart in *tombe a pozzo* of the neighboring necropolis of Vetulonia, and in *tombe a pozzo* and *a cassa* of other related Etruscan and Umbrian necropoli (*cf.* Volterra, Tarquinii, and the *sepolcreti Benacci*). The bronze horse-bits are frequent in Umbria, but very rare in Etruria (two only from Tarquinii). The vases appear to have been much broken or of inferior value, as they were not preserved by the discoverers.—*Not. d. Scavi*, 1887, pp. 134–37.

SYBARIS.—*Proposed Excavations.*—The Italian Government, having at length determined upon the excavation of Sybaris, has appointed Professor Viola, the distinguished explorer of Tarentum and other South-Italian sites, to conduct the projected operations.—*Academy*, June 4.

TARQUINII=CORNETO.—*Excavations in the Necropolis* were resumed Feb. 22, 1887, beginning under the tomb of the *Kitharodos*. The tombs here were generally *a fossa*, though several were *tombe a corridoio*. That the two kinds of tombs were contemporaneous is evident from the objects found in them. The first tomb discovered was *a corridoio*, and opened to the south: with the skeleton were found a pair of the well-known spirals of bronze covered with gold, a cup of black bucchero, and a Greek lekythos. Six metres to the north was found a *tomba a fossa*: the skeleton had on two sides of the skull the bronze spirals, on the forearms large spiral bronze armlets. To one of the armlets were attached two bronze rings: about the breast were four fibulæ. Of the utensils found in the same tomb, two were hand-made, a little tazza with upright handle, and a rude *guttus* of coarse red clay: three orcæ and a kantharos of black bucchero were wheel-made. Of Greek vases there were found three lekythoi, and an orca with painted and scratched ornamentation. Twenty metres to the south, another *tomba a fossa* contained a large iron lance-head with its spiral bronze πόρκης; a smooth bronze cup; and a scarab inscribed with two quadrupeds; a local vertical-handled cup; four Greek lekythoi; three alabastra; three plates; and a salt-box. Five other *tombe a fossa* and one *a corridoio* contained similar objects. At a distance of about 300 metres from the point where the excavations began, was found a *tomba a camera* in which there were two bronze mirrors with reliefs, one representing the group of Neop-

tolemos, Orestes and a Fury, the other (much damaged) a composition in which Dionysos is the central figure. In the same tomb was found a cylindrical cista resembling the well-known Palestrina cistæ, with three lion-claw feet, over each of which is posed a cupid. The cover is incised with palmettes. Its handle is formed by a seated female figure in the style of the figures on the covers of Etruscan urns. Three *thymiateria* and other utensils were in this tomb.—*Bull. Ist. arch. germ.*, 1887, 3.

TODI.—After a trial lasting four days, the tribunal sitting at Perugia passed yesterday (June 2) the following judgment with respect to the treasures found in the grave of an Etruscan lady at Todi, and described in the *Academy* of October 16, 1886: "Considering that Cardinal Pacca's edict of the year 1820 is still in force for the Province of Umbria, and that the Orsini Brothers excavated the tomb after the expiry of the permission granted to them, this court condemns them to a fine of 1,000 lire, together with all law charges, and confiscation of all the archæological objects to the Royal Museum."—*Academy*, June 11.

SICILY.—SELINOUS.—*Akropolis.*—The excavations undertaken to bring to light the walls of the akropolis have already yielded important results. There are several circuits of walls communicating with each other by means of subterranean apertures which, singularly enough, have circular arches. These walls extend beyond the akropolis and are defended by advanced circular towers. The exact topography cannot be ascertained until the end of the excavations.—*Arte e Storia*, 1887, No. 17.

SYRACUSE.—*Sanctuary of the Nymph Kyane.*—At a place called the *Cozzo di Scanduria*, there have come to light walls and other remains that belong to an edifice, probably the well-known sanctuary dedicated to the nymph who gave her name to the neighboring *Fontana Ciane* (τῆς Κυάνης ἱερόν: Diod., XIV. 72). The edifice was quadrangular and the walls built of tufa: two calcareous water-spouts with lion-heads of good Greek workmanship belong to the building: remains of columns also have been found. *Not. d. Scavi*, 1887, p. 380.

CHRISTIAN ANTIQUITIES OF ITALY.

Agostino di Duccio.—The least appreciated artist of the early Italian Renaissance is probably Agostino di Duccio of Firenze, pupil of Donatello, and sculptor not only of the well-known façade of San Bernardino at Perugia, but of the Cathedral of Rimini. In a recent number of the *Arte e Storia* (1887, No. 10), A. Venturi calls attention to an interesting work of his in Modena, where he executed a marble altar-front for the Cathedral: it is now built into the façade of the church. Its reliefs represent four scenes of the life of S. Geminiano. The inscription reads AVGVSTINVS · DE · FLORENTIA · F · 1442, and shows this to be the ear-

liest known work of the sculptor. It has all the characteristics of his more mature productions.

AQUILA.—*Società Abruzzese di Storia Patria.*—By the initiative of Marchese Giulio Dragonetti, a society is being formed in Aquila for the study and illustration of the history and monuments of the interesting province of the Abruzzi, which possesses many learned men capable of carrying out this work.—*Arte e Storia*, 1887, No. 17.

BARLETTA.—*A sculptor of the XII century.*—In the church of S. Andrea at Barletta, on a portal richly sculptured with figures of Christ, the Virgin and John the Baptist, and the four Evangelists, is an inscription to which attention has lately been called. It gives the name of the artist: + INCOLA · TRANENSIS · SCVLPSIT · SIMEON · | RAGVSEVS · DN̄E · MISERERE. This sculptor of the twelfth century, **SIMEON OF RAGUSA**, is otherwise quite unknown. —*Arte e Storia*, 1887, Nos. 30, 32.

BERGAMO (near).—*Benedictine Convent of Pontida.*—This monastery, at which the famous league of Lombard cities against Frederick Barbarossa was concluded, has been sold at public auction. Among the buildings were a Gothic church, and a cloister built by Sansovino.—*Revue Critique*, 1887, 18.

SAN GIMIGNANO.—*Restorations in the Collegiate church.*—Domenico Fiscali, the well-known restorer of the frescos of the Campo Santo of S. Piero in Grado at Pisa, has lately been at work on a careful restoration of the important frescos by Taddeo di Bartolo (1393) of Siena which adorn the walls of the Collegiate church.—*Arte e Storia*, 1887, No. 30.

GREZZANA.—*Coins of Verona.*—An important find of coins with the inscription, *obv.*, ENRICVS, *rev.*, VERENA, was made at Grezzana, in the province of Trent. These are coins of the Emperor Henry, and are extremely rare, being related to those found last year at Vadena in the same province.—*Arte e Storia*, 1887, No. 24.

ROMA.—*A new periodical* for the study of art and archæology has been founded in Roma, under the direction of the well-known art-critic and writer Count Professor Domenico Gnoli. Its title is *Archivio Storico dell' Arte*, and it will probably be devoted mainly to the Middle Ages and the Renaissance.—*Arte e Storia*, 1887, No. 27.

House of SS. Giovanni e Paolo.—The discovery of this Roman house under the church of *SS. Giovanni e Paolo* was mentioned on p. 191. Further researches by Padre Germano have led to a discovery of the greatest importance. A third room was unearthed, 7 met. long by 4 met. wide, considered by Professor Gatti to be the *Tablinum* of the house. Its walls are covered with remarkably well-executed frescos; but the most remarkable circumstance is that, besides classic paintings of animals, hippocamps, country-scenes, and allegorical decorations, there are others of a *purely Christian* character. One represents Moses removing his sandals, similar

to a painting in San Callisto: the subject of another is the female *Orante* with hands raised, robed in a dalmatica, with a veil over her head and a necklace. It is the first time that frescos of a distinctly Christian character have been found in a Roman private house—hitherto, they have been confined to the Catacombs.—*Cour. de l'Art*, Nov. 25.

Early Christian Sarcophagus with the Betrayal of Christ.—Near the Porta Maggiore there came to light the front of an early Christian sarcophagus on which is carved the very rare scene of the betrayal by Judas. In the centre stands the youthful beardless figure of Christ; on his right, Judas approaches to give the kiss, bearing the money-bag in his hand. The accompanying crowd is symbolized by a figure on the left. The sculpture is of the time of the decadence in the second half of the fourth century. —*Bull. d. Comm. arch.*, May–July; *Not. d. Scavi*, 1887, p. 180.

Sant' Agnese: early figure of Christ.—On a fragment of a Christian sarcophagus of the fifth cent., found in repairing the side staircase of S. Agnese, was a bearded figure of Christ holding the book, and blessing. It is of especial importance as an early instance of the bearded Christ.—*Moniteur de Rome*, June 27–28.

SICILY.—SYRACUSE.—*Byzantine seal.*—On a Byzantine seal (recently purchased by the Museum of Palermo) is the name of a Byzantine duke of Calabria previously unknown, EIRENAIOS SPADATARIOS. The records of these Byzantine dukes of the VIII and IX centuries are extremely rare.—*Not. d. Scavi*, 1887, p. 124.

SPAIN.

THE MARTORELL PRIZE AND PRÉHISTORIC ANTIQUITIES.—The archæological prize of 20,000 pesetas founded by Don Martorell has been accorded by the city of Barcelona to the work of MM. HENRY and LOUIS SIRET entitled *Les premiers âges du métal dans le Sud-est de l'Espagne.* This work describes about thirty settlements and more than twelve hundred tombs of the neolithic period and the first bronze age, which have yielded fifteen thousand objects of exceptional importance for the early civilization of Spain.—*Muséon*, 1887, p. 366.

CADIZ.—The *Diario de Cadiz* has given interesting information regarding the discovery, in the neighborhood of Cadiz, of antiquities which are called Phœnicio-Egyptian or Punic. The excavations have been suspended until they can be directed by a member of the Academy of San Fernando. The discoveries illustrate the earliest history of the Spanish coast. Their character is not so clear as to make it certain, without careful examination, whether, or not, they belong to primitive Spanish industry. The *Diario* of March 12 contains a full description of the contents of the first two tombs found. By the well-preserved bodies were found several objects in iron:

among them, a dagger; a broken scarab with hieroglyphs; a large gold ring with an agate in the form of a scarab, on which was engraved a figure (said to resemble that of Osiris (?)), mounted so as to revolve; two large rings, one formed of gold spiral; fragments of a necklace; and a large number of other objects of gold, amber, *etc.* The *Diario* of March 15 and that of March 20 contain further particulars.

Several Spanish antiquarians consider the tombs to belong to the Roman period.—*Revista de Ciencias Historicas*, v, 1.

CARMONA.—*Prehistoric Tumuli and Roman Necropolis.*—Mr. GEORGE BONSOR writes to the London *Times* of August 23: "About six years ago a Spanish gentleman, Don Juan Fernandez, and myself purchased the two plots of land known as The Quarries and The Olive Groves (situated at a short distance west of Carmona) and commenced our excavations. Upon this site were some curiously shaped mounds which we afterwards found to be tumuli of a prehistoric age. Round these mounds the Romans had for centuries hewn, out of the rock, small chambers to serve as family-tombs. These are from four to five yards square and of the height of a man. In the walls are small cavities or niches for the cinerary urns, each of which last generally contains (beside the ashes of the dead) a coin, a mirror, a lachrymary, needles, a stilus and tabula, and a signet-ring. The walls are mostly painted in fresco or distemper in the Pompeian style, with representations of birds, dolphins, and wreaths of flowers. Near the entrance of each tomb is the crematorium, also hewn out of the rock, on the sides of all of which signs of fire are still visible. Up to the present time about 320 tombs have been discovered. They are disposed in groups, some around the tumuli, some near the Roman quarries and on both sides of the Roman roads, two of which ran from Carmona to Seville through the necropolis.

"This discovery shows, first, that, contrary to what is generally believed, the funeral pyre in this country was not made square, but oblong; the body, with the bier or feretrum on which it was carried to the necropolis being laid on it, the nails and other iron fittings belonging to the bier being still found among the ashes at the bottom of the crematorium: again, it shows the difference between a *bustum* or crematorium in which the ashes of the dead were left, and an *ustrinum*, or one from which the ashes of the dead were removed to be placed in the cinerary urns.

"The most important discoveries have been made near the Roman roads —namely, a columbarium and three large triclinia for the funeral banquets, with the peculiarity that in each a deep channel is cut all round the mensa into which the guests threw the libations. The largest funeral triclinium discovered contains three tables, with their couches round, the one for winter use being in a hall, another in the sun, and the third, for the summer, being in the shade. In addition to these, there is an altar, a tomb

with its cinerary urns, a kitchen, a bath, a well, and a sanctuary, in which is a stone statue. Last year, about 50 yards from this triclinium, we discovered a Roman amphitheatre, also hewn out of the rock. During the course of the excavations, numerous objects of interest were found, amounting to over 3,000 in number, among which are many inscriptions, fragments of statues, glass, marble, and earthenware urns, lamps and mirrors, rings and coins, and other valuable articles, all of which have been placed in a museum in the town specially arranged for them. The excavations are still being continued."—*Cf.* London *Times*, Aug. 13.

ECIJA and ASTORGA.—*Christian sarcophagi.*—In the *Boletin* of the Real Academia de la Historia for April, engravings from photographs are given of two early Christian monuments: one, a sarcophagus found at Ecija, of the fourth to sixth century, with representations of the Good Shepherd, of Daniel in the lion's den, and of the Sacrifice of Isaac, with the name of each personage in Greek above; the second, probably Gnostic, found at Astorga, has a triangular tympanum surmounting a square with an open hand in low relief. The tympanum and the palm of the hand are inscribed Εἷς Ζεὺς Σεράπις—Ἰαώ.—*Academy*, June 4.

MADRIDEJOS.—*Roman antiquities.*—The discovery of Roman inscriptions, mosaics, and other objects, seems to prove the site to be that of the Roman settlement *Rodacas*, whose name is preserved in that of the neighboring stream Ruecas.—*Rev. de Ciencias Hist.*, v, 1.

VICH (Valencia).—*Sculpture.*—In the *Calle del Embajador* has come to light a basrelief which seems to have formed part of a tomb. The subject is Judas kissing Christ: it is the work of a good artist of the XV century. —*Rev. de Ciencias*, v, 1.

PORTUGAL.

An Archæological Review.—A review devoted in great part to archæology has been lately founded at Lisbon, under the title of the *Revista archeologica e historica*. It is edited by MM. BORGES DE FIGUEIREDO and ALEXANDRE DE SOUSA, and appears monthly. In the first three numbers issued, the place of honor is given to ancient epigraphy. Some Roman inscriptions of Lisbon and Tuy are published by the editors, and Dr. Hübner has a paper on a series of inscriptions from ancient Balsa.—*Gazette Arch.*, 1887, Nos. 3–4: *chron.*, p. 12.

FRANCE.

ARCHÆOLOGICAL BIBLIOGRAPHY.—The bibliography of the historical and archæological works issued by French learned societies, undertaken by the Ministry of Public Instruction, some years ago, is in progress. The first volume, compiled by MM. de Lasteyrie and E. Lefèvre-Pontalis, com-

prehending the societies of the departments Ain to Hérault, is nearly ready for publication. A complete summary of the work has lately been issued by the *Comité des Travaux Historiques et Scientifiques* under the title of *Bibliographie des Sociétés savantes de la France*, par E. Lefèvre-Pontalis. —*Academy*, Oct. 29.

Prof. MASPÉRO has just completed the text of Mariette's *Monuments Divers*, which (as arranged between Mariette and himself) is entirely from his pen. With this important work, which will be given to the world with all reasonable promptitude, ends the colossal task which Prof. Maspéro undertook some sixteen years ago—the task of seeing the bulk of Mariette's works through the press. Eight years of collaboration with the living man have been followed by eight years of laborious editorial work consecrated to the memory of the departed *savant*; and there now remain but a few fugitive papers on Mariette's excavations at El Assasif in Western Thebes, on "Alexandria in the time of the Cæsars," *etc.*, which will be published by Prof. Maspéro in the pages of the *Recueil des Travaux*. Only those who know the difficult character of Mariette's handwriting, the fragmentary and unfinished condition of many of his MSS., and the immense mass of documents which have had to be sifted, deciphered, completed, and reduced to publishable form, can appreciate the amount of self-sacrifice and devotion with which Prof. Maspéro has performed this onerous duty.

Prof. Maspéro's second memoir on the Royal Mummies found at Dayr-el-Bahari in 1881 is in the press, and will shortly be issued. He has also just completed a *Catalogue Raisonné* of the Egyptian collection in the Museum of Marseilles, which not only describes and explains the objects in their order as seen by the visitor, but is designed to serve at the same time as a practical introduction to the study of Egyptian archæology.

In the meanwhile, Prof. Maspéro's *magnum opus*—his long-promised history of Ancient Egypt—progresses slowly but surely. Begun before he accepted the position left vacant by the death of Mariette, it has long been arrested by pressure of official work in Egypt. Even now, we can scarcely hope to see the publication of the first part earlier than 1889.—A. B. E. in *Academy*, Dec. 3.

M. Quantin will shortly publish the long-promised *Dictionnaire de l'Ameublement et de la Décoration depuis le XIII Siècle*, upon which M. HENRY HAVARD has been engaged during more than ten years.—*Athenæum*, Oct. 22.

RESTORATION and VANDALISM.—Among the churches at present being restored are those of Courcône (Charente), of Bonpère, of Saint-Léger at Saint-Maixent (crypt), of Parthenay-le-Vieûx (Deux-Sèvres), and of Cravant. The early Norman church of Breteuil, built at the close of the XI century on the model of those at Caen and Fresnay-sur-Sarthe, is being thoroughly restored. The vaults of the three naves are being made over,

The uncovering of the walls, which had been whitewashed at the commencement of the century, has brought to light some interesting objects.

Two ancient towers have been destroyed at Vannes. The château of Dijon is to lose one of its towers, to make way for a straight boulevard. The Gothic church of Hermes, with its fine Romanesque bell-tower, is being demolished by the municipality. The famous Hôtel at Sens, one of the most interesting specimens of mediæval civil architecture in France, is to be sold, and its destruction is possible: M. G. Bapst, of the Société Nationale des Antiquaires, M. Tranchart, president of the Société de l'Histoire de Paris, and M. de Lasteyrie are seeking to prevent this.—*Revue de l'Art Chrêtien*, 1887, pp. 258–59.

PAINTED GOTHIC ALTAR-FRONT.—In a late number of the *Revue de l'Art Chrêtien* (1887, II), M. de Farcy makes known an interesting altar-front or *rêtable* of painted wood, of the early XIII century, which belongs to his collection: it is all the more interesting on account of its rarity. The large figure of St. Peter, in the centre, has, on each side, four compartments, in two rows, in which are given incidents of his life. The figures are on a silver-gilt background.

AMIENS.—*New architect of the Cathedral.*—M. G. Durand has found a document dated from 1260 which mentions one of the architects of the cathedral of Amiens: *Magister Renaudus cementarius, magister fabrice Beate Marie Ambicanensis.* It has been hitherto considered that the architects between 1220 and 1280 were Robert de Luzareth and Thomas de Cormont and his son Renaud. The newly-discovered architect seems to come in before Renaud de Cormont.—*Revue de l'Art Chrêt.*, 1887, p. 485.

AUTUN.—*Roman Mosaic.*—In the Faubourg St. Jean, a Roman mosaic, measuring twenty-five metres superficial, has been discovered. It was sixty centimetres below the surface of a kitchen garden, near the ancient ramparts of the city and a field entitled *Gaillon*, belonging to the Hospice d'Autun.—*Athenæum*, Oct. 1.

BRIONNE.—*Sarcophagus.*—In a stone sarcophagus, discovered at the depth of a metre, were found a skeleton, some coins, fragments of glass vases, a sword-blade and a bronze buckler. The tomb appears to be that of a Gallic warrior.—*Revue de l'Art Chrêtien*, 1887, p. 255.

CARNAC.—*Expropriation of the Megalithic Monuments.*—The recent law on the preservation of historical monuments has been first seriously applied by a decree which pronounces the expropriation, in favor of the State, of the land containing the monuments of Carnac which it has not been possible hitherto to purchase. This will involve property at Menec and Kermario containing magnificent megalithic stones.—*Bull. Mon.*, 1887, p. 494.

DAX (Landes).—*Cathedral.*—Important excavations have been made in the garden of the cathedral. At first there were found, under the pave-

ment of the cloister which dates from the XIV century, three tombs of singular shape, each containing four iron bars and a gridiron: in one there was a coin of Edward III (1317–55). Under these tombs there came to light important substructures, which appear to have formed the circuit of the chapel spoken of in the charter of the Abbey of Divielle which was consecrated by bishop Maximus in 511 on his return from the Council of Orléans. Its materials were evidently used in building the third tomb. Numerous Merovingian sculptures were found, and even a stone bearing traces of wall-paintings. The cutting of these VI-century stones seems anterior to the XII century, and this would give an approximate date to the tombs, which were used from that time forward.

Substructures of the cloister have been found, as well as two tombs anterior to the XII century, also fragments of early altars.—*Revue de l'Art Chrétien*, 1887, II, pp. 213–14.

Dijon.—*The Castrum.*—In digging under Saint-Etienne for the early crypt of this church erected in the IV century, the workmen found an important piece of the foundation-walls of the ancient *Castrum*, described by Gregory of Tours. It was under Aurelian that, in view of the weakness of this province, the population was obliged to confine itself to the Roman camp, which was then strengthened by these important fortifications. Built in haste, they include innumerable fragments important for art. This piece is no exception, and it contains material from buildings important for their dimensions and art.—*Revue de l'Art Chrétien*, 1887, p. 256.

Ennent.—*Merovingian and Carlovingian tombs.*—Excavations made for the construction of the church of Ennent have led to the discovery of sixty-eight Merovingian and Carlovingian tombs, all Christian, and containing perfume-burners.—*Revue de l'Art Chrét.*, 1887, p. 485.

Liene (Aisne).—*Mosaics.*—In the Villa d'Ancy at Liene, district of Braisne (Aisne), has been found a Gallo-Roman mosaic, 3 by 2 met., in which is represented a hunted stag. The remaining decoration is of a geometrical character, and the border is fine.—*Berl. phil. Woch.*, Oct. 22.

Lyon.—*Discovery of an amphitheatre.*—MM. Lafon and Pierrot-Deseilligny have undertaken excavations on the hill of Fourvières which have led to the discovery of one of the two ancient amphitheatres of Lyon, that placed near the Forum and the Imperial Palace. M. Pierrot-Deseilligny has published a report on these excavations in the *Bulletin Monumental* (September-October, 1887). Commencing the excavations early in May with the idea that the walls that were being uncovered were those of a theatre, the excavators soon found that it was in reality an amphitheatre built (like those of Syracuse, Pola, and Fréjus) partly on the declivity of a hill, partly on flat land: those portions that are on the hill are the best preserved, while the others are irretrievably lost. As they

at present stand, the highest portion of the walls rises 20 met. above the level of the arena. Three concentric walls have been found. *The first* has appeared on a length of 41 met.: *the second*, 7.50 met. from the first, was discovered along an uninterrupted length of 34 met., and seems to have been joined to an accessory wall by a vault: *the third* is at a distance of 10 met. from the second; about 15 met. of it have come to light. There are radiating walls between these concentric walls. Only one trace of a passage has been found; otherwise the walls are solid. This amphitheatre has a considerable historical interest, as it is that in which the Christian martyrs of Lyon suffered.—*Cf. Revue Arch.*, July-Aug; *Revue Epig. Midi*, July; *Revue du Lyonnais*, July-Aug.

