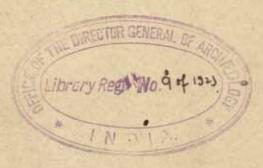




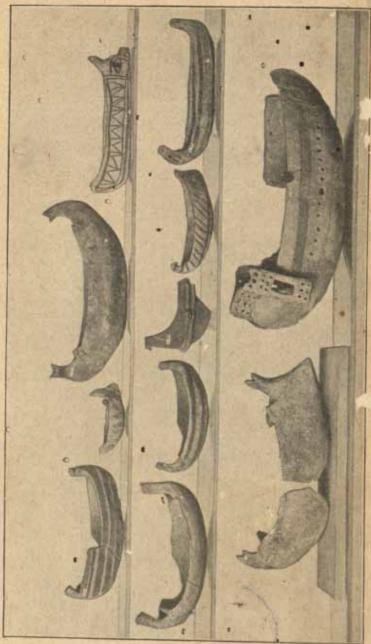


GUIDE TO THE EXHIBITION ILLUSTRATING GREEK AND ROMAN LIFE.

SECOND EDITION.







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BRITISH MUSEUM. PARTMENT OF GREEK