MANTOCHE (Haute-Saône).—*Gallo-Roman Tombs.*—In a field between Mantoche and Apremont are the remains of a Gallo-Roman necropolis in which discoveries have been made at various times for a number of years. The entire neighborhood, besides, is full of remains of Roman villas. M. Virot has uncovered a number of bodies with which were found glassware and pottery.—*Revue Arch.*, 1887, pp. 344–45.

MUY (Var).—*Ancient Cemetery.*—Baron de Bonstetten has discovered here an ancient cemetery, including funerary inscriptions.—*Revue Critique*, 1887, No. 26.

PARIS.—RECENT ACQUISITIONS BY THE LOUVRE.—The following purchases have been recently made.

1. *Egyptian Museum.* Report of M. Revillout. 1. A basalt dog, larger than life and remarkably true to nature. 2. An admirable head of the Early Empire (*cf. Gazette des Beaux-Arts*, 1887, p. 185), which may be considered one of the chefs-d'œuvre of the collection: the workmanship is very fine and sharp, and the features are full of life and energy, and equal to anything produced by the Italian Renaissance. 3. A royal head, very carefully executed: the monarch was certainly not an Egyptian but a European, probably even a Roman. 4. Several interesting terracotta figurines: these terracottas, imitated by the Greeks, are very rare in Egyptian art; to be especially mentioned are the upper part of a vase with a female head of common but very truthful expression; a youthful smiling royal head of the Saïtic period; a nude female figure treated with delicacy. 5. A charming small Saïtic statue, approaching in type the statue of Nechthorhib, at the entrance of the Museum hall: there is remarkable suppleness and modelling in the forms, and the figure is very graceful. 6. A lot of finely-executed small objects. 7. Important additions from an archæological standpoint have been made: M. Cattani has brought back from his mission to Egypt many hieroglyphic, hieratic, demotic, Greek, and Koptic papyri and tesserae (of which there are thousands), furnishing most precious scientific information, as shown by the Report of M. Cattani in

the *Revue Égyptologique* (fifth year). Many of these were gifts, among which should also be mentioned a fragment of basrelief, probably representing a priestess of Tum, lord of Tuku or Succoth; a fragment of naos mentioning a hitherto unknown prince named Amenmes, the elder son of Thothmes I; several hieroglyphic stelai of the Early Empire and of the classic period—some of which are interesting, even artistically, and bear new archæological types; Greek and Arabic papyri; very interesting embroidered stuffs of the Koptic period; *etc.*

II. *Museum of the Middle Ages, the Renaissance, and Modern Times.* Report of M. Molinier. The new hall opened on May 10 is devoted provisionally to a certain number of sculptures and other works of art recently purchased or given—some very recently. The works are classified as follows: *Sculpture.* 1. Spanish stone-door, end XV or beg. XVI cent., in flamboyant Gothic style, surmounted by two figures in low-relief representing the Annunciation. 2. Large tomb-slab of grey stone of Jean de Cromois, abbot of Saint-Martin of Liège, who died in 1525: this finely executed work is by a Flemish artist strongly influenced by Italian art—in a style not before represented in the Museum. 3. The four cardinal virtues, marble figures for the support of a tomb or pulpit, of the Italian school of the XIV century: these four statues from Southern Italy will be useful for a comparative study of French and Italian sculpture. 4. The Virgin and Child, a basrelief of painted and gilt stucco by Donatello: it is the Virgin called the *Madonna dei Pazzi*, the marble original of which was purchased by the Berlin Museum. 5. An angel standing in the pose of the *Mannekenpiss*—a statuette in grey stone of the school of Donatello, in the style of the bronze reliefs of the *Santo* of Padova: both these works were purchased in Firenze. 6. Saint John, a marble bust by Donatello, bequeathed in 1885 by M. Alb. Goupil: it came from the *Ospedale degli Innocenti* at Firenze (engraved, *Gaz. des Beaux-Arts*, 1885). 7. Ferdinand of Aragon, king of Napoli, a marble bust formerly painted, to be attributed to the hand or school of an artist who came to France at the close of the XV cent., Paganino da Modena, called *Mazzoni*, who executed the Mortorio of Monte-Oliveto at Napoli and that of San Giovanni at Modena, as well as the tomb of Charles VIII. 8. The Virgin and Child, a marble basrelief, with mosaic background, by the Venetian school of end XIV or beg. XV cent.: a repetition of an earlier type very frequent at Venezia. 9. The Virgin and Child, a group belonging to the Venetian school of the XV century, of the same style and doubtless by the same artist as the Virgin at the *Madonna dell' Orto* in Venezia, attributed to Giovanni de Santis. 10. The Virgin and Child, a colossal basrelief of painted and gilt *carton* by Jacopo Sansovino, purchased in Roma (*cf.* W. Bode, *Italien. Bildh. d. Renaiss.*, p. 282). 11. Funerary mask in marble, from a French tomb of the XVI cent. 12. Mar-

ble medallion of Ludovico il Moro, of the Venetian school, close of XV cent. 13. David vanquishing Goliath, a bronze statuette, cast *à cire perdue*, which is a reproduction or imitation, of early-XVI cent., of the famous lost figure by Michelangelo which was at the Château de Bury.

Beside the sculptures are to be mentioned some bronze medals of XV and XVI centuries; some *plaquettes*; a silver chalice of the Spanish art of the end of the XII cent.; and a number of enamels of the XVI cent., including two which are the only known French enamels with a white ground.—*Gazette Archéologique*, 1887, Nos. 3–4; *chron.*, pp. 1–4.

Greek and Roman Sculptures: the following acquisitions have been made during 1886 and five months of 1887.

A colossal Dioskouros, the torso of which was brought from Carthage by MM. Babelon and Reinach; the head, right leg, and the horse had been bought by the British Museum, but were given up to the Louvre: six headless male statues, one of which represents an Emperor: two statues of women: a crouching Aphrodite from Tyre, with traces of the hand of Eros (a repetition of the celebrated group): a marble statuette of Aphrodite from Sidon: archaistic head of Dionysos from the Peiraieus: head of a philosopher (Sokrates) from the Peiraieus: head of Augustus from Marseilles: from Athens, an archaic male head with long undulating hair and prominent eyes, in the style of the Apollon of Tenea; beside several torsos, heads, and other fragments of statues: two inscribed round altars from Athens: architectural fragments of an architrave, palmette, and sculptured ornament from the temple of Apollon Didymeus, and of an Ionic capital and ornament from the temple at Priene: two stelai with Greek inscriptions: a long inscription containing a decree of the inhabitants of Apollonia in honor of Aischrion, son of Poseidippos: two fragments of Greek and three of Latin inscriptions: and an Attic marble sepulchral vase ornamented with a basrelief of a man taking leave of a woman.—*Gazette Arch.*, 1887, Nos. 5–6.

MUSÉE DES GOBELINS.—*Koptic Tapestries.*—This museum has purchased a series of tapestries found in the tombs of a Koptic cemetery discovered in 1884 by M. Maspéro. They consist in fragments of costumes, bands adorned with flowers or fantastic animals. They are formed of a woollen thread passed through a *chaîne* of écru linen, similar to the Gobelin manufacture. The earliest fragments reproduce ancient models: Perseus and Andromeda, a Centaur playing on the lyre, geometric ornaments, vases, plants, animals, grotesque figures; also ornamental flowers, chimerae, *etc.* The more recent represent Christ with the cruciform nimbus, Saint George on horseback, and saints with the nimbus. All these motifs are surrounded by a very elegant framework of Greek fret, interlaced patterns, *etc.* The colors are so fresh that they seem to be of yesterday. The blues, reds and

violets are remarkably brilliant. In this respect these early works are far superior to the Gobelins. They are five or six centuries earlier than any examples hitherto known.—*Revue de l'Art Chrét.*, 1887, p. 537; GERSPACH in *Gazette des Beaux-Arts*, Aug. 1887.

MUSÉE DE SÈVRES.—The *Chronique des Arts* says that the Musée de Sèvres has been enriched by the acquisition of a piece of mosaic of a kind unknown, until now, to the best-informed French experts. It was brought from the ancient Medersa of Tlemcen. M. J. Levet, a captain of engineers, having special knowledge of mosaics, recognized the interest of this relic, caused it to be removed from its ancient site, and presented it to Sèvres. Such being the case, a demand has been formulated that pupils of the great military schools should have imparted to them some "notions d'archéologie," in order that the army should be enabled to assist in enriching the national museums.—*Athenæum*, Sept. 24.

GALLIC CEMETERY—The remains of a cemetery belonging to the age of the Gauls have recently been discovered in Paris, in the old Faubourg St. Germain, at the corner of the Rues Rocroi and Bellechasse. Fifty-two tombs have been found with skeletons, most of which are skeletons of women and children: only twelve are skeletons of men. Many weapons and implements, also, have been unearthed—swords, lances, shields, and bronze and iron instruments of all descriptions.—N. Y. *Eve. Post*, July 15.

PARIS (near).—*Gallic Cemetery of St. Maur-les-Fossés.*—At a meeting of the *Académie des Sciences*, M. BERTRAND read a very interesting report upon the Gallic cemetery recently discovered at St. Maur-les-Fossés, near Paris, by M. Ernest Macé, who has presented most of the objects discovered to the Museum of National Antiquities. These objects are identical with those hitherto found in the departments formed of that part of Gaul which Cæsar allotted to the Belgians. The tombs are dug to the depth of about 3 ft. 6 ins., and they vary in length from 6 to 7 feet, while in width they are from 2½ ft. to 3 ft. Most of the tombs had been walled round to a height of from 12 to 14 ins. to keep back the sand at the sides; and the body is placed immediately upon the sand and covered with a row of large flat stones to keep it down. In every case the bodies are laid with the face upwards, the sword in the right hand, fastened by a jointed iron belt near the head. On the right-hand side is the point of a lance, the handle of which is placed between the legs, having probably been broken as a token of mourning at the funeral. Among the other objects discovered is a sword in a good state of preservation, with the chain still attached to it. This sword is 32 inches long, the sheath being in iron, while the hilt and the guard are ornamented with three heavy nails meant to represent a sort of shamrock leaf. M. Bertrand states in his report that, though it is impossible to specify the exact date of these interments, there can be no doubt that the bodies are those of warriors of Gaul, armed exactly as the war-

riors of the Belgian provinces were at the time of the war of independence, while, having regard to the care taken in the arrangement of the cemetery, he comes to the conclusion that St. Maur-les-Fossés was an advanced post for the defence of Lutetia. M. Ernest Macé hazards the suggestion that the bodies are those of warriors killed during the attack by Labienus upon that city, but this theory is not spoken of by M. Bertrand, whether to confirm or reject it.—London *Times*, July 13.

ROUEN.—*Gothic Tombstones.*—In the Rue Saint-Lô, on the site of a church built, probably, at the beginning of the XIV century, three singular tombstones have come to light. The first represents a female figure with cap, with a greyhound at her feet, and lying under a trefoiled arcade. An angel descends bearing a crown, while a group of angels burn incense. The inscription reads: *Chi gist Mahaus du Chastelier, Diex Jesus Crist li puisse. Mortali namq. domo clauditur omnis homo.* On the second stone is a male figure, also under an arch, wearing the headdress of a "béguin": there are the same incense-burning angels, the same greyhound, *etc.*, but the ornamentation is simpler. The inscription reads: *Ci gist Pierres du Mesnil quit trespassa. Proiez por lui.* It bears the date 1266, and seems about twenty years older than the former: both are in a wonderful state of preservation. They have been taken to the Museum in the Rue Thiers. The third tombstone also belongs to the XIII cent.: it is ornamented only in the upper part. The composition is similar to the preceding, with the addition, below, of the subject called "the triumph of the soul," often found on such tombs. The inscription is: *Hic jacet Adia Roscellin | .. corpus ejus requiescat in pace.*—*Revue de l'Art Chrétien*, 1887, p. 255.

SAINT-GERMAIN.—*Museum.*—Almost all the Keltic and Roman antiquities at the Cluny Museum have lately been removed to the Museum of Saint-Germain, including the very notable collection of Roman glass from the necropolis of Poitiers.

SAINTES.—*Roman antiquities.*—In demolishing the ramparts of the city there have been found a large number of fragments of Roman architecture and funerary inscriptions.—*Revue Critique*, 1887, No. 26.

SAINT-SULPICE-DES-LANDES.—*Frescos.*—In the church of Sainte-Marie a series of frescos of the XV cent. covering the entire walls of the church have been uncovered. Scenes of the Creation, the Garden of Eden, the Flight into Egypt, succeed each other without much order. Other paintings are by a better artist, *e. g.*, the Annunciation, the Institution of the Eucharist, some figures of Saints, S. Christopher bearing the infant Christ, the betrayal by Judas, and Christ in glory.—*Bull. Mon.*, 1887, p. 501.

SANXAY.—*Preservation of the ruins.*—Some time ago a large amount was contributed from public and private sources for the purchase of the land on which these important ruins stand, discovered a few years since by P.

de la Croix, who has been appointed their guardian. At present a further subscription is being collected to keep them in good order and to protect them from further damage.—Paris *Temps*, Nov. 5.

SENLIS.—*Cathedral.*—The excavations for a new furnace have proved the interesting fact that the cathedral was built (1154–1191) without any transept, as shown by the continuous foundation-walls. The present disproportionately large transept was added, in about 1240, by breaking through the walls and displacing the piers: in the masonry that dates from this period are fragments of columns, capitals, and arcades.—*Revue de l'Art Chrétien*, 1887, p. 254.

DISCOVERIES IN VENDÉE AND NEAR THE VILAINE.—NANTES (near).—On the supposed site of the ruined Gallo-Roman city of the fifth century, DURETIE (commune of Fégéac) M. Maître has discovered baths and a military station. At CHÂTEAU-MERLET he has unearthed several foundations, especially those of a temple 21 by 16 met. The remains show a very rich style of decoration. The columns are of fine white stone of Poitou. At SAINT-GEORGE in North-Vendée, M. Dugast-Matifeux has found one of the Gallo-Roman wells that are occasionally discovered in this region. It was full of interesting archæological objects: fragments of vases, improperly called *Samian*, of fine, close, red clay covered with a coralline lustrous varnish. They are extremely varied in shape and decoration, and are covered either with elegant decorative ornamentation or with painted scenes of fête, sacrifice, hunting, *etc.* Notwithstanding the diversity of objects found in this well, there were no iron or bronze utensils or human bones to indicate a sepulchral destination.—*Courrier de l'Art*, Nov. 4.

SWITZERLAND.

BERNE.—*Cathedral.*—The Münsterbau Committee in Berne has entrusted the "restoration and completion" of the cathedral to the architect E. Steuler, who has undertaken to follow out the plans drawn up by Prof. Beyer, the architect who has so long been *Münsterbaumeister* at Ulm, where the works on the cathedral are now approaching completion. The late Gothic church was the work of the famous family of architects the Ensingers, who were employed for three generations in Strasburg, Constance, Ulm, and Berne. Prof. Rahn, in his *Geschichte der Künste in der Schweiz*, gives an account of seven members of this family, all of whom were more or less distinguished as architects in the fourteenth and fifteenth centuries—Ulrich, Caspar, Matthäus, Moritz, Moritz the younger, Vincenz, and Matthias.—*Athenæum*, Oct. 29.

CHUR.—*Bronze helmets.*—Two ancient Roman bronze helmets are reported to have been discovered near Chur, Switzerland. The inscription on one shows that the owner was Publius Cavidius Felix, and that he

belonged to the *centuria* of Caius Petronius; the inscription on the other gives the name of Numerius Paponius, of the *centuria* of Lucius Turetedius of Cohort III. Both helmets have been sold. It is to be hoped that they are not productions of the antiquity-manufacturing company recently discovered in Switzerland.—*Athenæum*, Sept. 10.

GREAT ST. BERNARD.—*Prehistoric granite altars.*—A journal of Friburg gives us the news that, not far from the summit of the Great St. Bernard pass, there have been discovered five large altars of granite, and various objects in stone, such as axes, knives, *etc.*—*Bull. di Palet. Ital.*, 1887, p. 168.

BELGIUM.

HASTIÈRES (Namur).—*Church.*—The works that have been carried on for some time at the church of the Priory of Hastière-Notre-Dame have been brought nearly to a close. There have been found underground the remains of two buildings anterior to the present ones: (1) a crypt, thought to be the first church of Hastières, built by Saint Maternus; (2) a second and much larger church, probably built by bishop Adalberon toward 945 A. D. The fine Romanesque church erected by abbot Rodolphus (1033–35) remains, with the exception of the choir which was rebuilt in the XIII century: the transept and aisles of the choir, which were demolished at the beginning of this century, have been rebuilt. The crypt is composed of three naves with three arcades and an apse: the old altar and two circular benches remain. Under the pavement have been found five stone sarcophagi of the Romanesque period. The ancient pavement of the choir is to be uncovered.—*Revue de l'Art Chrêtien*, 1887, pp. 215, 260, 261.

HOLLAND.

EXCAVATIONS.—A circular of the Dutch Minister of the Interior invites all the burgomasters to inform the director of the museum of antiquities at Leyden of all the excavations that may be carried on in their respective communes, in order to prevent the loss of material precious for the ancient history of the country.—*Muséon*, p. 366.

GERMANY.

ABUSINA (mod. Eining).—The extensive excavations (see JOURNAL, I, p. 247; II, p. 96) at the Roman station of Abusina, on the Danube near Regensburg, have at length been concluded, and all the walls of the bath and principal buildings roofed with tiles for protection. Herr Dahlem, the Regensburg antiquary, has now proved conclusively that the building on the rising ground, described, when discovered, as the Prætorium, must have been the residence of the Quæstor.—*Athenæum*, Dec. 24.

BERLIN.—ACQUISITIONS OF THE MUSEUM DURING 1886.—I. *Græco-Roman Sculptures.* A late Greek plaster-capital on the front of which is a figure of Nike; a lion-head water-spout; fragment of a relief representing a young man; all from Tarentum. A left foot on a plinth, fragment from a copy of the Athena Parthenos, from Rome. A number of architectural fragments from the Ionic temple at Mesa, Lesbos.—II. ANTIQUARIUM. (1) *Terracottas.* Group of a young man carrying off a maiden, probably from Asia Minor; a kneeling Seilenos, which is a modified Tanagra copy of the Seilenos of the Dionysos theatre, Athens; a sketch for a votive relief; decorated fragments in shape of a discus: all from the Hoffman sale, Paris. Other minor terracottas from Asia Minor. (2). *Bronzes.* A hammered relief representing Venus Victrix surrounded by cupids, Roman period; moulded relief of Gorgon-head, from Neandreia in the Troad; statuette of running Artemis from Thesprotia. (3) *Vases, etc.* Archaic vase in form of reclining ram, Boiotian (?); a vase of Mykenai make from Lesbos; gold ring of Mykenai type; glass tankard found at Naples; eight ox-heads of lead, from South Russia.—*Jahrb. d. Arch. Inst.*, 1887, III, pp. 198–205.

HEDDERNHEIM (near).—*Discovery of a Mithræum.*—Frankfurt papers describe at length the discovery of a Mithræum, or *sacellum* dedicated to Mithras, on the site of the old Roman town near Heddernheim, not far from Frankfurt. The chapel would seem to have been about 10.8 metres (about 35½ ft.) long, by 2.55 metres (8¼ ft.) broad. At the northern end was a sculptured group in relief representing the usual group of Mithras and the bull with the usual symbolical animals. At either side of this sculptured slab are two other reliefs, representing the two genii with torches. Usually the genii are sculptured on the same slab with the Mithras group; but in the present case they are on separate slabs. The whole work is very spirited, full of life and grace, and in excellent preservation. The right elbow is wanting in the Mithras figure, and the head of one of the genii. At the opposite end of the *sacellum* there is a species of altar of basalt, the top of which is sloped four-corner-wise, like a roof. One face has the inscription, *Deo invicto Mithræ*: the opposite face bore the relief of the torch-bearers: on another face is the eagle of Zeus holding the thunderbolt; under him is a hemisphere marked with meridian lines, and the word *cælum*: on the opposite side is a long-bearded man with an anchor and large shell, and the word *oceanum*. This is the third Mithræum discovered in the neighborhood of Heddernheim, a proof of how the worship and mysteries of this Eastern divinity had spread through the Western Roman provinces.—London *Times*, June 9.

KÖLN.—*Church of St. Severinus.*—On removing the whitewash in the choir of the St. Severinuskirche, some frescos of conspicuous artistic value came to light. The finest are in the compartments of the vaults: the central

vault has a *Majestas Domini*, double life-size, on a blue ground. It is singular that the Saviour bears in his left hand a chalice instead of a book. In the two compartments on the right are the Virgin and St. John: the paintings in those on the left have fallen a sacrifice to the cleaning of past centuries. In style, these paintings remind one most of the figure of S. Dionysios in St. Cunibert and the Crucifixion in the Baptismal chapel in the same place, and they may be dated from the beginning of the last third of the XIII century.

Afterward was discovered a second large cycle of paintings adorning the five-sided concha from the pavement to the rosette-windows opened in the apse. In the central niche is a much-injured representation of the Crucifixion with the Virgin and St. John, and also St. Severinus and Cornelius. Below are seven kneeling figures, probably the donors, under which is a richly-clad knight in a coat of chain-mail and bearing a shield. Of the standing figures on each of the two sides, that of John the Baptist is alone recognizable. The date is fixed at about 1300 by the inscription *Rutgerus rayze* under the knight, with which the style of figures and architecture agrees.—*Kölnisches Volkszeitung*, March 25, Apr. 16. *Cf. Repert. f. Kunstwiss.*, 1887, No. 3, pp. 315–16.

SCHLESWIG.—*Runic Monument.*—The *Hamburger Nachrichten* reports the finding, in Schleswig, of a large stone with a Runic inscription. A new barrack is being built on the ruins of the old castle of Gottorp, erected in the XVI century, and in demolishing the old foundations the workmen laid bare this stone, in perfect condition. It stands about 120 centimetres (nearly 4 ft.) high, and is about a foot broad. It has on two faces an inscription in the usual characters, and the style of the writing is said to correspond with what has been found on three other similar stones found in Schleswig or the neighborhood. It is in the line of the dyke known as the Dannewerke, and probably covered a grave. The inscription has been partially deciphered, and is said to probably run as follows: *Osfrida made this mound, the daughter of Vinthingar, to Sigtrig, the King, her son, on the holy place.*—London *Times*, Aug. 30.

AUSTRIA-HUNGARY.

FRÖGG (near Rosegg).—*Tumulus.*—The Historical Society of Carinthia has been carrying on excavations here, and, after opening a number of tombs, with but poor results. But, in the woods, a large tumulus was opened, within which, two metres below the level, a great variety of objects were found: bronze ornaments; fibulæ; over fifty lead figures; and two thousand pearls.—*Mitth. d. k. k. Oest. Mus.*, 1887, IX.

LAIBACH (Carniola).—Two Roman sarcophagi have recently been discovered at Laibach, the Roman Emona. Their date is said to be the second century B.C. If this be so, the find is of considerable interest.—*Academy*, July 9.

OLMÜTZ.—*Early Mediæval coins.*—A lot of over 2400 silver coins (*denaria*) found here date from the XI and XII centuries, and are mostly of the local Princes. Some bear the legend of S. Peter, others of SS. John, Nicholas, and Wenceslaus: the earliest date from Wratislaw II, Duke of Olmütz from 1055 to 1086, and the latest from the first year of Sobieslav I. Beside these fine and small denaria, there were some 400 larger coins of quite a different type: they appear to be Austro-Bavarian coins, partly from the Regensburg mint under the Bavarian dukes Welf I (1071–1101) and Welf II (1101–1120), and partly from the Viennese mint under the Austrian dukes Leopold III (1082–96) and Leopold IV (1096–1107). The inscriptions are generally illegible. These coins seem to prove (1) that the monetary independence of the province was illusory; (2) that the cult of Cyrill and Methodius had very much waned.—*Mitth. d. k. k. Oest. Mus.*, 1887, x.

PODGRADJE (Dalmatia).—On June 6, excavations were commenced on the site of the old Roman city of Apenna, at Podgradje, near Benkovac. The Governor of Dalmatia was present, as these excavations have been undertaken by order of the Government.—London *Times*, June 8.

SACRAU (Silesia).—*Prehistoric tombs.*—An interesting discovery was recently made at a village called Sacrau, a little east of Breslau. Three graves of stone were found, with remains of weapons, wooden and earthenware jars, ornaments in bronze and silver, *etc.*, especially some curious fibulæ. In the grave last opened were a golden necklace, some small rings, a gold fibula, and a gold coin, IMP CLAVDIVS AVG. The graves have been ascribed to the Romans. A trade-route of imperial times certainly ran across Silesia, connecting the Baltic and the Mediterranean, and Roman coins, *etc.*, mark it all the way.—*Academy*, Aug. 20.

STRIEGAN (Silesia).—A further discovery of antiquities, consisting of gold ornaments, costly vessels, *etc.*, belonging to the early Roman times has been made at Striegan in Silesia.—London *Times*, July 28.

TRIESTE (anc. TERGESTE).—*Mosaics.*—Some interesting archæological discoveries have lately been made at Trieste. Last Saturday, four beautifully preserved mosaic floors were laid open at Barcola, near Trieste, at a depth of only one metre. The floors measure four square metres each, and are apparently the remains of a patrician's villa. The excavations are being continued under the superintendence of Professor Puschi, director of the Municipal Archæological Museum.—London *Times*, Nov. 2.

SCANDINAVIA.

Prof. GEORGE STEPHEN writes from Copenhagen of an important find lately made near Bergen, in Norway. A bone stylus with a Runic inscription was discovered, together with a little book in red Latin letters, evi-

dently written with the stylus. The date seems to be the twelfth century. —*Academy*, July 23.

The results of M. DU CHAILLU's Scandinavian researches will be published this winter by Mr. John Murray, in two volumes, with more than one thousand woodcuts. The book is entitled *The Viking Age:* the Early History, Manners, and Customs of the Ancestors of the English-speaking Nations, illustrated from the Antiquities discovered in Mounds, Cairns, and Bogs, as well as from the Ancient Sagas and Eddas.—*Academy*, Oct. 29.

GREAT BRITAIN.

ENGLAND.—CAMBRIDGE.—We are glad to record that the Rev. G. F. Browne, of St. Catherine's College—whose studies have thrown so much light upon the obscure subject of early sculptured art in England—has been elected to the Disney professorship of archæology at Cambridge, vacant by Prof. Percy Gardner's removal to Oxford. Prof. Gardner's introductory lecture on "Classical Archæology, Wider and Special" has just been published in pamphlet form by Mr. Henry Frowde.—*Academy*, Dec. 3.

CHESTER.—*Recent discoveries and age of the walls at Chester.*—It would appear that a further portion of the Roman wall of Chester together with quite a number of Roman inscribed and carved stones have recently come to light. English antiquarians are making the most of the fact, and the columns of the London *Academy* have for four months been flooded with letters on the subject. It seems that these antiquarians disagree as to the age of the walls, those who deny them to be Roman sustaining that they were put together for the great part by the Puritans in the *seventeenth* century. A similar discussion has been raised about a relief considered by some to be Roman, while others see in one of the figures "an ecclesiastic in canonicals," and consider it to be a *Gothic* work of "*circa* the fourteenth century." We quote from Mr. Brock's letter in the *Academy* of Sept. 17. "The walls have been found to be constructed of massive blocks of sandstone, put together so neatly, without mortar, that I failed in one place to insert a penknife-blade between the joints. The thickness is about eight feet at the base. The blocks are fairly-well squared and are of enormous size, some being more than five feet long. This construction has been revealed by excavation on three sides of the city, while it has been always visible at other points. Uniformity of design and execution has, therefore, been shown to exist generally in the construction of the wall, indicating that it was the work of one people. I say the Romans; but your correspondent, elsewhere than in the ACADEMY, has said: some Puritan builders of the XVII century for one portion, and during the Edwardian period for another. I understand, however, that he allows the stones to be Roman, but shifted in position from elsewhere at the periods named. . .

No less than seven inscriptions have already been found, which are given in full by Mr. Frank H. Williams in the *Chester Courant* of September 7.

"While I write, notice of another has reached me. In addition, there are six or seven portions of basreliefs, either with processions of figures, or single figures, one bearing traces of colour. There are also twenty moulded stones, portions of architectural members, such as cornices, copings, a keystone of an arch, a length of an architrave, *etc.* These have formed parts, originally, of various buildings, evidently of moderate size, and no mortar has been used in their beds any more than when applied to their second use as walling in the city-rampart. The whole of this remarkable mass of inscriptions, sculptures, and moulded work, has been found entirely within the moderate area of the wall operated upon by Mr. Jones, the city-surveyor, in showing the thickness of the wall for effecting some much-needed repairs to a portion of its extent."—*Cf. Academy*, Sept. 3, 24; Oct. 8, 15, 22; Nov. 12, Dec. 3, 17; and paper "on the walls of Chester," read before Brit. Arch. Assoc., Nov. 16, by the President, Sir J. A. Picton.

The Chester authorities have kindly sent the sculptured stone found in the city-wall, on which so much controversy has arisen, for exhibition at the Society of Antiquaries, before whom Mr. W. de G. Birch, will read a paper at an early date (*Athenæum*, Dec. 17). Fellows of the Society and their friends will thus have an opportunity of inspecting the stone for a short time while it is in London. Our readers will remember that Mr. Thompson Watkin maintains that the sculpture is mediæval, whereas Mr. Birch claims a Roman origin for it.—*Academy*, Nov. 26; *cf.* letter of W. Thompson Watkin in *Athenæum*, Dec. 10; in *Academy*, Dec. 31.

New Inscriptions.—A number of inscriptions have been found in the more recent excavations, but as yet have not been allowed by the authorities to see the light.—*Academy*, Dec. 31.

Harrow.—*Sir Gardner Wilkinson's Collections.*—Readers of the late Sir Gardner Wilkinson's *Manners and Customs of the Ancient Egyptians* may remember his frequent allusions to antiquities in his possession. Twenty years ago he gave this important collection to Harrow School, together with his large collection of Greek, Etruscan, and Roman antiquities. They have fared badly there, having been packed away in the library in a case that was not air-tight in front, and rested against a damp wall behind. But, last year, a museum was built at Harrow for the school, and the collections were removed thither. Since then, the Egyptian antiquities have been catalogued by Mr. Wallis Budge, of the British Museum, and the rest by Mr. Cecil Torr; and these printed catalogues can now be obtained from Mr. Wilbee, the bookseller at Harrow. Under Mr. Budge's direction, all the Egyptian antiquities have been repaired, mounted, numbered, and arranged for exhibition. But a further vote of money will be

needed before all the collections can be placed in a satisfactory state.—*Academy*, Nov. 5.

LONDON.—*Old Roman Wall.*—At a meeting of the British Archæological Association (May 18), Mr. Loftus Brock reported the discovery of a portion of old London Wall, which had served partly as a foundation for the houses on the east side of Wormwood Street, Aldgate, now removed. The wall is of fine Roman work, having a chamfered plinth of dark brown ironstone, various bonding courses of bright red brick, and facework of squared Kentish ragstone. Nearly opposite the Synagogue in Bevis Marks the foundations of a circular bastion have been met with. It is not bonded into the wall, showing that it is of later date. It is formed almost entirely of worked freestone evidently taken from other buildings, as if for its erection in haste.—*Athenæum*, May 28.

Excavations.—The excavations proceeding in Piccadilly on the site of the new premises of the Junior Travellers' Club have brought to light many interesting objects. The houses which are built on that portion of the thoroughfare have for their foundations a series of well-formed arches at a depth of about sixteen feet from the surface. In piercing some of these, great difficulty was experienced on account of the toughness of the substance of which they are constructed. This having been overcome, a series of subterranean passages, apparently connected, was discovered. These were full of foul gases, and contained a vast quantity of rubbish, among which have been found numerous articles of interest. Not the least interesting is a red-granite tomb dated 1509, some bronze armor, several fowling-pieces, a richly embossed lamp, and a large quantity of vellum manuscripts. The vaults have been only partly explored, and further discoveries are anticipated.—*Academy*, Sept. 3.

BRITISH MUSEUM.—*Recent acquisitions.*—From the list published in the *Classical Review* (1887, pp. 117–19) we make the following enumeration of recent acquisitions.

General acquisitions.—Marbles. 1. Head and forehand of horse found at Civita Lavinia (ancient Lanuvium) in course of excavations carried on by Sir J. Savile Lumley; it appears to have formed part of a chariot group with four horses: spirited Græco-Roman work. 2. Portrait-head of Marcus Brutus as a young man; from Rome. 3. Portrait-head of the younger Drusus; from Kyrenia, Kypros. 4. Torso of Cupid bending bow; Græco-Roman work. 5. Stele of fourth-century Athenian work, with relief representing a sepulchral vase (amphora) supported by a winged sphinx which faces the spectator, and whose body is heraldically repeated on either side. On the vase is sculptured in relief a parting scene between two warriors, Ἀρχιάδης Ἀγνούσιος and Πολεμόνικος Ἀθμωνεύς.—*Inscriptions.* Two marble fragments of Greek inscriptions from Erythrai.—*Bronzes.* 1.

Right leg of a colossal bronze statue, which had been broken away somewhat above the knee. It belongs to the best period of Greek art, and is illustrated in *Journ. Hell. Stud.*, VII, pl. lxix. 2. Fragments of drapery and armor from same statue (?) as preceding. 3. Four bronze oinochoai, from Galaxidi near Delphi.—*Terracottas.* 1. A series of fragments of painted sarcophagi, from Klazomenai, with archaic designs like those of the black-figured vases. 2. Mask of a satyr, from Samos; of thick red terracotta, pierced at nostrils, a very interesting specimen: the type is that of the sixth-century so-called "Chalcidian" satyr, with long carefully plaited beard, horse's ears, squat nose, and eyes and bushy eyebrows turned upward. 3. Vase in the form of a camel kneeling, with panniers between which is the mouth of the vase.—*Vases.* 1. Bowl of drab ware with brown linear ornaments, exactly similar to *Myk. Vas.* No. 80; said to come from Saqqarah. 2. Etruscan cup of black ware (form of *Berlin Vase Cat.*, No. 150, without stem) with incised design and satyric mask in relief.

Department of Coins. 1. The most important acquisition was a selection from the collection of the late Mr. Whittal, of Smyrna, of ninety specimens from a collection of early electrum coins of the Ionian coast, struck between the sixth and fifth centuries, including many types quite new and unpublished: these will shortly be published by Mr. Barclay V. Head in the *Numismatic Chronicle.* 2. A series of coins noticed in *Naukratis* (I, pp. 63–9), and published in the *Numismatic Chronicle* (1886, pl. 1).

Department of Greek and Roman Antiquities. The trustees have acquired the contents of an Etruscan tomb of exceptional interest, recently discovered at Chiusi; the most important object being the large terracotta sarcophagus which has been described in the JOURNAL, vol. II, p. 482, and vol. III, p. 180. For details, especially for a description of smaller objects, such as gems and coins, the reader is referred to the various numbers of the *Classical Review.*

A kriophoros and a seated ram in terracotta (Beirût): a terracotta statuette of Eros (Babylonia): Karpathos vases noted in Furtw. and Loeschcke, *Myk. Vas.*, p. 83: Assarlik antiquities: three Mykenaian vases found near Pothia (Kalymna): a bronze Etruscan figure of a running female on a flower: a fine series of twenty-six moulds for terracotta figures (Tarentum): a lekythos with Mænad (?) (Tarentum): large hydria with friezes of warriors, horsemen, *etc.*, in so-called Chalkidian style (Tarquinii = Cervetri): small oblong bronze plaque with two panels, each having a pair of nude figures, archaistic.—*Class. Review*, 1887, pp. 249–50.

The two fine terracotta vases from Kypros which we described lately as in the charge of the Department of Greek and Roman Antiquities, British Museum, have now been definitely purchased, together with the silver ornaments mentioned by us at the same time, and an important archaic marble torso of a statue which stood outside the tomb in which these articles were

found. Among the silver ornaments discovered inside the tomb was a silver coin of Idalion, dated c. 520–500 B. C., which would do for the date of the statue. At a meeting of the *Hellenic Society*, Oct. 20, Mr. MURRAY read a paper on these two vases. They were found in recent excavations on the site of the ancient Marion, and both undoubtedly were of Athenian origin. The older was an *alabastron*, with female figures finely drawn in black on a creamy surface. The scene was of a Dionysiac character, and the painting was signed by an artist PASIADES, a name hitherto unknown. The second vase was a *lekythos*, with red figures on a black ground, but with accessories of white color and gilding. The figures represented were Oidipous, the Sphinx, Athena, Apollon, Kastor, Polydeukes, and Æneas, and the subject, Oidipous putting an end to the Sphinx after she had thrown herself down from her rock, on the solution of her riddle. The coloring seemed to Mr. Murray to suggest an attempt on the part of the painter to reproduce the effect of a chryselephantine statue. Mr. Murray was inclined to fix the date at about 370 B. C.—Mr. C. SMITH remarked that the interest of the vases lay specially in their coming from Kypros, and dwelt upon the importance of working out so rich a mine.—Mr. WATKISS LLOYD argued that a column in the second vase, which Mr. Murray had considered to indicate a temple, was more probably the column on which the Sphinx is ordinarily seated in vase-paintings.—Mr. J. T. CLARKE remarked upon the close relation between Athena and the Sphinx, which might be noticed in Asia Minor and elsewhere, and was certainly older than the myth of Oidipous. Hence, no doubt, her appearance on the helmet of the Parthenos at Athens.—*Athenæum*, Aug. 13; Oct. 29.

Mr. A. W. FRANKS has presented to the British Museum a most remarkable coin lately received from India. It is *a decadrachm of the Bactrian series, the first ever met with*, and bears, on the obverse, a horseman charging with his lance an elephant, on whose back are two warriors; and, on the reverse, a king or Zeus, standing, holding a thunderbolt and a spear; in the field is a monogram composed of the letters A B. The obverse records some victory of the Greeks over the barbarians, and the reverse may be a representation of Alexander the Great. The coin evidently comes from the district of the Oxos, and was struck about the middle of the second century B. C.—*The Evening Post* (N. York), Aug. 19.

Mr. JESSE HAWORTH, of Bowdon, Cheshire, owner of the famous *throne-chair of Queen Hatasu*, or Hatshepsu (XVIII Egyptian dynasty), has munificently presented this unique royal relic to the nation. The throne-chair has, we understand, arrived at the British Museum.—*Academy*, Dec. 3.

Changes.—On Monday next the public will be re-admitted to the old Print-Room in the British Museum, which has been handed over to the Department of Greek and Roman Antiquities, and employed by Mr.

Murray to house a considerable number of antique *stelæ*, fragments of many kinds, fronts of Roman sarcophagi, and rectangular sepulchral vases of marble. Of the last-named class the department possesses an unusual number, no fewer than fifty, and nearly all of them noteworthy on account of the excellence of their carving or the interest of the inscriptions upon them. The larger *stelæ* have been sunk into the walls facing the windows, the sarophagi stand at one end of the room, the remainder of the objects being placed upon the floor in groups. The huge torso from Delos, removed from the Phigaleian Saloon, has been placed between two of the windows. In the north wall is inserted a very fine and boldly carved votive monument erected in honor of Lucius Antistius and his wife Antistia Plautia, by their freedmen Rufus and Anthus, in gratitude for their goodness. It is an extraordinarily vigorous and striking example of Roman carving of two heads in the highest alto-relief, of full life-size, and sunk in very deep circular recesses, which are shaped like scallop shells, the rays of the shells being distinct behind the heads; the hinges of the shells are fully marked in front. Each recess is bordered with a laurel-wreath. Below is the dedicatory inscription. The remarkably animated expressions, the lifelike pose of the heads, and the general *vraisemblance* and spirit of these sculptures compel attention. Like nearly everything of the kind in the room, this monument has been for a long time unseen. Brought from the cellar where it has lain since it was bought at Lord Bessborough's sale in 1858, it has the attractions of a newly discovered treasure.

The papyri which were hung in long glazed frames against the walls of the staircase at the end of the Egyptian Saloon have been removed to make room for the exhibition of a number of mosaics, chiefly from Halikarnassos and Carthage, which have long been reinterred in the basement of the building. The papyri have been framed in convenient lengths, which will be stacked in racks, and thus made available for examination by students. This improvement is due to a suggestion of Dr. Bond.

A great improvement is being carried out in the arrangement of the Greek and Etruscan vases in the upper story of the Museum. They are being grouped topographically. This practically involves their nearly exact chronological arrangement, and offers quite new and very suggestive aid to the student desirous of appreciating fairly the characteristic styles of the individual artists. A very precious group of vases has been made by bringing together all the signed instances. The beautiful little vase shaped like an *alabastron*, which we described some time since, has been placed in a detached case in one of the rooms.—*Athenæum*, Oct. 8.

Mr. Percy Gardner has been elected to the chair of archæology at Oxford, vacant by the transfer of Prof. Ramsay to Aberdeen. We understand that Mr. Gardner will resign not only his post in the medal room

at the British Museum, but also the Disney professorship at Cambridge, which he has held since the resignation of Prof. Babington. The department of coins in the British Museum has recently suffered another loss in the withdrawal of Mr. C. F. Keary.—*Academy*, Aug. 20.

SOUTH KENSINGTON MUSEUM.—*Koptic Embroideries.*—A descriptive catalogue of the collection of tapestry-woven and embroidered Egyptian textiles recently purchased by the South Kensington Museum has been compiled and will be shortly issued. The introduction, briefly dealing with the history of those specimens made between the first and ninth centuries A. D. at Akhmîm, in Upper Egypt, has been written by Mr. Alan Cole, who for the last two years has been engaged in writing a catalogue of the tapestries and embroideries in the South Kensington Museum. It is only recently that these interesting textiles have come to public notice. Great interest is at present excited in them, as they are the earliest yet discovered, and collections of them are being formed (*cf. Letter from Roma*, p. 392; and *Musée des Gobelins*, in *News*, p. 490).—*Athenæum*, July 9.

OXFORD.—On Tuesday last, Convocation at Oxford voted the following grants: £250 for removing the Arundel marbles from the Bodleian to the University Galleries, where they will be under the charge of the Professor of Archæology; £730 for additional accommodation at the Bodleian Library and the Radcliffe Camera; £500 for building a lodge for the caretaker of the new Clarendon Laboratory; and £1200 for continuing the arrangement and cataloguing of the Pitt-Rivers anthropological collection.—*Academy*, Dec. 3.

The Evangelistarium of St. Margaret of Scotland.—The Bodleian Library purchased at a sale at Messrs. Sotheby's, on July 26, a small volume described in the catalogue as "Quatuor Evangelia, sæc. XIV." This is now found to be the Evangelistarium, or portions of the Gospels recited during the Mass, which belonged to St. Margaret, Queen of Scotland (*ob.* A. D. 1093), the grand-daughter of Edmund Ironsides and mother of Matilda, the wife of Henry I, and the foundress of Dunfermline Abbey. It is beautifully illuminated with four full-page pictures of the Evangelists, in the English style of the first part of the XI century. From a passage in the life of the Queen, by Bishop Turgot of St. Andrews, compared with an inscription in the volume, it is clear that this very book was believed to have been the subject of a miracle, in having been immersed in a river for a considerable time without receiving injury. The MS. was subsequently in the possession of Lord William Howard of Naworth, who gave it its present binding. Prof. Westwood considers the style and ornamentation of this codex to be of the same period as the Canute Gospels in the British Museum (*Royal MS.*, I. D. 9), that is, early in the XI century. He has no doubt that it was written and painted in England; but few distinct-

ively Anglo-Saxon forms of letters are found, except in N, where the first perpendicular stroke is continued below the line, and the cross stroke is horizontal and very low. In general, the writing is fine Caroline minuscule. The gold is not burnished, but consists of thick gold-leaf laid on the parchment, and is either dull in tint or, where brighter, of a reddish color (*rutilabat*). Beneath the figure of St. Luke is a representation of the earth as a rugged surface. St. Mark and St. John are represented as bearded.—London *Times*, Aug. 5; *Academy*, Aug. 6, 20.

SOUTH SHIELDS.—*Roman Patera.*—ROBT. BLAIR writes, from South Shields, to the *Academy*, Sept. 25, "A few days ago I purchased, from the finder, a fine Roman *patera* of bronze, six inches in diameter. It had been found at low-water mark on the Herd Sand, South Shields—a stretch of sand, dry at low tide, on the south side of the Tyne. The handle is missing, but the shield-like outline where it was affixed remains. In the inside of the saucer-shaped vessel and around a central boss is the inscription, APOLLINI · ANEXTIOMARO M A SAB, which Prof. Hübner, in a note on the subject to be read at the next meeting of the Newcastle Society of Antiquaries, expands *Apollini Anextio Maro M(arcii) A(ntonii) Sab(ini servus)*. APOLLO ANEXTIUS occurs for the first time. He considers it a local divinity like Apollo Maponus, *etc.*"—*Cf. Academy*, Oct. 8, 15.

WALES.—At a meeting of the Society of Antiquaries of London, held Dec. 1, Mr. J. WILLIS-BUND, as Local Secretary for South Wales, read a report on various archæological discoveries in his district, principally on the excavations at Strata Florida Abbey, and his own researches amongst the Roman remains about Llanio. He also spoke in strong terms of the great destruction of ecclesiastical and other remains now going on in South Wales.—*Athenæum*, Dec. 10.

AMERICA.

UNITED STATES.

EGYPT EXPLORATION FUND.—*Donation of Egyptian Antiquities to the Museum of Fine Arts, Boston; and to Chautauqua Union College.*—At the fifth annual meeting of the Egypt Exploration Fund (London, Dec. 22), Miss AMELIA B. EDWARDS, the hon. secretary, after a lively recognition of the generous support given to the Fund by Americans, stating that the American subscription was, this year, equal in amount to the English, moved that, in addition to minor objects, the following works of sculpture should be presented to the Museum of Fine Arts, Boston, U. S. A.: (1) a seated statue, of heroic size, of Rameses II, in black granite, found in 1885 at Tell Nebesheh (the site of the city of Am); (2) a headless black granite

sphinx, of the Hyksos period, formerly inscribed on the chest with the ovals of a Hyksos king, and re-engraved with the ovals of Rameses II; being also inscribed with the names of various other kings, including that of Setnekht: this sphinx was likewise found at Tell Nebesheh. (3) A squatting statue in black granite of the style of the XII dynasty, reworked about the head, and inscribed with names and titles of Prince Mentuherkhopeshef, "General of Cavalry of his father," King Rameses II. This very interesting piece was found during the present year at Boubastis. (4) A selection of Greek vases from Naukratis.

The resolution was seconded by Mr. J. S. COTTON, who said that he performed this office with especial sympathy, because of his intimate knowledge of the intelligent treatment of learned subjects by various American newspapers. He would, however, name only three: *The Nation* of New York, *The Literary World* of Boston, and *The Critic* of New York. Mr. Cotton then referred to the *American Journal of Archæology* and the *American Journal of Philology*, which he defined as being of a higher order of merit than any publications bearing similar titles in Great Britain. The American School at Athens had preceded the British School; and the work of the American Archæological Society, and of the American explorers along the coast of the Mediterranean, were in every sense an honor to the United States. The motion was carried unanimously.

Mr. WILLIAM FOWLER then moved: "That a selection of Egyptian and other antiquities made by the Committee be presented to the Museum of Sidney, N. S. W.; the University of Chautauqua, in the State of New York, U. S. A.; the Ashmolean Museum, Oxford; and other museums." Mr. Fowler dwelt in terms of warm appreciation upon the generosity of the American subscribers to the fund. The Rev. W. MacGregor, local hon. secretary for Tamworth, seconded the resolution, which was passed unanimously.—*Academy*, Dec. 31.

WASHINGTON.—*A study-collection of casts of Babylonian and Assyrian Antiquities in the National Museum.*—The National Museum at Washington, in association with the Johns Hopkins University, has undertaken the formation of a study-collection of casts of Babylonian and Assyrian antiquities; and the Museum is ready to make facsimiles and casts of such antiquities. At first, will be obtained reproductions of Assyrian antiquities preserved in this country. The Johns Hopkins University will attend to the arrangement and cataloguing of the Assyrian collection in the National Museum, under the supervision of Dr. Paul Haupt, Professor of Shemitic Languages, and of Dr. Cyrus Adler, assistant in the Shemitic courses, who will also coöperate in the work of securing the loan of objects to be copied, and of forming the collection.—*Johns Hopkins University Circulars*, Jan. 1888.

A. L. FROTHINGHAM, Jr.

SUMMARIES OF PERIODICALS.

ATTI DELLA SOCIETÀ DI ARCHEOLOGIA E BELLE ARTI PER LA PROVINCIA DI TORINO. 1887. No. 1.—A. FABRETTI, *Proceedings of the Society, 1883–86.* An introduction refers to the restoration of the ancient gateways of Susa, to the excavations at Castelletto Ticino (*cf. News* of JOURNAL, I, pp. 234, 439), at Fontanello and other places, especially in view of the additions to the museum of Torino.—VITTORIO SCATI, *Studies on the Antiquities of Acqui.* The writer identifies Caristo, the capital of the Ligurian tribe of the Statielli, which was captured and destroyed in 172 B. C. by the consul Caius Popilius, with the present city of Acqui. It is the strategical centre of their territory, being at the mouth of two valleys and in the midst of several others. It was called by the Romans, after its destruction and reconstruction, *Aquae Statiellae.* Ancient monuments that previously existed and discoveries of antiquities made in preceding centuries are mentioned, and, finally, the excavations made during the last few years are described. The tombs found were of the Roman imperial period, and contained only pottery of no value. The only ancient monument that remains standing is the Roman aqueduct. The writer insists on the great importance of Acqui in Roman times, as shown by the Peutinger Table, and from its position at the head of three great Roman roads. —G. CLARETTA, *Research in Torinese antiquities.*—E. FERRERO, *The Civic Museum of Susa.* At the close of 1884, the Municipality of Susa approved the institution of a Museum of antiquities, fine-arts, and natural history, proposed by Professor Ugo Rosa, who was appointed its director. It is to illustrate mainly the region of Susa.—C. BOGGIO, *The first Christian churches of the Canavese.* I. There are records of a number of early monuments in this province, but it was at all times such a battle-field for different nations and factions that the greater part of the earliest monuments have been either entirely destroyed, as the catacombs of S. Bessus and S. Juvenalis, or nearly so, as that under the church of *Santa Maria in Doblatio* near Pont. The cathedral of Ivrea retains only its two Lombard towers. At Settimio Vittone is *S. Lorenzo in Castello,* a small simple octagonal church, coupled with one in the shape of a cross and similar to the Mausoleum of Gallo Placidia at Ravenna. At San Ponso is an octagonal chapel whose cupola is supported by a wall having four square and four semicircular

niches, similar to the baptistery attached to the Cathedral of Chieri. As no traces of large churches exist, it remains uncertain whether these interesting little edifices [which appear to belong to the VI–VII cent.] were baptisteries or places of worship.

BULLETTINO DI ARCHEOLOGIA CRISTIANA. 1886. Nos. 1-4.— O. MARUCCHI, *Meetings of the Society of Christian Archæology.* The meetings reported are those of the winter and spring of the season 1885–86. The eleventh year was inaugurated by a meeting on *Dec. 13, 1885* (in the new abode of the Society, the *Palazzo dell' Accademia ecclesiastica*) by an address of Comm. DE ROSSI on the discovery of the Cemetery of S. Felicita (*cf.* JOURNAL, vol. II, pp. 93, 354), which he continued at the next sitting, *Jan. 3.* Prof. STORNAJOLO spoke of some paintings, recently discovered in a crypt of the basilica of S. Vincenzo al Volturno, representing scenes from the life of the Virgin and episodes of the martyrdom of SS. Stefano and Lorenzo. These paintings (published in part by P. Piscicelli in a letter to P. Tosti, 1885) belong to the ninth century. Their exact date is determined by the portrait of their author, abbot Epiphanes, who is there represented with a square nimbus. The style is native South Italian, as distinguished from the Byzantine. *Feb. 7*, Prof. O. MARUCCHI spoke of the discovery at S. Agnese of the front of a sarcophagus of especial interest, as it has, in the centre, a figure of Christ bearded and of the severe type, holding the book in his left hand and blessing with his right, while at his feet lies the case for containing the volumes of the divine word. By a comparison of this monument with others in which the Saviour, though bearded, has a sweet and gentle expression, Prof. Marucchi concludes that the new relief proves the type of the severe bearded Christ to have existed as early as the fourth century, though it was only fully developed later in the mosaics. Sig. IGNAZIO GIORGI sent a paper regarding two metrical pieces discovered by him in a seventh-century MS. of the Victor Emmanuel Library. The first is the acrostic metrical eulogy of an unknown martyr, the deacon Nabor killed by the Donatists: it is attributed to S. Augustine. Comm. DE ROSSI, in continuing his account of the discoveries made in the cemetery of S. Felicita, called attention to the curious fact that in a *loculus* of IV cent. A. D. was infixed a *quadrans* with a dog on the reverse, which Visconti has shown to have belonged to the Roman colony of Sutri between the fourth and fifth century of Rome: it was thus employed seven centuries after it was current coin. *March 7*, Prof. O. MARUCCHI reported on the excavations in the cemetery of S. Sebastiano (*cf.* JOURNAL, vol. II, pp. 338–41). Comm. DE ROSSI gave a description of a remarkable Christian isolated subterranean cubiculum, anterior to Aurelian, seen by Campana, who sketched the paintings that adorned it. The vault had: in the centre, the Good

Shepherd; in the angles, four busts, between which were four scenes,—Moses striking the rock; Christ multiplying the loaves; raising Lazarus; *etc.* In the arcosolia were: the *orante*; Daniel; Noah. By the door: the paralytic; and Job. Of two Greek inscriptions found, one is that of Verazio Nikatora, probably a Galatian; and there are reasons for believing that a number of Asiatic Greeks were buried in this region, which explains why this cubiculum is not connected with any catacomb. This cubiculum cannot now be found. M. DE LAURIÈRE spoke of an inscription at S. Bernard de Comminges, with the consular date of 347, which is one of the oldest in France. Comm. DE ROSSI announced the discovery, at Philippeville in Africa (the ancient Rusicade), of the ruins of a large Christian basilica with columns, capitals, and other decoration.—G. B. DE ROSSI, *The mausoleum of the Christian Uranii at S. Sebastiano on the Via Appia.* An inscription of the year 349, during the consulate of Limenius and Catullinus, was found near S. Sebastiano, and reads as follows: MIRE BONITATIS AC TO...| ADQVE PRVDENTIAE ℂ FL·MA...| DVLCISSIME·QVAE VIXIT AN...| DXXV DEP·INP XI KAL DEC·LIME.... The mausoleum in which it was found is one of the finest of that region. A large inscription on a marble architrave shows it to be the family mausoleum of the Uranii; the brother of the great Ambrose of Milan was Uranius Satyrus and the letters MA might even suggest the name of their sister Marcellina.—G. B. DE ROSSI, *Primitive Priscillian epigraphy, or the inscriptions cut in marble and painted on tiles of the earliest region of the cemetery of Priscilla.* In this lengthy and important monograph, De Rossi takes up a subject the materials for which he has been collecting for years. It is a collection and an analysis of the elements necessary to define with the greatest precision possible the period to which should be assigned the ancient tombs bearing inscriptions, some cut in marble and others painted on tiles, situated in the primitive and central region of the cemetery of Priscilla. Only the first part appears in the present number of the *Bullettino*, and that is a long and minute analysis of the inscriptions: the chronological and historical dissertation is to appear in the following year. The inscriptions are taken up in chronological order, and light is thrown on them by notes and comparisons. Sometimes there are discussions of a certain length, such as that raised by the inscription VERIC M VNDVS. It was of the utmost importance to decide whether the initial letter M stood for *Martyr* or not, especially in view of the great antiquity of this group of inscriptions. De Rossi takes up and rejects as impossible all other interpretations, and decides in favor of *Martyr*, applying the same interpretation also to the two inscriptions M·ZOVCTINOC and MM SILVIN FRT. Without dwelling longer on the inscriptions, the interest of which will appear more fully in the second

part of the treatise, let us pass to the chapter on "*The inscriptions, sarcophagi, paintings and monuments of the artery K and its dependencies.*" This artery is the principal one and that nearest the staircase which originally led down to the cemetery: it was a sand-pit gallery turned to cemeterial use. It was broad and was flanked, in *K 6*, on either side by large niches to receive marble sarcophagi, and was without any *loculi:* in *K 1, 2, 3*, the loculi prevail, but they are of great antiquity; one of them is adorned with a beautiful decoration of stucco-reliefs, and by its side is the famous group of the Virgin and Child with the figure pointing to a star. The fragments of sarcophagi found are insignificant, and they seem to have been barbarously broken into a thousand pieces: none of them are of Christian workmanship. The most important group of crypts in the whole cemetery is that marked *A*, A^{I}–A^{VI}, *B*, as is proved by the beautiful decoration in stuccos, frescos and marbles. The largest, A^{I}, is entirely built up, has an apse, and was covered with large marble slabs: A^{V} was decorated with beautiful friezes of stucco with elegant volutes of leaf-work and female figures of classic art, apparently belonging to the period of Hadrian or the first Antonines. The great crypt A^{VI}, commonly called *cappella greca*, is adorned with the very early and now famous frescos and with architectural friezes in stucco. This region is not yet entirely explored. In the fourth century, works were undertaken in order to unify this group of crypts. In view of tiles of the years 159 and 164, found under the pavement of crypt *A*, De Rossi concludes that the period of the expansion of the cemetery beyond the sand-pits, and of the multiplication of the tombs under the pavement, was that of Marcus Aurelius, Commodus and the close of the second century, and that the prevalent period of the tombs of the primitive nucleus in the sand-pits is earlier, and may begin with the Flavii and the Claudii.

BULLETTINO DELL' IMP. ISTITUTO ARCHEOLOGICO GERMANICO. SEZIONE ROMANA. Vol. 1. No. 3.—W. HELBIG, *Excavations at Vetulonia* (pp. 129–40). The wonderful discoveries made by Signor Falchi in the necropolis of Vetulonia have been more than once noticed in the JOURNAL (vol. I, p. 447; vol. II, pp. 92, 492–94). This paper by Professor Helbig was written after the first discoveries on the *Poggio alla Guardia*. The first objects described, belonging apparently to a well-tomb, form a group to which belong, (1) two Egyptian scarabs of green enamel, judged by Mr. Steindorff to be not anterior to the XXVI dynasty; (2) an oblong silver strip, stamped with a design of ducks and disks; (3) a superb silver clasp, forming part of a long necklace of silver and amber tubes; (4) fragments of a fine silver chain, belonging to another necklace; (5) two simple gold rings, four silver fibulæ, and an amber ring. Toward the south is a series of hole-tombs cut in the soft rock and irregular in shape:

they seldom appear in the *Poggio alla Guardia*, but in the neighboring *Poggio al Bello* they alone are employed. As at Tarquinii the well-tombs are followed by trench-tombs, so at Vetulonia they are followed by hole-tombs, and in each case their contemporary use and gradual transition from one to the other are clearly apparent. But, while at Tarquinii the modification in the construction of the tombs was accompanied by a change in the sepulchral rite from cremation to burial, at Vetulonia the rite of cremation was always continued. Professor Helbig describes the contents of three hole-tombs, opened before his visit, which had fortunately not been entirely devastated by previous visitors. The first and most important is that called the *Tomb of the Warrior* on pp. 493–4 of vol. II of the JOURNAL, where its contents are briefly described: the long Etruscan inscription on a black bucchero vase, and a silver-gilt cup of Phoinikian workmanship engraved with griffins, sphinxes, birds, winged horses, *etc.*, prove the tomb to belong to the VI cent. B. C. The floor of the hole was covered with vases, arms, and other objects deposited in honor of the defunct. A vase of beaten bronze, containing the ashes, had the first place in the row of vases: the other vases were placed either on the bottom or inside bronze jars: of the latter a number were found, full of earth, which contained the greater portion of the precious and smaller objects. The terracotta vases belong to three classes: (1) brownish vases made by hand, of local manufacture; (2) vases of black bucchero, probably imported from Southern Etruria; (3) some painted Greek vases. In another similar tomb was found a figurine in green enamel, of Egyptian style, representing Isis and Osiris; a number of objects in amber; chains and rings of gold, silver, and bronze. In a third tomb was an idol of Bes.—A. MAU, *Excavations at Pompeii* (pp. 141–57; pl. VII *a*). This paper describes the excavations carried on at Pompeii, during the season 1884–85, in the *Reg. 8 ins. 7* and *ins. 2*. The former were mainly confined to the great garden which occupies the E. end of the *insula*, and to an adjacent small house. At the S. W. corner there are remains of a house that existed before the garden, with frescoed decoration in the second style: to this partly-demolished house belongs a lararium. The small house occupies the smaller and the W. side: in its present shape, it is not anterior to the earthquake of 63 A. D., though its construction dates further back and it preserves paintings of the third style.—*Reg. 8, ins. 2*. Two houses (Nos. 32–35 and 36, 37) standing close to that called "of Joseph II" are described: they are similar to the latter. Here, also, the fronts show traces of the first period before the destruction of the city-wall, while the rear parts, which were adjacent to it, are rebuilt. The atrium (with its chambers) of No. 32–35 preserves the form of the *epoca Sannitica*. Although this house was one of considerable size and importance, its decoration is very inferior, and it contains no figured frescos.—A. KLITSCHE DE

LA GRANGE, *Archæological finds in the territories of Tolfa and Allumiere* (pp. 158–60). The existence of Italic tombs of the first iron age was, until now, ascertained only for the northernmost part of the *Monti Ceriti, i. e.*, the Allumiere territory alone, and near the *Colle della Pozza*, the slopes of *Monte Rovello*, and the east side of *Poggio Umbricolo*. The discovery, however, of a tomb belonging to the same period at the *Coste del Marano*, on the southernmost edge of the territory of Tolfa, shows that this entire range of mountains must have been at that time filled with numerous centres of population.—G. WISSOWA, *Silvanus and his companions: a relief in Firenze* (pp. 161–66; pl. VIII). This relief has been for some years in the new museum of the *Palazzo della Crocetta* at Firenze. It was evidently not an independent basrelief, but formed part of some architectural decoration. In a background made to imitate a solid wall, three doors open—the central one with a gable, the others with a low round arch: framed by each, is a figure. In the centre is Sylvanus with a Satyr on the left and a Pan on the right. This relief is the only example of a union of Silvanus with figures of the escort of Dionysos—a union so general in the literature.—F. VON DUHN, *Two basreliefs of the Rondinini palace* (pp. 167–72; pls. IX, X). These reliefs both belong, as shown by their style, to the time of Antoninus Pius. The first shows the sacred serpent of Asklepios (brought to the island of the Tiber by Antoninus Pius) coming forth to drink, while the figure of the river-god rises from the waves to offer it water in a cup. In this connection, the writer identifies the site of the temple of Asklepios with the present church of S. Bartolommeo.—H. VON ROHDEN, *Terracottas from Nemi* (pp. 173–78). This paper is a continuation of one published in the *Bullettino* of 1885 (pp. 149–57): it is called forth both by the importance of pieces afterward discovered, and to draw the general conclusions made obvious. In general, the terracottas belong to the last centuries before Christ, there being nothing archaic and but a few insignificant fragments of the Imperial period. Of especial importance are (1) a group of reliefs with a vegetable ornamentation (=Capua) or a winged goddess, sometimes with animals; (2) antefixæ with heads—sometimes Bacchic female-heads, sometimes masks; (3) fragments of the roof of a miniature temple; (4) large figures, especially of Diana, generally worked in the round, sometimes in relief.—P. STETTINER, *Some new Aes grave* (pp. 179–82). The most important is a Roman *As librale* (fig. 1) with the usual type of the bifrons on the obverse, and the prow and sign of the *As* on the reverse: what render it interesting are the letters on the obverse, placed under the head, which are very indistinct; they have been read IANI, but the real reading is IANVS. This is important as identifying, beyond doubt, the double-head figured on the *As*. A second coin (fig. 2) has, on both sides, the Gorgon-head, of the type on the coins of

Populonia. The third example is a fragment of *Aes signatum* (fig. 3) bearing on each side the impress of a fish-fin (*cf.* Garrucci, t. xxv, No. 2, who, however, mistakes them for branches of verbena and chamaerops): it belongs to Todi.—G. F. Gamurrini, *Combat of the Lemnian women on a Bolognese stele* (pp. 183–87). On an Etruscan stele with the inscription, *I am the tomb of Vettius Catilius*, belonging to the third century, there are four reliefs, one under the other. The second shows the usual chariot-procession; the third represents a combat between a female on horseback and a warrior, and is identified by the inscription *Lemnites*. The subject, for the first time met with, is the contest, celebrated by Greek historians and dramatic and comic poets, of the Lemnian women and the Thrakians. According to the tradition, the Lemnian women, rejected by their husbands who took other wives from Thrake, killed, after a sanguinary contest, their former husbands with the women and children, and the island was henceforth under female rule. The fact that this subject was represented by an Etruscan artist gains special significance through the discovery of the famous long Lemnian inscription (*Bull. Corr. Hellén.*, 1886, p. 1) in archaic Greek letters, but in a language akin to Etruscan. This has led several *savants* to suggest that the Etruscans were merely a branch of the Pelasgians.

No. 4.—L. Borsari, *Excavations at Ostia* (pp. 193–99). A description of the excavations undertaken in 1885–86, under the direction of Prof. Lanciani, to unite the Theatre with the Temple of Vulcan. [They have been carefully described in the Journal, vol. II, pp. 483–84.] Only one of the four temples found has been identified by an inscription: VENERI SACRVM. The excavations carried on between this temple and the group of *horrea* yielded no results, as the quarter was one inhabited by the poorer classes, probably by dyers and tanners. The work undertaken to the south of the Theatre was of great importance for the epigraphy of Ostia, as, in restoring the central ambulacrum, four marble pedestals came to light with dedicatory inscriptions that form a part of the interesting group discovered in 1880 (*Not. d. Scavi*, 1880, pp. 470 *sqq.*).—F. Koepp, *Archaic Sculptures in Roma*, II (pp. 200–202; pl. XI). A female head in the Chiaramonti Museum is published. It is of Greek marble and once belonged to a statue, though it was probably worked by itself to be set on to the body. Whether it be the Greek original or a copy, it bears unmistakably the mark of the pre-Pheidian art of the middle of the fifth century [to judge from the plate this would seem doubtful, to say the least.—Ed.] and related to the Olympian sculptures. In this class the writer also places the heads: II, in Lansdowne House; III, Richmond; IV, British Museum; V, Alba coll. in Madrid; VI, Villa Albani No. 63; VII, Torlonia Mus. No. 486.—A. Mau, *Excavations at Pompeii* (pp. 203–13; pl. XII: continued from p. 157).

Description of a house whose different stories are exhibited on pl. XII: it was formed by the reunion of two earlier houses which met at an angle and which were still divided in the Imperial period, at the time of the third style. Both atria had been demolished, probably in consequence of damages produced by the earthquake of 63. On the walls of one of the atria are terracotta "grondaie" of four classes with lion-heads between palmettes, painted.—W. HELBIG, *Journey through Etruria and Umbria* (pp. 214–34). This paper is the fruit of a trip to Orvieto, Chiusi, Perugia, and Todi. For Orvieto, the latest results of excavations at the *Cannicella* are given: the tombs all belong to the latter half of the VI century B. C. At Chiusi, he examined the contents of the tombs of *Seianti Thanunia*, several times mentioned in the JOURNAL (vol. II, p. 482; vol. III, p. 180) and now at the British Museum. At Perugia, the most important late discovery had been of some tombs on the *Frontone*, and a description is given of their contents, especially that of the warrior-tomb with the *kottabos*, which belong to the V cent. B. C. They have been noticed in the JOURNAL, vol. II, p. 484. Especially to be noted is a red-figured krater painted in the Attic style of the Periklean age (second half V cent.). On one side are Zeus and Hera, each enthroned and holding a sceptre and patera, and each with an attendant. The second composition represents the departure of Triptolemos, and includes figures of Persephone, Demeter and Hermes. At Todi, Prof. Helbig found the rich contents of the recently-discovered tomb of a woman belonging to the third century B. C., to whose extreme artistic and archæological value attention has been called in the JOURNAL, vol. II, pp. 490–91.—*Appendix: remarks on the kottabos* (pp. 235–42). This game, so familiar to the Greeks from early times, was also common among the Etruscans. It consisted of a slender bronze stick rising from a circular base, on the top of which stood a small figure or *Manes*; a ring is inserted over the pointed top and stops two-thirds down, where the stick grows larger, sustaining a thin bronze basin (λεκανίς, λέβης, *etc.*): the last constituent is a concave bronze disk (πλάστιγξ) which can be balanced on the obtuse end of the metal stick. There were three ways of playing the game: throwing the wine (1) at the balanced πλάστιγξ so as to make it fall into the basin; (2) at the head of the *Manes*; (3) at the πλάστιγξ placed on top of the *Manes*.—I. FALCHI, *Excavations at Vetulonia* (pp. 243–44). A description of the vessel and the ossuary found in the Tomb of the Warrior, and fully described on p. 493 of vol. II of the JOURNAL.—G. SORDINI, *A polygonal wall found in Spoleto* (pp. 245–46). *Cf.* JOURNAL, vol. II, p. 490. —F. MARX, *Relief in the Villa Albani* (pp. 247–52). In this relief the semi-nude figure of a powerful brutal man is negligently seated on a rock, with one arm bending towards him without effort a pine tree, while he reclines on the other and seems in the act of conversing with some figure

that does not appear. This is evidently the giant Sinis Pityokamptes defying the hero Theseus, represented on a corresponding block that has been lost. It belongs, doubtless, to a series of decorative reliefs representing the exploits of Theseus, and its model was probably an Attic work of the fifth century.—TH. MOMMSEN, *Epigraphic miscellanea* (pp. 253–54). An inscription of A. Didius Gallus, legate to Gaul. A. L. FROTHINGHAM, JR.

ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. **1886. No. 4.**—D. PHILIOS, *Inscriptions from Eleusis* (contin.). 29. This inscription is graven upon both sides of a flat slab of Pentelic marble. Upon one side are 105 lines of 47 letters, on the other, 90 lines of 51 letters, each. We have here a detailed report concerning the materials for some building. The contractors were to furnish all materials, but the city agreed to furnish lead and iron for the fastening of the stones, and a good pulley. The inscription belongs to a time shortly after the archonship of Eukleides (403 B. C.). Possibly, the building for which the materials were to serve may have been a stoa intended to stand before the temple by Iktinos, though no such stoa was built until much later, at the time of Demetrios of Phaleron.—S. A. KOUMANOUDES, *Two Attic Decrees; and, in an Appendix, a Decree from Priene.* No. 1 is a decree in honor of a Boiotian proxenos of Athens. The date is either the archonship of Euandros (382–1 B. C.) or, less probably, that of Euthykles (398–7 B. C.). The inscription is fragmentary, and was found in a street in Athens. No. 2 is also fragmentary: it is said to have been found in the eastern part of Athens. This is also an honorary decree, apparently in honor of some citizens of Priene. It appears to belong to about the middle of the fourth century B. C. The *Appendix* gives two fragments of a decree of Priene in honor of some citizen who had rendered various services to the city. The approximate date is fixed by the mention of Julius Cæsar.—A. STSCHOUKAREFF, *Megarian Inscriptions.* No. 1 is part of an honorary decree. Mention is made of the Roman senate, and the name M. Calidius occurs. The inscription appears to belong to the first half of the first century B. C. The greater part of No. 2 was published by J. Schmidt (*Mitth. Ath.*, VI, p. 352). It is a decree in honor of several persons. The titles of several Megarian officials occur in this and the preceding inscription. The date assigned is "Roman times before Christ." No. 3 was apparently upon the base of a statue of the Emperor Claudius. It mentions him as pontifex maximus, imperator for the twelfth time, consul for the fourth time, holder of the dictatorial power for 47 years, and father of his country. No. 4 is published by Le Bas, No. 48. One fragment was found at Aigina, the other at Megara. No. 5 is *C. I. G.*, 1063. Nos. 6 and 7 are simple sepulchral inscriptions.—I. SAKKELION, *Christian Sepulchral Inscriptions.* Nos. 1, 2,

and 3 are rude inscriptions giving the names of the deceased with the dates of their death. The dates are 856, 921, and 867 A. D. These three inscriptions are upon the same stone, found in excavating the site of the burnt market in Athens. Nos. 4 and 5 are from a manuscript of the XVI century in the national library at Athens. No. 4 is entitled: *On the grave of Demetrios Leontares in the monastery of Petra.* It consists of 20 lines. This Leontares lived under Manuel Palaiologos II, and died in 1431 A. D. No. 5 is a similar poem on the tomb of Isaac Asanes (τοῦ Ἀσάνη κυροῦ Ἰσαακίου) and his grand-daughter in the monastery of the Philanthropos. This Asanes is the one who was sent with Leontares and Manuel Kantakouzenos to meet the Amir Mehenet I in 1420. It is not known in what part of Constantinople the monasteries of Petra and Philanthropos were situated. In a manuscript of the Bibliothèque Nationale in Paris (No. 475: *cf.* Δελτίον τῆς Ἱστορικῆς καὶ Ἐθνολογικῆς Ἑταιρίας τῆς Ἑλλάδος, I, p. 455) twenty-three lines are identical with lines of these epitaphs.—B. STAES, *Sculptures from Epidauros* (pls. 11, 12, 13). Under the remains of a Roman building to the north of the temple of Asklepios were found statues and statuettes of Asklepios, Hygieia, Athena, and Aphrodite. Seven Asklepios-figures were found, one of which is published. The height of the figure with its base is 0.80 m. The god stands, leaning with his left arm-pit upon his staff, while his right hand rests upon his hip. His right shoulder and breast are uncovered. The left arm is wanting from above the elbow. The inscription states that the statue was dedicated by the high-priest Plutarchos in the year 185 after Hadrian's visit to Greece. An inscription by the same man, with the same date, is found upon the base of another small Asklepios, and is here published. Two figures of Hygieia (height 0.57 m. and 0.52 m.) are published. One was dedicated by Gaius to Hygieia, the other by Lysimachos to Hygieia and Telesphoros, as the inscriptions show. A third inscription with a dedication to Asklepios, Hygieia and Telesphoros is also published. The two figures of Hygieia are much alike, each being clad in a long garment, and each being engaged apparently in feeding a serpent. In one case, however, the serpent is twined about the body of the goddess, while in the other it merely passes over her shoulders. The left hand of the goddess is wanting in both cases, so that her action is not quite plain. Three figures of Athena are published (described and discussed by E. Petersen, *Mitth. Ath.*, XI, p. 309 ff.). Two of these figures represent Athena with long drapery, shield, helmet, and aegis, apparently encouraging her followers in battle. One of these figures is dedicated to Artemis, but the inscription expressly calls the figure Athena. The other figure is dedicated to Athena Hygieia, and Petersen thinks it might be an imitation of the new-born Athena of the eastern pediment of the Parthenon. This new-born Athena might, then, stand in special relation to

childbirth, and hence be classed with the deities of medicine. An inscription here published shows that Athena was worshipped at Epidauros as Ἀρχαγητίς, and it is suggested that these figures properly represent Athena in this character, but that one of them, being bought ready-made, was dedicated to Athena Hygieia. The third figure represents Athena in quiet pose, more like our usual conception of Hygieia. By a new reading of the inscription, it appears that this figure was dedicated by Genethlios, possibly the sophist from Petra in Palestine mentioned by Suidas and others. On Pl. 13 a figure of Aphrodite is published. The base and feet, as well as the right arm from above the elbow, are wanting: head and left forearm were found not far from the trunk. This figure (1.51 m. in height) resembles the so-called Venus Genetrix of the Louvre, but here the right, not the left, shoulder and side are uncovered. A sword-strap shows that the goddess wore a sword, and perhaps she carried a spear in her left hand. Thus, though the type is the same as that of the so-called Venus Genetrix, the details are very different.—D. Philios, *Head from Eleusis* (pl. 10). Is published a head of a youth whose hair falls in wavy locks about his face and neck, and is held by a band about his head. The nose is gone, and the lips much injured. The work is ascribed to the fourth century B. C., and seems to be the original, or more probably a copy, of a work which exists in replicas in the Louvre (see *Gazette Arch.*, 1886, pl. 22), in the Capitol, and at Mykonos (see *Bull. de Corr. Hell.*, 1885, p. 253). This head was found near the Propylon of Appius. Many other objects were found at the same place. Of these the following are described: 1. A figure of a youth, of Pentelic marble: height about 1.20 m. The head is very effeminate; parts of the legs and arms and the back of the head are wanting; and the surface of the figure, especially the drapery, is injured in many places: the work is not very good. Perhaps Bacchos is represented. 2. A high-relief representing a man seated upon a throne the arms of which are adorned with sphinxes: the figure is about life-size: the parts above the breast, and also the feet, are gone. Though the work is careless, especially in the treatment of the himation which covers the legs, the relief may belong to the fourth century B. C. 3. Two fragments of a low-relief. A draped female figure is represented, but only the throat, breast, and part of the arms are preserved: the work is good. 4. Two fragments of high-relief like those found in the Asklepieion at Athens. Five figures are visible—all female: one large figure is followed by four smaller ones. The relief was apparently once of considerable size. The state of preservation is bad, but the work appears to be good. 5. A low-relief representing two large (nearly life-size) female figures and one smaller one. One of the figures carries what seems to be a torch. Perhaps Demeter and Kore are here represented. The work seems to be of Roman times. 6. The upper

part of a terma with a life-size archaistic head of Dionysos. 7. A dedicatory inscription on a pedestal.—P. GEORGIOU, *Inscription from the Akropolis.* This inscription was found near the Erechtheion. It consists of three columns, but the two at the sides are almost entirely lost. This inscription was part of a list of Choragic victories (*cf.* Köhler, *Mitth. Ath.*, III, p. 10ff.). The middle column records victories in the archonship of Philokles (ol. 80.2), among them, one of a comic poet Euphronios, and one of Aischylos (with the *Oresteia*), and gives the beginning of the list of victories under the next archon, Habron. Diod. Sic. (XI. 79) calls the archon of ol. 80.3 Bion. This should be corrected to Habron.—ADDENDA and CORRIGENDA.

HAROLD N. FOWLER.

GAZETTE ARCHÉOLOGIQUE. 1887. Nos. 1-2.—E. SAGLIO, *Polyphemos* (pp. 1–7; pl. 1). Description of a black-figured *oinochoë* in the Louvre (Campana collection) whose only figured representation gives the scene of the blinding of the Kyklops Polyphemos by Odysseus and his companions. Polyphemos is reclining in an easy posture, asleep, a massive club resting within his left arm: his figure is colossal and well-drawn. Two figures (one being Odysseus) are rapidly approaching him, holding the red-hot pole which they are on the point of thrusting into his eye. Nearby, a third figure is represented heating the end of the pole in a blazing fire [Is not this Odysseus himself, repeated?]. Four other representations of this scene on vases, treated in different ways, were already known, but none so artistic.—A. CHOISY, *The excavations at Susa, and ancient Persian art* (pp. 8–18; pl. 2). Recapitulation of the details and results of M. Dieulafoy's expeditions to Persia and excavations at Susa, and description of the monuments found. In this first article, M. Choisy describes the ruins of the palace, the columns, the two friezes of enamelled reliefs, and the engraved stones.—A. DE CHAMPEAUX and P. GAUCHERY, *Works of architecture and sculpture executed for Jean de France, duc de Berry* (pp. 19–28; pl. 3). In the transformation of French art from the pure, severe and broad style of the XIII century to the more fastuous, realistic and personal art of the Valois, the Duc de Berry took a leading share, and, had his career been more fortunate, the school founded by him might have exercised a permanent influence. The duke was a great builder, and seventeen châteaux or hôtels are attributed to him, besides the construction of many religious edifices. Among the artists whom he employed were the sculptors Jean de Liège and André Beauneveu of Valenciennes, the painter Jean de Bruges, and the architect Guy de Dammartin. The artistic works undertaken for him at his favorite château of Mehun-sur-Yèvre, excited so much interest that, on two occasions, the Duke of Burgundy, Philippe le Hardi, sent artists to examine them (among these was the famous sculptor Klaus Schluter). A descrip-

tion of this château, as well as that of Concressault, is given in this paper. Shortly after, the Duke charged Guy de Dammartin to build a palace at Riom: the names of the artists who executed the sculptures are known. The building has been lately made over, and only the chapel with its painted glass in great part preserved.—E. LEFÈVRE-PONTALIS, *Study on the capitals of the church of Chivy* (pp. 29–36; pl. 4). In consequence of the repeated attempts of M. Ed. Fleury to attribute these and other series of decorative sculptures to the Merovingian period, M. Pontalis proves them to belong to the XI century. M. Fleury had supported his argument by the assertion that the nave of Chivy belonged to the XII cent., to which period the primitive capitals could not be attributed, and he then asserted these capitals to be the remains of an earlier building. This is disproved by the evident identity of style shown by M. Pontalis to exist between the nave of this church and those of others in this region. Besides, several of these buildings of the XI century in the Soissonnais and Beauvaisis contain capitals of a similar character (*e. g.*, Morienval, Oulchy, St. Thibault, *etc.*). —C. DE LINAS, *The reliquary of Pépin d'Aquitaine in the treasury of Conques* (pp. 37–49; pl. 6). When M. Daxel wrote his important monograph on the treasury of Conques (published in 1861), he was not allowed to examine one very interesting monument called the Reliquary of the Circumcision, which is now carefully studied and reproduced by M. de Linas. In the absence of any direct evidence, the writer has recourse to the traditions of the Abbey and the documents relating to its Carlovingian founders and patrons, in order to show that this reliquary was given by Pépin king of Aquitaine at the beginning of the IX cent.—L. PALUSTRE, *The architects of the Château of Fontainebleau* (pp. 50–54; pl. 5). An answer to an article lately published in this review by M. Molinier, who contradicted certain conclusions regarding the relative share of the several architects in the construction of Fontainebleau. M. Palustre declares that the Château of Saint-Germain-en-Laye was not finished in 1544, as asserted by M. Molinier, but in 1548, as shown by the *Comptes*. Other objections are refuted, as for instance that, not Chambiges, but *Il Rosso* constructed the *Grotte des Pins*, whereas he only appears in 1535, and the grotto was finished in 1531.

Nos. 3-4.—L. HEUZEY, *On some cylinders and seals from Asia Minor* (pp. 56–63). This is a study of a number of engraved stones coming from the region of Aïdin in Asia Minor, which have strong analogies with the "Hittite" rock-sculptures. The greater part were given to the Louvre by M. Sorlin-Dorigny. The most important is a hematite cylinder of fine workmanship (Perrot et Chipiez, vol. IV, p. 771), in which the principal subject is the presentation, to a bicephalic divinity, of three worshippers bearing the lance and the curved stick or *lituus*. [In commenting on the figure of a female divinity whose feet rest on the back of an animal, M.

Heuzey commits the singular error of doubting that divinities on animals are often seen on ancient purely Babylonian works.]—A. DE CHAMPEAUX and P. GAUCHERY, *Works of architecture and sculpture executed for Jean de France, duc de Berry* (II, pp. 64–71; pl. 7). The present article treats entirely of one of the most important artistic undertakings of the Duc de Berry, the Palace of Poitiers. There only remain the original accounts of the years 1384–86, but they regard especially the Tour de Maubergeon, one of the most original and historically interesting monuments of old Poitiers. The works were directed by Guy de Dammartin, who had under him Jehan Guérart and Robert Fouchier. The records cite the names of all the stone-cutters, sculptors, masons and other artisans, engaged in the work. The manufactory of enamelled faïence used for the pavements of the halls was under the direction of Jehan de Valence. Part of the decorative sculpture was executed by Henry Mornant and Regnauldin de Bossuc, and the painted glass by Henry Lancien. The main hall of the Palace has preserved the imposing character of its XIV-cent. architecture, when it was restored by Guy de Dammartin.—A. ODOBESCO, *A silver dish and a stone sarcophagus with hunting-scenes, found in Rûmania* (pp. 72–80; pls. 8, 9). The dish contains a double decoration in relief: in the centre is a combination of flowery volutes in two concentric circles intersected by two squares formed by stems, the whole being surrounded by a tasteful border. The outer rim is divided, by circular medallions containing heads, into six compartments in which are represented real or fanciful hunting-scenes: every alternate figure is in high-relief. Most of the scenes represent the combat of two men or centaurs with two wild beasts. The dish forms part of a most interesting series of antiquities found in a tomb at Contzesti between 1806 and 1812. It is conjectured to have been the tomb of some great Mongol chief among those led by Batu-Khan in 1240, in which some of the ancient vessels of precious metals which he had captured were buried. His horse, with rich gold harness, was buried with him, and the tomb filled with precious stones, objects in gold and silver, and splendid arms.—S. REINACH, *Bust of an athlete in the Louvre* (pp. 81–85; pl. 10). This bust from the Villa Borghese has been in the Louvre for eighty years without being adequately noticed. It is of Pentelic marble: the upper part of the head, the end of the nose and the chest are modern restorations. The nose is strong, the eyes small and narrow, the hair encircled with a fillet. The head evidently represents an athlete. In this connection, M. Reinach classifies the heads of the period about contemporary with Pheidias, in the various museums, which bear some analogy to the one here studied. For various reasons, among which are similarities to the Capitoline *Youth extracting a thorn*, the Apollon *Choiseul-Gouffier* and its Athenian replica, M. Reinach attributes this head to Pythagoras of Rhegion or his school.—S. REINACH,

Head of Bacchos Ammon in the Museum of Constantinople (pp. 86–87; pl. 10).—M. COLLIGNON, *Fragments of a marble statue of ancient Attic style in the Louvre* (pp. 88–93; pl. 11). These archaic fragments are in Pentelic marble, instead of the usual Parian. The dimensions of the statue are less than life-size: the details of the flesh are very highly finished, while the head-dress is left quite rude: there is no doubt that the head is of a male figure. A fragment of the left leg, with well-studied muscular development, shows the man to have been young and agile: the left hand is nervous and delicate, with closed fingers. M. Collignon suggests the hypothesis of a portrait-statue, placed over a tomb. It is slightly posterior to the "Apollon" of Tenea (middle VI cent.), and belongs without doubt to the early Attic school.—E. MOLINIER, *Two Reliquaries from the chapel of the Order of the Holy Ghost* (Louvre) (pp. 94–98; pl. 12). These reliquaries belong to the XIV century, and are in the form of angels bearing in both arms a barrel-shaped reliquary of crystal. The angels are of silver-gilt and have large outspread wings. They were first added to the treasury of the kings of France by Anne de Bretagne (inventory of 1498).

A. L. FROTHINGHAM, JR.

JAHRBUCH DES K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS. Vol. II. 1887. No. 1.—A. MICHAELIS, *In Remembrance of Wilhelm Henzen.* An account of the life and works of the late Wilhelm Henzen, director of the German Archæological Institute in Rome from 1856 until his death, Jan. 27, 1887.—L. v. SYBEL, *Two Bronzes* (pl. 1). A cut in the text shows a small bronze figure in the British Museum, formerly in the Payne-Knight collection. A nude seated male figure is represented pointing with the forefinger of the right hand over the left foot, which is held up to the right knee, immediately below which the right leg is broken off and lost. The execution is very good. Various interpretations have been suggested, but it is doubtful if the figure has any mythological signification. Pl. I represents a bronze cheek-piece from a helmet. A bearded man, clothed only in a chlamys and pilos, is sitting on a rock, looking into the distance. Beside him are a sword and two spears. It may represent Odysseus or Philoktetes, or may have no mythological meaning. This bronze is in Berlin.—F. DÜMMLER, *Vases from Tanagra, and related objects* (pl. 2). Two vases from Tanagra are published. One is adorned with linear ornament and seven animals, the other with linear ornament and a checker-board pattern. The style is that variously called Chalkidic or Proto-Korinthian. No. 3 is a fragment of a vase from Aigina. Beneath some lines appears a head without a beard and shaven, except that the hair at the back is long and tied together. This is the coiffure of the Abantes of Euboia (Hom. *Il.* β. 542). This fragment belongs to the same class as those from Tanagra, and

proves the Euboic (*i. e.*, Chalkidic) origin of the class. No. 4 is a fragment from the Heraion near Mykenai. Under some lines is the upper part of a rudely drawn female figure, somewhat like those on Dipylon-vases. Beside this figure is an unrecognizable object.—A. MILCHHÖFER, *Reliefs from Pillars for the support of Votive Tablets.* A cut in the texts represents five fragments of reliefs from Athens, apparently from two monuments. The upper parts of Zeus and Athena are visible upon the end of one block, upon the sides of which are parts of so-called "hero-reliefs." Upon the end of the other block is the figure of Artemis, opposite to whom some other deity once stood. A fragment of a "hero-relief" is preserved upon the side of this block. These reliefs are evidently not sepulchral monuments, but votive reliefs, probably offerings to heroized dead. The frequent connection of such reliefs with Asklepios is explained by the power of healing attributed to heroes.—J. BÖHLAN, *Early Attic Vases* (pls. 3, 4, 5). The vases published on these plates and in twenty-three cuts in the text are of Attic origin, and most of them are now in Athens. Their ornamentation is largely geometrical, but shows many foreign elements. The forms of the vases are those of the geometrical style, and the manner of painting with dark-brown varnish upon light "Dipylon-clay" belongs also to that style. The arrangement of the decoration is, however, no longer strictly geometrical, and the favorite animals of the old style, the horse, the stag, and the roe, are supplanted by Oriental figures. Lions, sphinxes, griffins, centaurs, and winged horses occur, as well as cocks, dogs, and hares. The water-birds are the only animal figures which retain their former prominence. In the ornament proper the old geometrical forms are also, in great measure, supplanted by new ones, among which lotos-flowers and divergent rays are prominent. The whole character of these vases seems to show that this style, which followed that of the "Dipylon-vases," is the result of Oriental influence upon the successors of the painters of the "Dipylon-vases." This influence came from some part of the Greek Orient, but the difference between these vases and those of Rhodian manufacture shows that the Rhodians were not the teachers of the Attic artists of the last part of the seventh century B. C., the period to which these vases belong.—**MISCELLANIES.** H. v. ROHDEN, *The Hermes of Praxiteles* (pl. 6). A wall-painting from Pompeii is published. It represents a youthful satyr holding a child upon his left arm, while in his raised right arm he holds a cluster of grapes toward which the child is stretching out its arms. The position is almost identical with that of the Hermes of Praxiteles, except that the figure stands without support and is, therefore, somewhat more erect than the Hermes. Even the mantle hanging from the left arm of the figure is retained, though the satyr wears a nebris. The kerykeion is, of course, wanting. This painting shows that the Hermes must originally have held a cluster of

grapes in his right hand.—F. Studniczka, *Painted Tiles.* Those peculiar terracotta tiles shaped something like a thimble, from which about a third —parallel to the logitudinal axis—has been cut away, are discussed. They appear to have been used as coverings for the ridges of wooden roofs. Then the roofs must have been very small, since the closed end of these tiles would prevent their employment as a continuous covering for a long ridge. Studniczka suggests that they may have covered the peaks of wooden stelai.—E. Loewy, *On Greek Artists' Inscriptions.* No. 477 and No. 487 in Loewy's *Inschriften griechischer Bildhauer* are identical.—**Bibliography.**

HAROLD N. FOWLER.

MITTHEILUNGEN DES K. DEUTSCHEN ARCHÄOLOGISCHEN INSTITUTS. ATHENISCHE ABTHEILUNG. Vol. XI. No. 4.—W. Dörpfeld, *The Ancient Temple of Athena on the Akropolis* (suppl. pl. A). The plate gives the plan of the building. For reconstruction and details see *Antike Denkmäler*, 1886, pls. I, II. This temple stood just south of the later Erechtheion, but extended much further toward the west. The portico of the Κόραι and part of the southern wall of the Erechtheion extend over the remains of the old temple. The temple was peripteral, with six columns on the ends and twelve on the sides. It had a pronaos at each end. The eastern cella was nearly square (10.50 by 10.65 met.), but was divided into three parts by two rows of columns. The western cella was somewhat shorter (6.20 by 10.65 met.) than the eastern, and had, apparently, no interior columns. Between the eastern and the western cellae were two smaller rooms, which together occupied the whole width of the building. It seems probable that they were entered from the west, but for what they were intended is as yet unknown. The temple was built upon a partly artificial terrace, as the ground upon which it stood was not naturally level. The length of the building, measured on the stylobate, was 43.44 met., and its width 21.34 met. Several parts of columns, epistyle, triglyphs, cornices, *etc.*, have been found, which are attributed with certainty to this temple, and make a reconstruction of it possible. The foundations are of the hard bluish rock of the Akropolis and hard Peiraieus limestone, mixed with a little other material. The columns, epistyles, triglyphs and cornices were of Peiraieus stone, while the metopes, the entire roof and the pediment sculptures were of marble. The temple had but one step, not three. The Doric columns have 20 flutings, a wide capital with four rings, and four rings about the neck. The date assigned to the peripteros and the upper part of the building is the time of Peisistratos, but the cella and opisthodomos appear to be older.—F. Studniczka, *Union of fragments in the Akropolis Museum* (pl. 9). 1. The beautiful archaic female head published in the Ἐφ. Ἀρχ., 1883 pl. 6, fits upon a draped torso in the Akropolis Mu-

seum. The drapery is finely done in the archaic manner. The colors with which it was adorned are now much faded, but green and red patterns are visible. The figure belongs to the type of which our knowledge has been especially increased by the discoveries of the past year in Delos and Athens. The date assigned is the end of the sixth century. 2. (pl. 9. 2.) In 1882 a female head was found, which belongs to a statuette long since discovered. The work is archaic, but shows much individuality. Colors were freely used in the adornment of this figure. 3. A torso, 0.70 met. high, has been put together by uniting three fragments, apparently Nos. 5084, 5022, 5019 of v. Sybel's catalogue. 4. Two fragments are united to form the figure of a scribe with an open diptychon upon his knee. The figure is clothed only in a himation. Red and green colors are used. Two similar figures were recognized by Furtwängler, *Mitth.* VI, pl. 6, p. 175 ff. 5. This figure is published in pl. 9. 3. It is composed of seven fragments. It is much superior in execution to the preceding. 6. Furtwängler published in *Mitth.* VI, pl. 1, 2, p. 20 ff., a torso of a boy, found in 1865–66, in digging for the foundations of the Akropolis museum, and fitted upon it a fine head found at the same time. It has been doubted whether these pieces belong together, but it is here proved that they do. 7. (pl. 9. 1.) A head in the Akropolis museum fits upon the unfinished torso, formerly in the Propylaia, which has been variously called Apollon with the lyre, and an athlete or charioteer. The head shows that the figure is a replica of the well-known Hermes tying his sandal.—J. BÖHLAU, *Perseus and the Graiai* (pl. 10). An Athenian pyxis formerly incorrectly interpreted (by Gaedechens, *Perseus bei den Nymphen*, Jena 1879) is here better published. It represents Perseus taking the eye of the Graiai by stealthily substituting his hand for that of one of the blind sisters. The Graiai are three in number. Besides the actors in this scene, Athena, Poseidon, Hermes, and Phorkys are represented.—E. PETERSEN, *Archaic figures of Nike* (pl. 11). Eight small bronzes in the Akropolis museum (three of these are published) and one in London represent a winged figure (Nike) in rapid motion. The figure is, in most cases, so supported by the drapery and a base, usually with Ionic volutes, that the feet are in the air. Fragments in the Akropolis museum of similar marble figures, of almost life size, are published (pl. 11 B, C). Nearly the whole of one of these figures is preserved. The oldest known figure of this kind is the old Delian one in Athens (pl. 11 A, after *Bull. de Corr. Hell.*, 1879, pl. 6). If the feet of this figure did not rest upon the base, the chief reason for refusing to connect it with the inscription of Mikkiades and Archermos falls to the ground. The column with the name of Archermos (Ἐφ. Ἀρχ., 1886, p. 133 f.) may have served as a pedestal for a figure of this kind, for figures of Nike were frequently set upon columns, though their employment as akroteria was also common.

—C. SCHUCHHARDT, *Kolophon, Notion, and Klaros.* The exact site of Kolophon has never before been determined. The writer undertook two journeys into the region where Kolophon was to be sought, the first in the company of H. Kiepert, the second in that of P. Wolters. Extensive remains of Hellenistic walls were found very near Tratscha and Dermendere, in the valley of the Arodschitschai. The extent of the ruins shows that a large city must once have stood there, and Kolophon is the only large city in that region. Four cuts of portions of the walls are given. They are regularly built, though the regularity of the layers of stone is sometimes interrupted by the employment of unusually large blocks. The wall was strengthened with semi-circular towers. A sepulchral inscription from Dermendere is published. Notion, the port of Kolophon was situated on a steep hill by the mouth of the Arodschitschai. A cut of part of the wall is given. The wall is for the most part Hellenistic, but was restored in Roman times. Besides the wall, remains of a *templum in antis* and of a nearly square auditorium, perhaps a dikasterion or bouleuterion, are described and cuts are given. A small theatre with only 27 rows of seats was found, the front walls of which are of Roman times. The nekropolis of Notion is of considerable extent. Eight inscriptions from sepulchral monuments are published, two of which are of considerable length. One of these marked the tomb of a priest of Apollon of Klaros. The sacred cave and oracle of Apollon seem to have been situated in a valley near Giaurkoï, where is an almost inaccessible cave with a pool of clear water. Not far from this cave (which agrees with the account of Tacitus, *Ann.*, II. 54), a Korinthian capital was found, apparently of Greek workmanship. The entire territory of Kolophon was studded with watch-towers. These are marked upon the map of the region which accompanies this article, as do also plans of Kolophon and Notion.—H. G. LOLLING and P. WOLTERS, *The Dome-Sepulchre at Dimini.* This tomb, about an hour's walk from Volo, has been excavated by the Greek Government. It resembles very closely the tomb at Menidi. The dromos is only about half the length of that at Menidi, but this is explained by the steepness of the hill at Dimini. In this tomb were found remains of bodies which had not been exposed to fire. This shows that simple burial, as well as cremation, was practised. Numerous objects of gold, glass, bone, bronze, and stone were found, nearly all of which are closely similar to objects found at Mykenai, Menidi, and Spata. The fragments of vases found in the tomb are of no particular interest.—**MISCELLANIES.** R. BOHN, *Tower of a Pergamene Country-town* (pl. 12). A tower of the Pergamene town described on p. 1 ff. is published. The outer walls are built of carefully squared blocks, and the space within was filled with loose material.—F. DÜMMLER, *Corrections to pp. 18, 20, 25.* The corrections concern the statements made,

on the pages referred to, regarding the stone of which certain objects are made.—H. SWOBODA, *On p. 115 N. 3.* The inscription, published by Dümmler, *l. c.*, is shown to belong to Syros, though it was found at Melos (*cf. C. I. G.*, 2347 c). Νάξις or τὰ Νάξια was then a deme of Syros.—P. WOLTERS, Κύλινδρος τετράγωνος. This expression occurs in an inscription, *C. I. A.*, II, 2. 835, l. 70. Other cases are cited in which κύλινδρος seems to mean merely a long stone used for purposes of adornment.—F. STUDNICZKA, *On the Artist's Inscription of Atotos and Argeiadas.* The second part of this inscription (Loewy, No. 30 *d*, *e* with appendix p. xviii), κ' Ἀργειάδας Ἀγελαΐδα τ' Ἀργείον is explained by assuming that Agelaidas had been endowed with the citizenship of Argos, while Argeiadas had only the citizenship of Sikyon.—H. G. LOLLING, *Metrical Inscriptions in Larissa.* Two metrical inscriptions are published. One is archaic, with digamma of the form Ⅎ; the other is very late.—DISCOVERIES and LITERATURE.

HAROLD N. FOWLER.

REVUE ARCHÉOLOGIQUE. **1887. March-April.**—HIPPOLYTE BAZIN, *The Roman theatre of Antibes.* From very scanty remains of the substructure, M. Bazin is able to draw a plan of the Roman theatre at Antibes (pl. v), correcting the plan given in the *Antiquitez historiques de la ville d'Antibes*, a MS. of the year 1708, by Jean Arazi. According to the new observations, the *cavea* was divided into *summa* and *ima cavea*, and would seat about 3,500 people. The dimensions of the *proscenium* and the line of the *scena* have also been determined. The remains of the theatre were demolished, in 1691, to supply materials for fortification.—L. DE LAIGUE, *An inedited portrait of Macchiavelli.* In the possession of Count Bentivoglio is a life-size terracotta bust of Macchiavelli (pl. VI). Its authenticity is supported by an engraving in the MS. records of the Pieci family, taken from an original portrait by Santi di Tito. This determines the marble bust in the Bargello, Firenze, to be unauthentic.—GERMAIN BAPST, *Tomb and Reliquary of Saint Germain.* Saint Germain died in 576 A. D. and was buried in the church of Saint-Germain-le-Doré, Paris. His tomb was decorated, perhaps designed, by Saint Éloi about 635 A. D. There were two reliquaries of Saint Germain: one was made under the abbot Eble, at the end of the ninth century; the second was made, under the abbot Guillaume, in 1408, and was enriched with a large number of precious stones. A reconstruction of this reliquary is given in Plate VII. The tradition ascribing the reliquary to Saint Éloi is shown to be baseless.—*Tomb of Sainte Colombe.* It appears that Saint Éloi constructed or decorated the tomb of Sainte Colombe at Sens, and afterwards deposited the relics of the saint in a chapel erected in her honor in Paris. The reliquary is of later date, and was probably made under Archbishop Wenilon in 853 A. D.—*Tomb*

of Saint Séverin. Saint Séverin, abbot of Agaune, died Feb. 11, 507. Childebert erected in his honor a tomb and a church, which became the Abbey of Saint-Séverin. In the following century, Saint Éloi erected and decorated a new tomb. The reliquary, referred to Saint Éloi, was probably of later date.—Baron Ludovic de Vaux, *Recent discoveries at Jerusalem. Present condition of the excavations on the site of the Pool of Bethesda.* The excavations made by Mauss in 1865–1876, revealing a monastic chapel on the site of the Pool of Bethesda, have been continued by the missionaries of Algiers. Four cuts are given, showing the topography of the northeast portion of Jerusalem, and the advances made in the excavations on this site. The lateral porch with steps leading down into the five chambers of the crypt, and the mouth of a small channel cut in the rock, appear to identify the spot with the account in *John*, v. 2–7, though the identification is not thoroughly conclusive.—Eugène Müntz, *Ancient Monuments of Rome at the time of the Renaissance. New Researches* (end). Documentary evidence of the xv and xvi centuries is here presented, concerning the Capitol, Arch of Constantine, Arch near the Palace of Saint Mark, the Forum Boarium, the Tower of Nona and the Fountain of Trevi.—*Notes on a collection of xv-century sketches representing the principal monuments of Rome.* The library of the Escurial, in Madrid, contains an important collection of xv-century pen-sketches of Roman monuments. This collection, quite unknown to archæologists, contains sketches of architectural, sculptural, and other ancient Roman monuments.—M. Deloche, *Studies on some seals and rings of the Merovingian period* (cont.). xxxiv. Seal-ring of Diana. Besides the monogram, which is easily decipherable as DIANE, this ring contains, twice, the sign ⨛, indisputably the sign for S*ignum* or S*igillum*. This ring, in the possession of M. Alfred Danicourt, is the clearest instance known of the use of this abbreviation. xxxv. Explanation of seal-inscriptions engraved on two rings previously described. Under the heading xiv and xv were described two rings, one of which was read BENIGNVS; the other, which contains only the letter S, was left undeciphered. In the light of the seal-ring of Diana, the first of these rings may be read *Signum* BENIGNI; or, as both rings were found together in the same tomb, we may retain the reading BENIGNVS for the one, and read *Signavi* or *Subscripsi* for the other. The latter [somewhat hazardous] explanation presumes that one ring was used for ordinary correspondence, and both for official documents. xxxvi. Ring in the Museum of Montpellier with the fish-symbol. On the central bezil is engraved the early Christian symbol, the fish; on either side is carved the chrysalis, emblem of the resurrection. The ring was found near the village of Montbazin (Hérault), and is a new proof of the persistence, in the provinces, of symbols no longer used in Rome. xxxvii. Another ring with the fish-

symbol, attributed to Saint Arnoul, Bishop of Metz. For the reason given in the preceding case, there is no chronological difficulty in the legend which attributes this ring to Saint Arnoul, who was Bishop of Metz from 614 to 626. XXXVIII. Ring with the symbol of the dove of the ark. This ring is known, only by description, from a paper by M. de Longperier, as a Merovingian gold ring, on which was figured a dove carrying a branch. About the dove are engraved the words SALBA ME (*Salva me*). XXXIX. On the dove, as an emblem of Christ. Interpretation of this symbol on three rings previously described. On the basis of a passage from the poet Ennodius Magnus (d. 521), the dove is [quite uncritically] taken as an emblem of Christ, and this interpretation given to the appearance of the dove in rings Nos. III, VI, and XXXI.—PAUL MONCEAUX, *Note on a Proconsul of Africa, the poet Avienus.* It has been generally admitted that the poet Rufus Festus Avienus governed Africa in the year 366–67. In the *Fastes de la province romaine d'Afrique*, 1885, by Charles Tissot, the poet's name does not appear. Evidence, however, may be adduced, from the poetry and life of Avienus, that he was once proconsul of Africa, although in the year 366–67 the post of proconsul was occupied by Julius *Festus* Hymetius. The date of the proconsulship of Avienus cannot be determined exactly, but there is some reason to believe that it was one of the following years, 355, 356, 358 or 362.—NEROUTSOS-BEY, *Greek and Latin inscriptions collected in and about Alexandria.* Publication is here made of eleven Greek inscriptions, acquired since 1878, from the western nekropolis and the ancient city. Inscriptions from the eastern nekropolis and the townships Eleusis and Nikopolis will be published later.—JACQUES GUILLEMAUD, *Gallic inscriptions. A new attempt at interpretation.* After some prefatory remarks on the work of his predecessors, M. Guillemaud begins his treatise on Gallic inscriptions with a consideration of the bilingual inscription of Todi, finding the following correspondence between the Gallic and Latin words:

Face A: ATEKNATI TRUTIKNI KARNITU LOKAN KOISIS TRUTIKNOS.
Ategnati Druti filii tumulum locavit Koisis Druti filius.

Face B: ATEKNATI TRUTIKNI KARNITU ARTUA ⋈ KOISIS TRUTIKNOS.
Ategnati Druti filii tumulum statuit Koisis Druti filius.

His interpretation differs from that of Pictet and of Stokes, both of whom make KARNITU the governing verb. The Latin portion of the inscription contains the phrase *Frater ejus minimus* in apposition to *Koisis.* Supposing this notion to be contained in the Gallic words, we obtain the following glossary: ATEKNATOS, *eldest*: KNATOS, *child*: KNOS, *son*: KARNITU, *tomb*: LOKAN, *he placed*: KOISIS, *youngest son*: ARTUAST, *he constructed.*—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions.—Archæological news and correspondence.—Bibliography.*

May-June.—Léon-Heuzey, *A Chaldæan textile.* In an ancient textile from an Egyptian tomb, M. Heuzey recognizes a material similar to that figured upon Chaldæan monuments (pl. VIII–IX). The horizontal parallel lines on the figured garments are no longer to be interpreted as flounces, nor the vertical lines as pleats; but we are to see in these the representation of a textile which has threads in parallel lines projecting from the body of the cloth. This textile with its fleece-like surface is still made in the East. It was known to the Greeks as καυνάκης (Aristoph., *Wasps*, l. 1056–1131), made not only in Babylon, but also at Ecbatana, and exported from Asia Minor to Greece. Several varieties may be traced on Babylonian and Assyrian and Hittite monuments. Of like character appears to have been the *undulata vestis* which Tanaquil made for King Servius.—Robert Mowat, *Oscan inscriptions ornamented with images of coins.* Several small terracotta stelæ from Capua contain Oscan inscriptions and are ornamented with copies of coins. One of these, in the British Museum, is given in phototype (pl. X). It contains an image of the head of Minerva, resembling that on the *as libralis*; also the figure of a wild boar, like that on the *quincussis*; below is a portion of an Oscan inscription. These stelæ apparently commemorate votive offerings of money.—M. Deloche, *Studies on some seals and rings of the Merovingian period* (cont.). XL. Seal-ring from Saint-Pierre (Ardèche). This is a gold ring found at Saint-Pierre. On the bezil is engraved a head and the inscription + NON. The name *Nona* or *Nonna* was borne by several saints in the period from the IV to the VII century. XLI. Ring with a gold coin as a bezil. The coin imitates a Byzantine coin, and bears on it a figure of Winged Victory and a circular inscription: VICTVRIA AC . . . . TORVN, a corruption of VICTORIA AVGVSTORVM. Below the figure of Victory is inscribed CONOB. XLII. Seal-ring of Ragnethramnus. This is a gold ring found at Blois. The inscription has been incorrectly read RACNETHRAMNVS for RAGNETHRAMNVS.—Neroutsos-Bey, *Greek and Latin inscriptions collected in and about Alexandria* (cont.). Here are published twenty Greek inscriptions from the Eastern nekropolis. They belong to the Ptolemaic period and commemorate foreigners of the military class, Greek mercenaries, Kretans, Thrakians and Galatians. This was apparently the burial-ground for that portion of the army which was garrisoned to the east of Alexandria.—Jacques Guillemaud, *Gallic inscriptions. A new attempt at interpretation* (cont.). A careful reconsideration of the Gallic inscription of Briona (district of Novara, Italy) leads to the following translation: "Having been led in captivity afar off, the sons of Tanotalos, Quitos, Lekatos, Anokopokios and Setupokios, having been put to death, Tanotalos (their father) has publicly honored them by (erecting their) tombs."—Edmond Le Blant, *The robbery of relics.* As

early as the year 386 a decree was made in Constantinople against the disturbance and sale of martyrs' bones. A number of instances of the robbery of relics in succeeding centuries are described.—AUG. PROST, *Early Christian Sarcophagi in Gaul.* Many churches and several museums, especially in the towns of central France, contain early Christian sarcophagi of which no general study has been made. The works of M. Edmond Le Blant on the Christian Sarcophagi of Gaul show that, with the exception of that of La Gayolle, these sarcophagi do not antedate the IV century. The form and decoration of the earliest Christian sarcophagi were derived from pagan sources. Gradually, subjects from the Old and New Testaments were substituted. M. Le Blant has established the fact that the order and selection of the subjects on a large number of sarcophagi are taken from ancient funeral liturgies.—*Excavations of M. Virot at Mantoche.* These excavations have brought to light various objects of the Gallo-Roman period. Illustrations are given of several pieces of glass and pottery.—ANDRÉ LEVAL, *Inscription at Constantinople.* The inscription is found on a small gateway of the old town-wall near the church of SS. Sergios and Bacchos. It consists of a combination of Old Testament passages, with slight verbal and orthographic variations. It dates from the VI century.—MISCELLANIES. *Monthly Bulletin of the Academy of Inscriptions.—National Society of Antiquaries of France.—Archæological News and Correspondence.—Bibliography.*

ALLAN MARQUAND.

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ΚΑΤΑΛΟΓΟΣ ΤΩΝ ΒΙΒΛΙΩΝ ΤΗΣ ΕΘΝΙΚΗΣ ΒΙΒΛΙΟΘΗΚΗΣ ΤΗΣ ΕΛΛΑΔΟΣ. ΤΜΗΜΑ Β'. ΕΛΛΗΝΙΚΗ ΦΙΛΟΛΟΓΙΑ. ΕΝ ΑΘΗΝΑΙΣ, ΕΚ ΤΟΥ ΤΥΠΟΓΡΑΦΕΙΟΥ ΤΟΥ ΚΑΛΑΟΥΖ. 1884. 4to, pp. 300.

Vito la Mantia. Cenni Storici su le fonti del diritto Greco-Romano e le assise e leggi dei re di Sicilia. 8vo, pp. 136. Torino, 1887, E. Loescher; *lire* 3.

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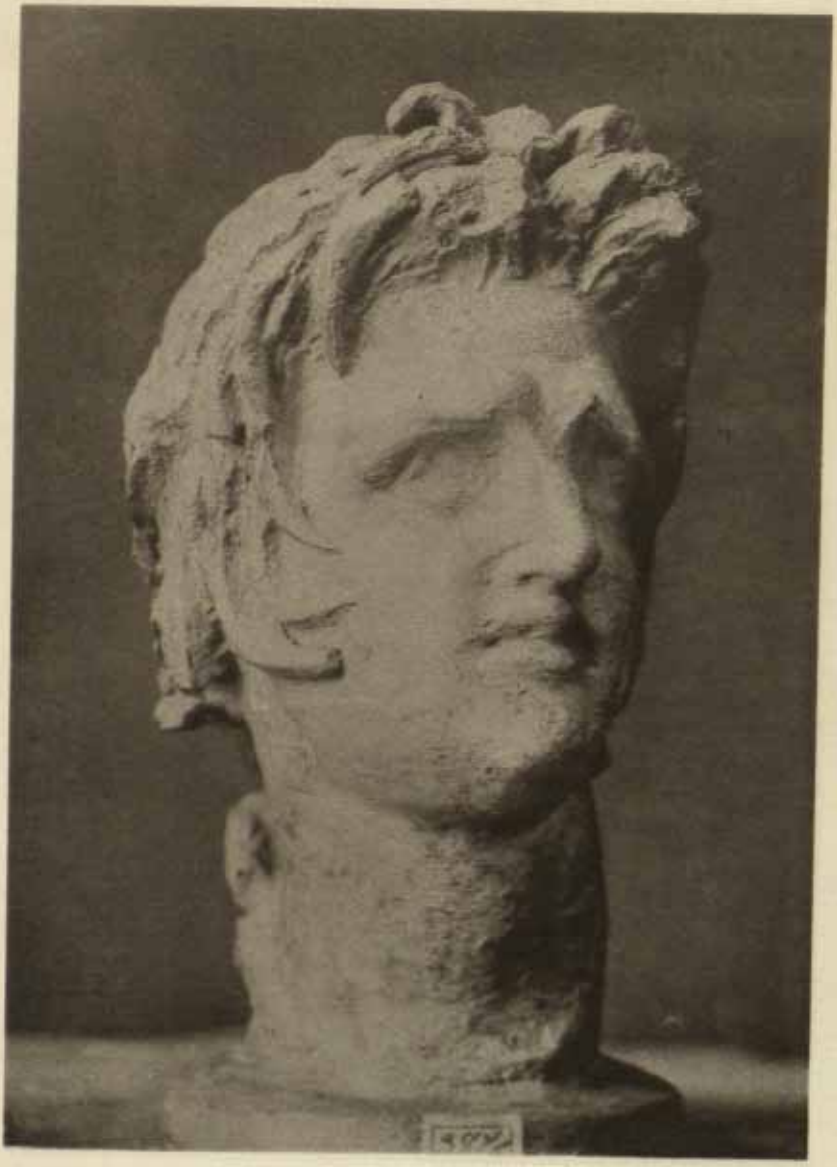
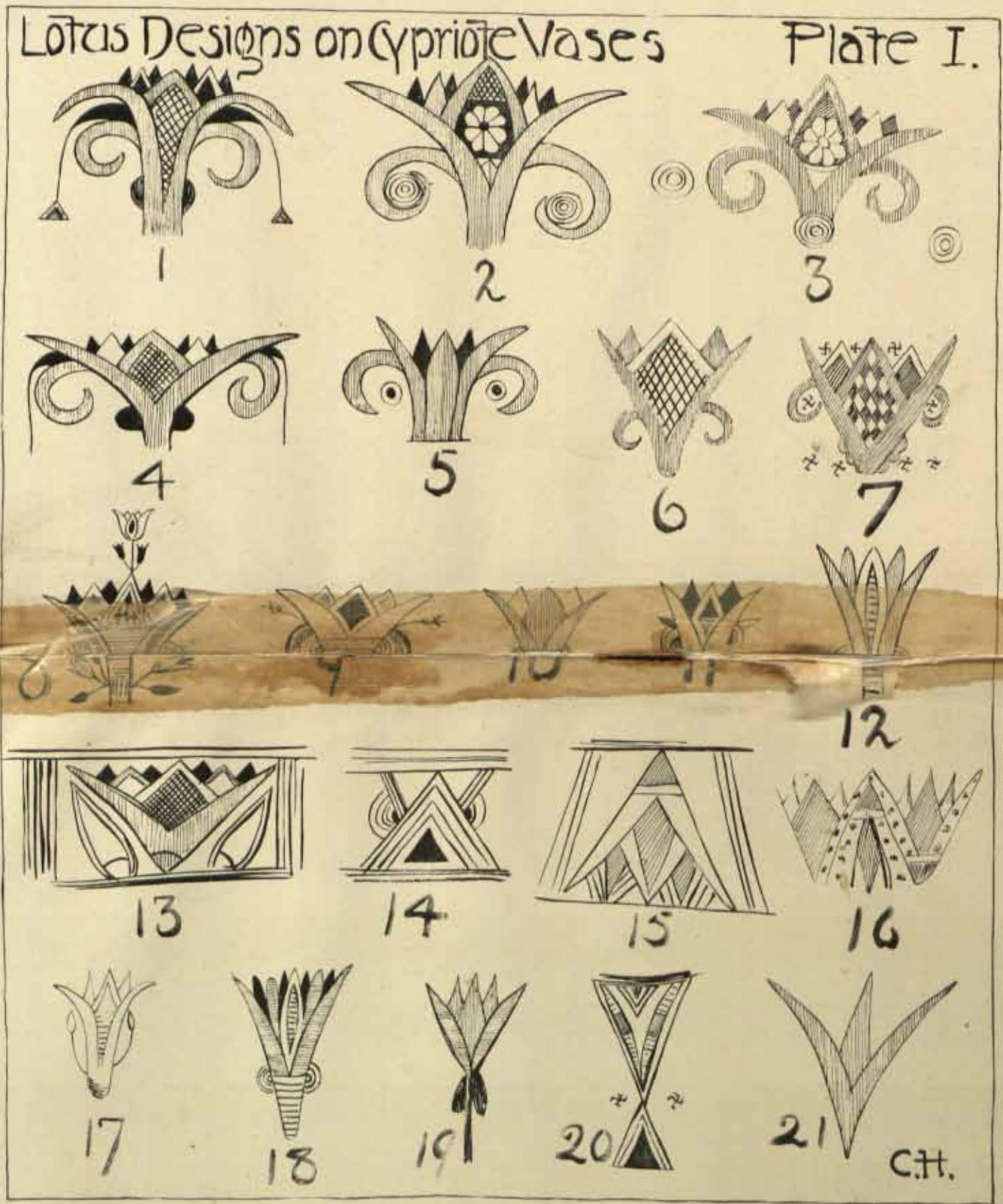
TERRACOTTA HEAD OF ALEXANDER THE GREAT,
IN THE ROYAL ANTIQUARIUM AT MUNICH.



TERRACOTTA HEAD OF ALEXANDER THE GREAT,
IN THE ROYAL ANTIQUARIUM AT MUNICH.

PAINTED SEPULCHRAL STELE FROM ALEXANDRIA,
IN THE COLLECTION OF E. E. FARMAN.



LOTUS DESIGNS ON KYPRIOTE VASES.

Proto-Ionic Steles and Capitals Plate II

No. 1.

Cyprus. Mus. Nap.
III. Pl. XXIII.

No. 2.

Cyprus

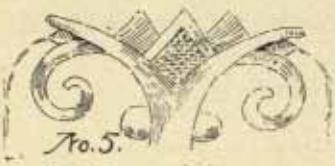
Met. Mus. N.Y.

No. 3.

Nimroud.
[Ivory]
Perrot. II 535

No. 4.

Sippara Tablet.
Clarke.



No. 5.

No. 6

Conestabile
Perugia
Greco-Etruscan

Cypriote Vase

No. 7.

Bronze Handle
"Olympia," Pl. XXII V. IV

No. 8. Ceccaldi-Cypre

No. 9.

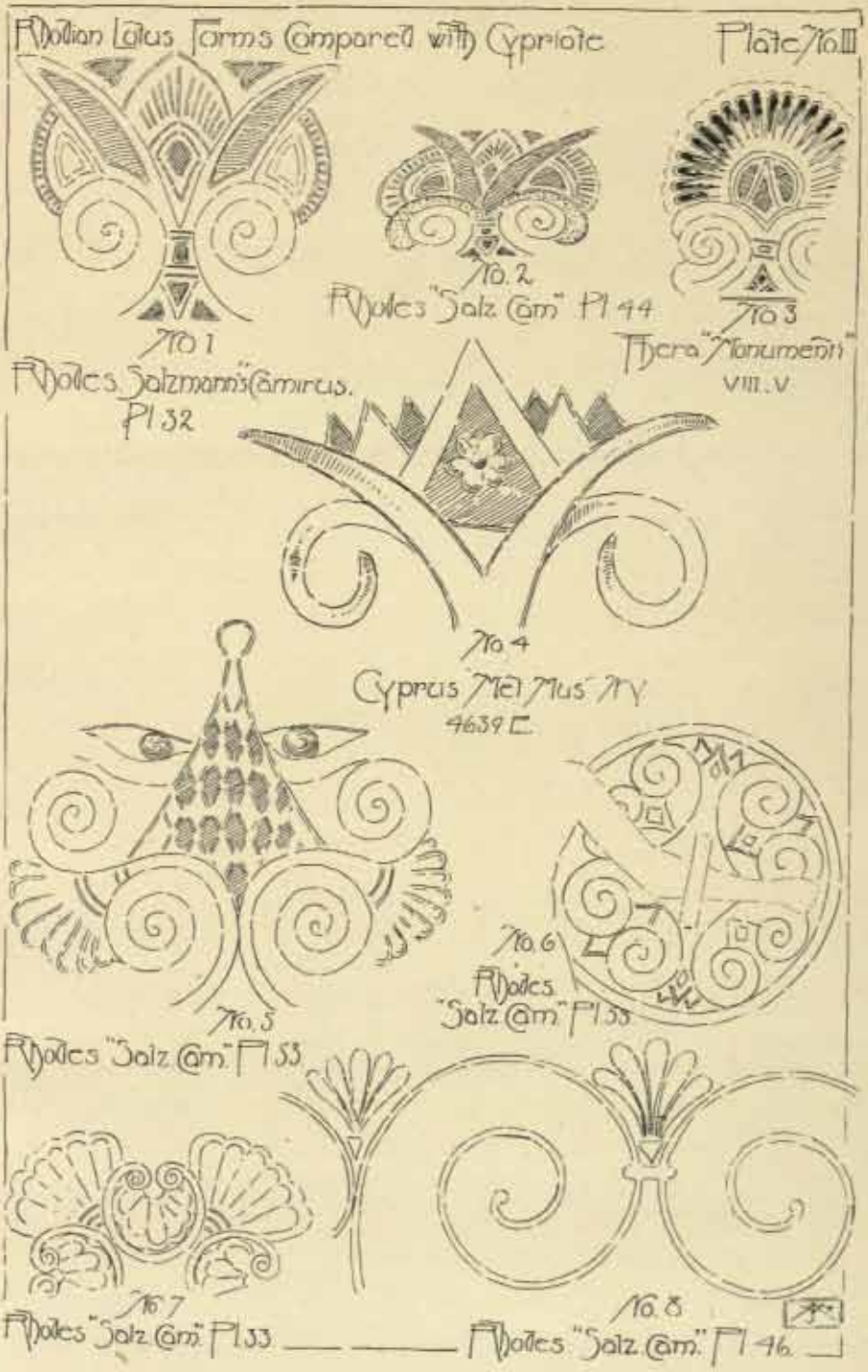
Detail from Amathus
Sarcophagus

No. 10

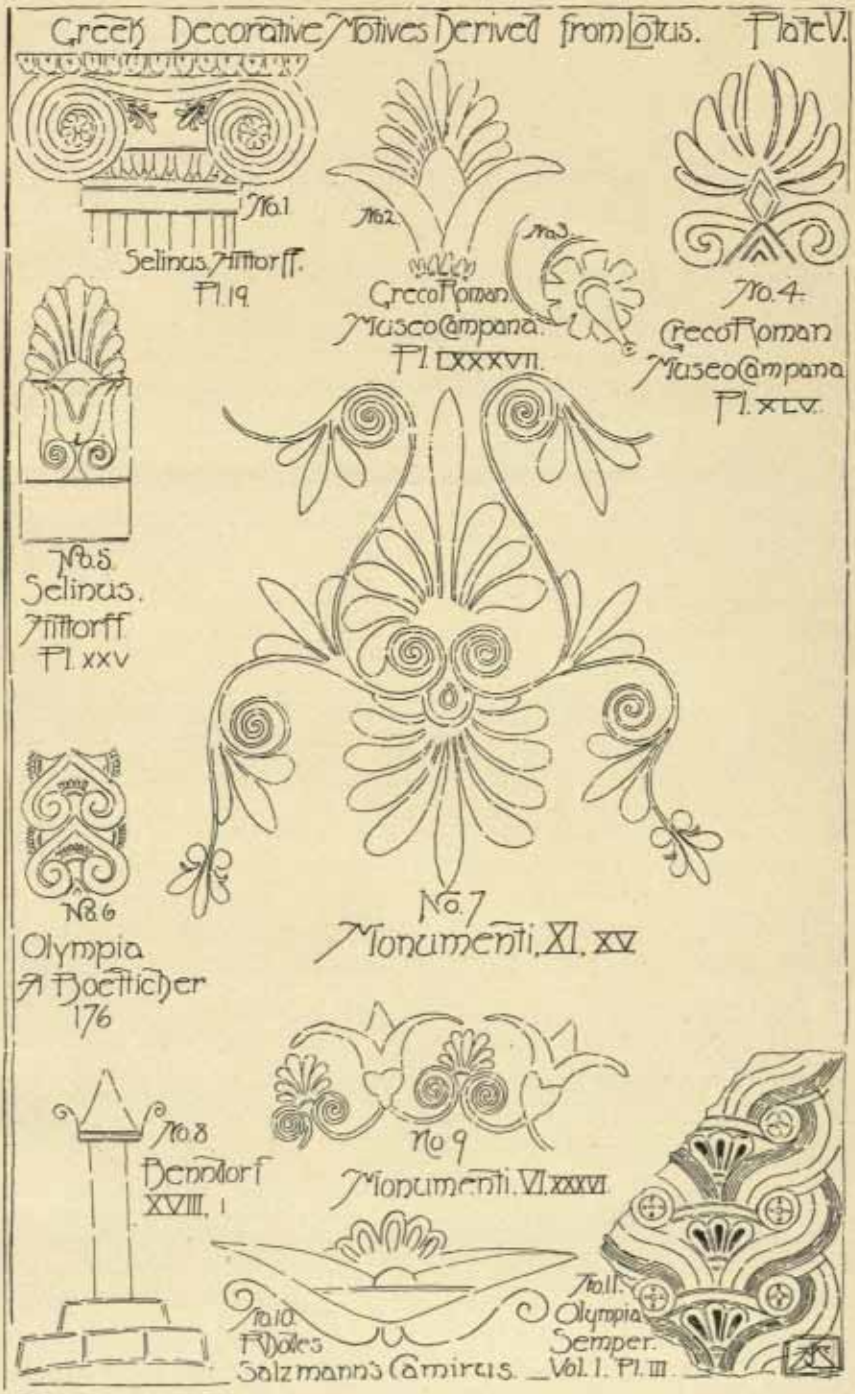
Ivory. Nimroud.
Perrot. II Pg. 222

No. 11.

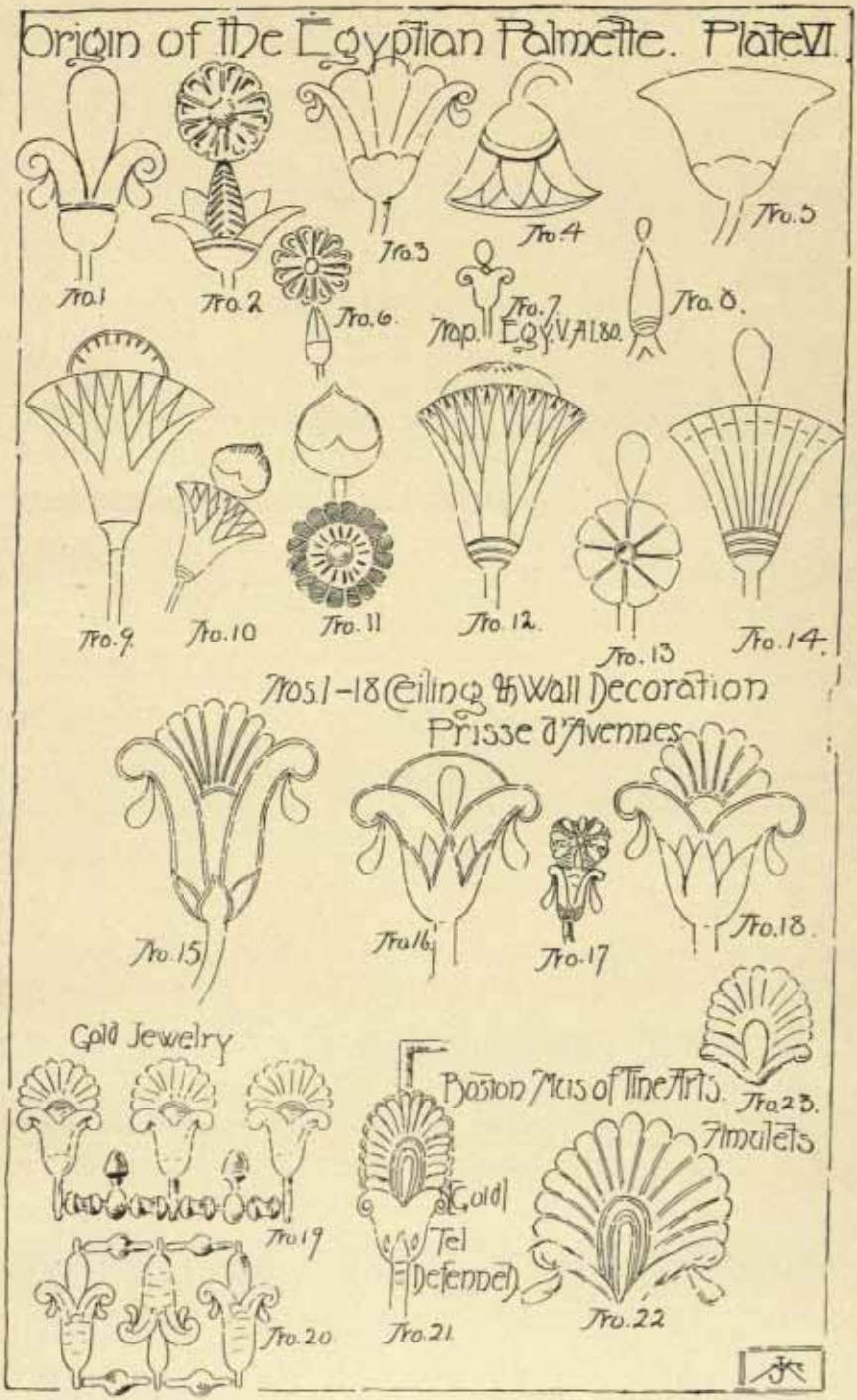
Stele. Met. Mus. N.Y.
Perrot-III., Pg. 217.



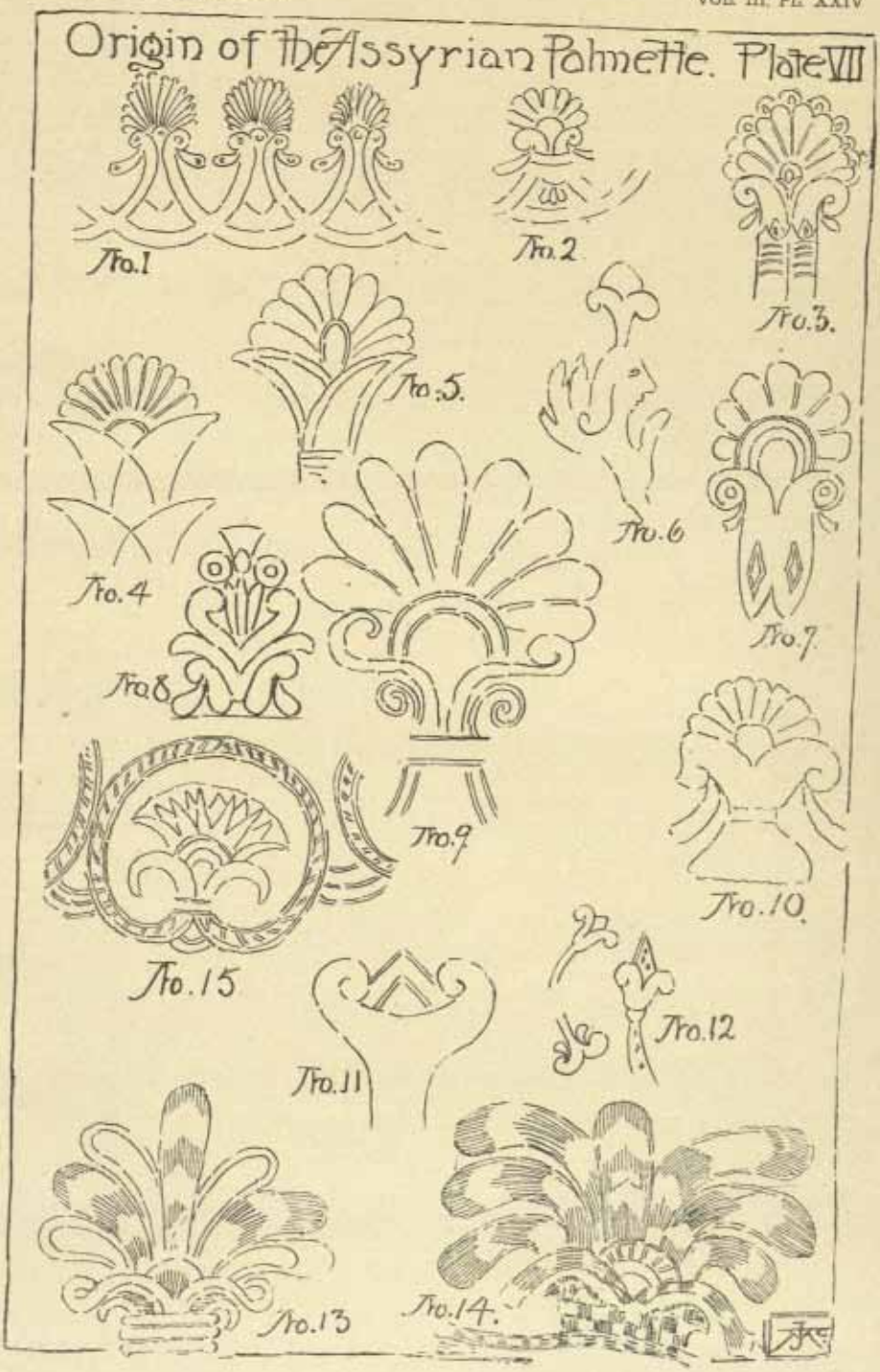
RHODIAN LOTUS FORMS COMPARED WITH KYPRIOTE.

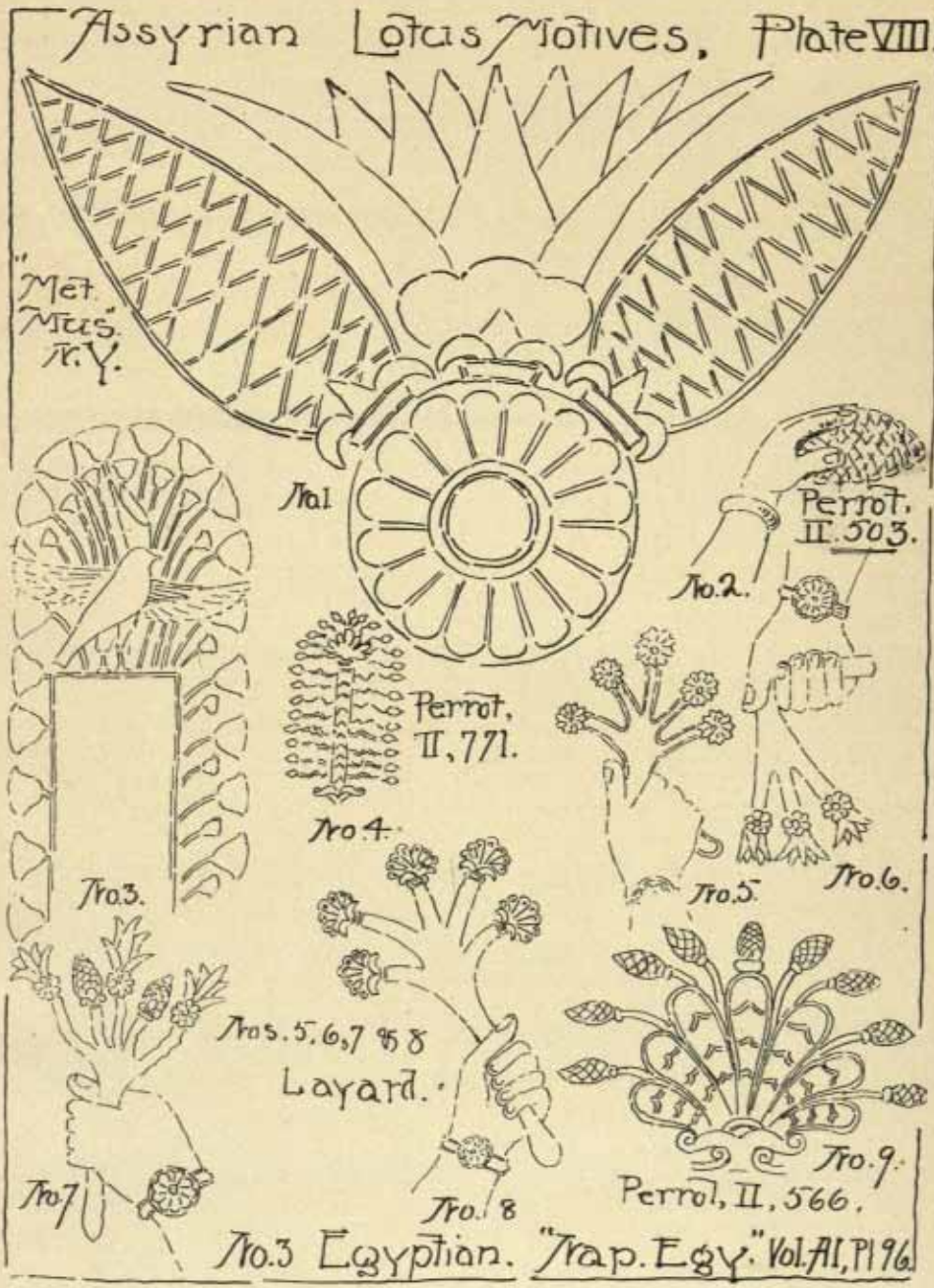


GREEK MOTIVES DERIVED FROM THE LOTUS.



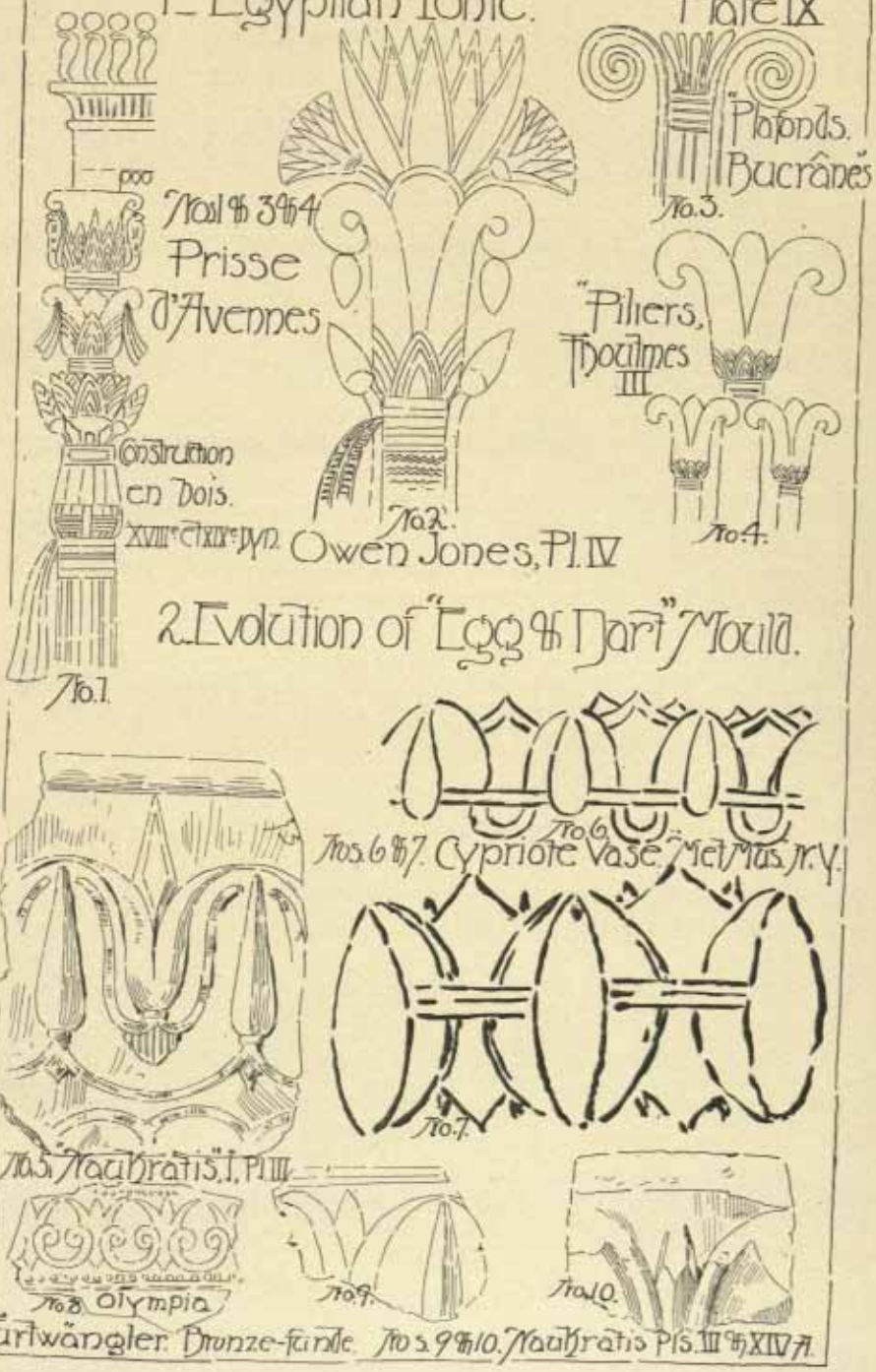
ORIGIN OF THE EGYPTIAN PALMETTE.


Origin of the Assyrian Palmette. Plate VII
Fig.1
Fig.2
Fig.3.
Fig.5.
Fig.6
Fig.4
Fig.7
Fig.8
Fig.9
Fig.10.
Fig.15
Fig.12
Fig.11
Fig.13
Fig.14.



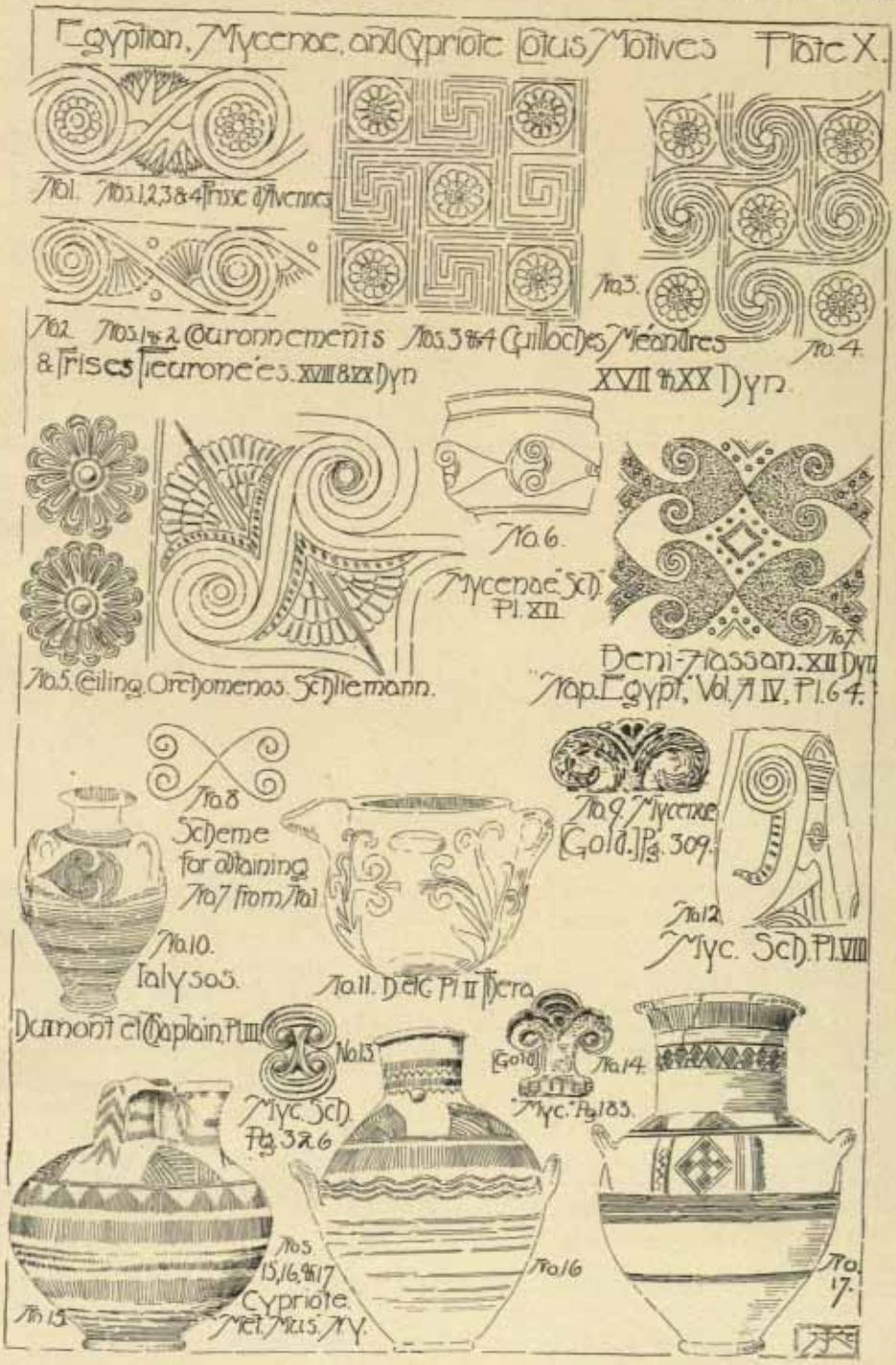
ASSYRIAN LOTUS MOTIVES.

1. Egyptian Ionic. Plate IX



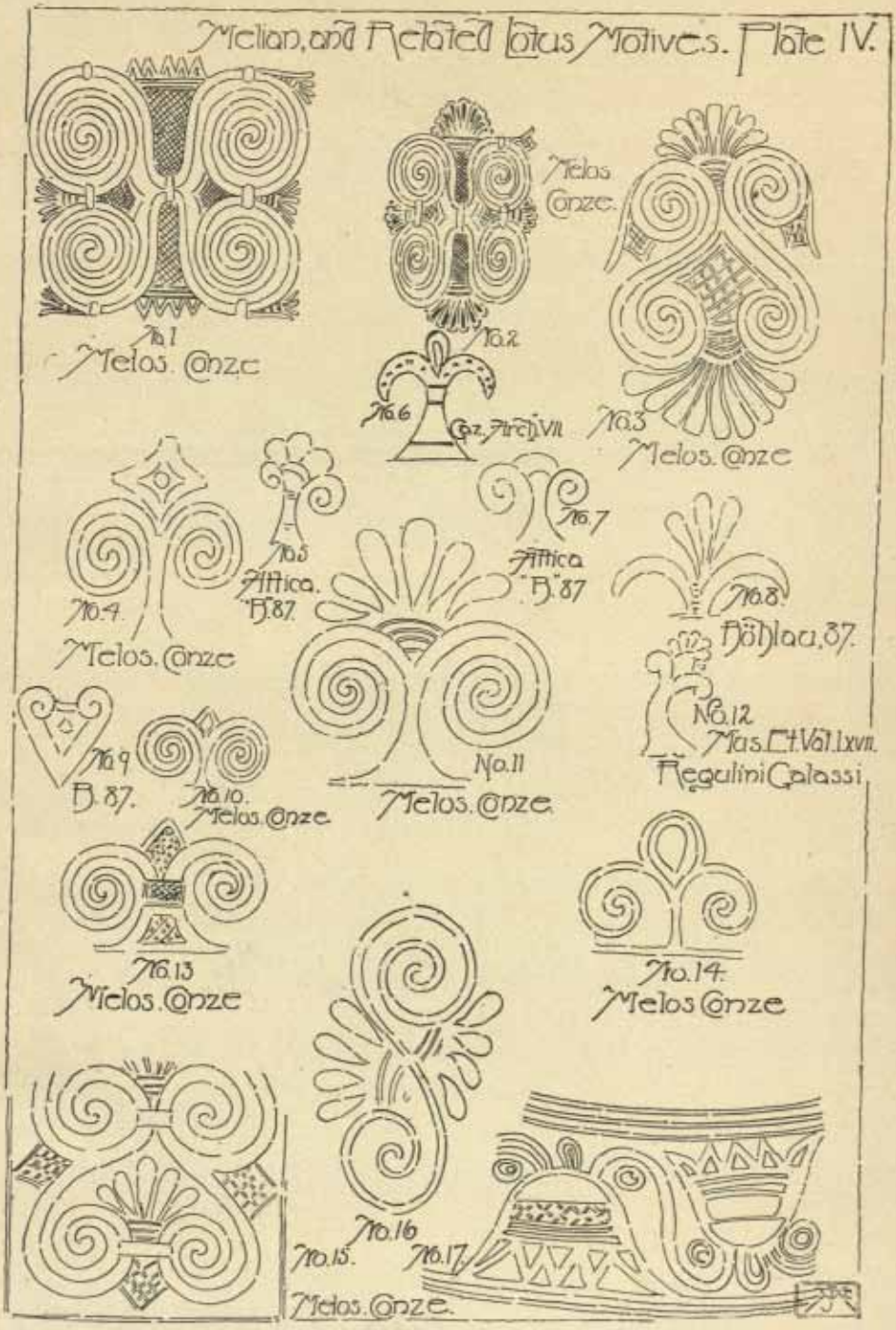
2. Evolution of "Egg & Dart" Mould.

Furtwängler. Bronze-funde. Nos. 9 & 10. Naukratis Pls. III & XIV A.



EGYPTIAN, MYKENAIAN, AND KYPRIOTE LOTUS MOTIVES.

GRECO-PHŒNICIAN REMINISCENT LOTUS MOTIVES.



MELIAN AND RELATED LOTUS MOTIVES.

A

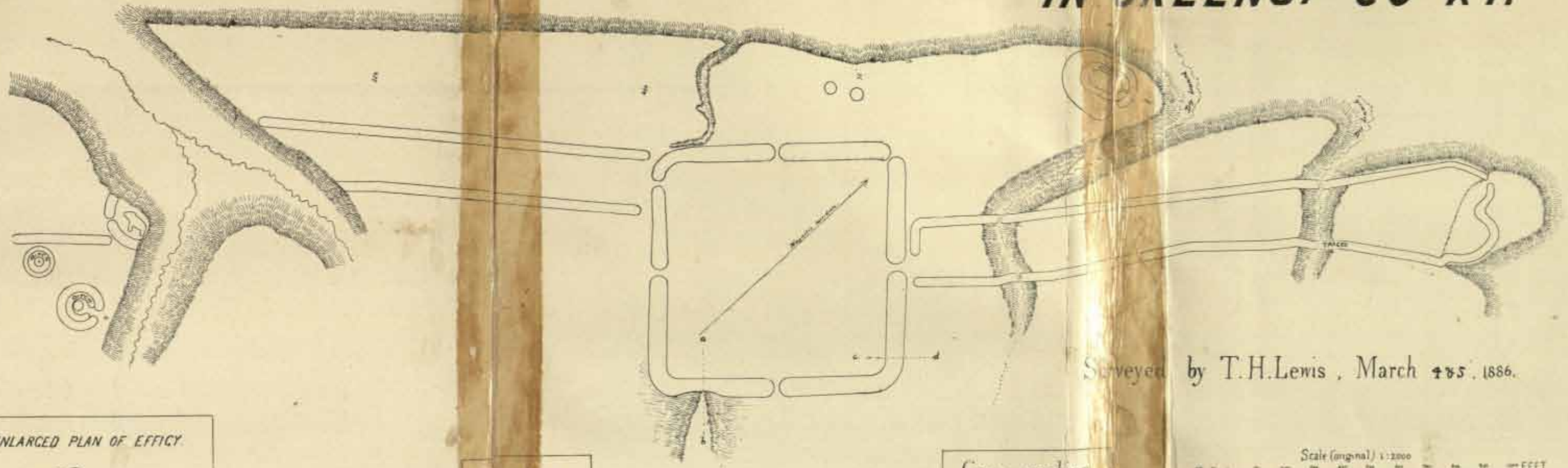
B

FORMSTEIN DES TURINER MUSEUMS.

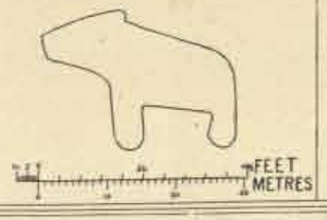
RELIEF IM MUSEO CIVICO ZU BOLOGNA.

THE "OLD FORT" &c.

IN GREENUP CO KY.

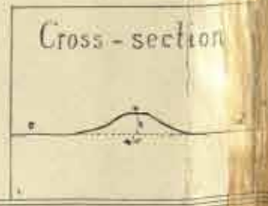


ENLARGED PLAN OF EFFIGY.



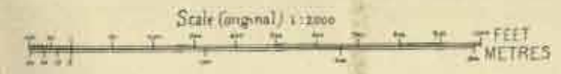
C section

Cross-section



Surveyed by T.H.Lewis, March 25. 1886.

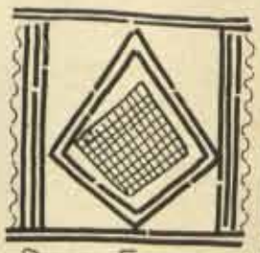
Scale (original) 1:2000



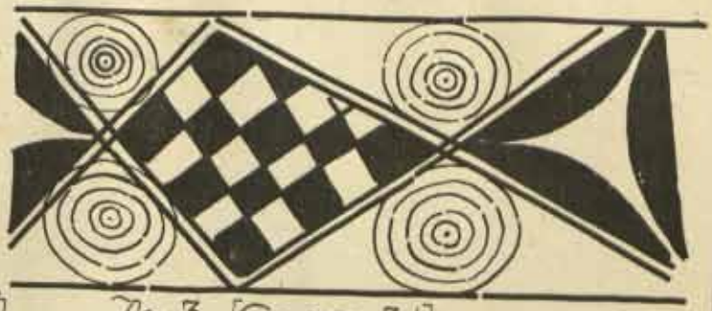
Drawn by A.J.Hill.

Geometric Lotus Patterns on Cypriote Vases. "Met Mus". Plate XII

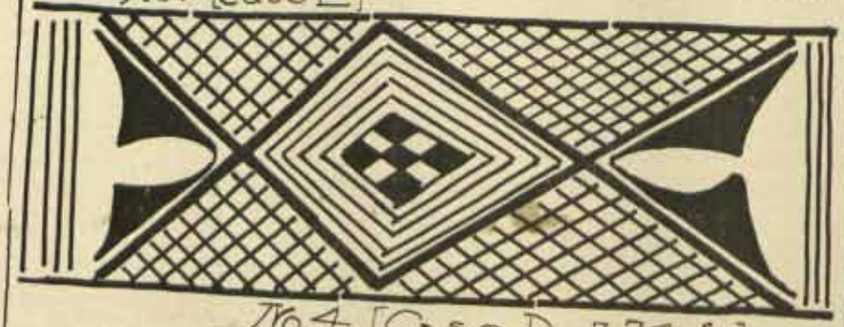
No. 1. [Case E]



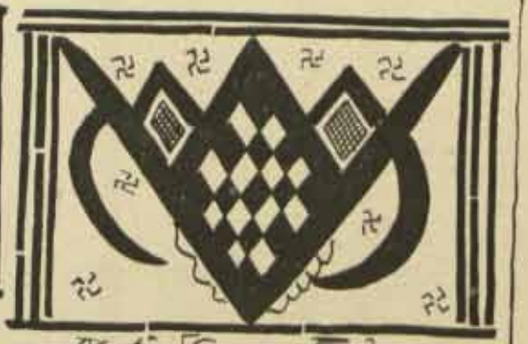
No. 2. [Case 25, 3545]



No. 3. [Case 31]



No. 4. [Case D. 3744]



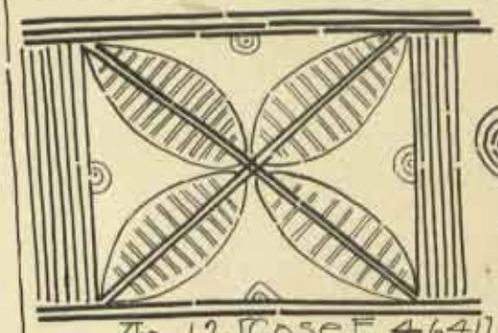
No. 5. [Case E]

No. 6. [Case 32,

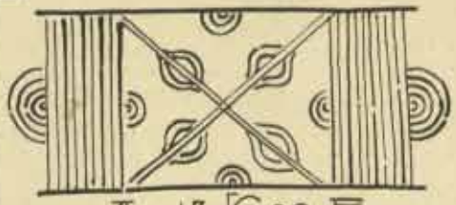
No. 9. [Case 32, 4853]

No. 10. [Case 30. 4646]

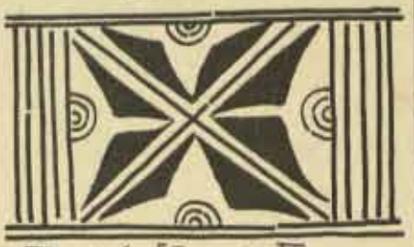
No. 11. [Case E, 4158]



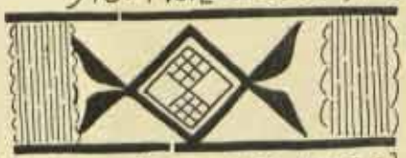
No. 12. [Case E, 4641]



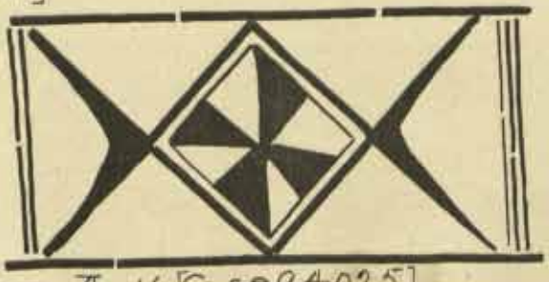
No. 13. [Case E, 4158]



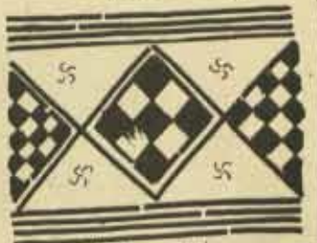
No. 14. [Case E, 4158]



No. 15. [Case 33, 3236]



No. 16. [Case 9, 4025]



No. 17. [Case 31, 4847]

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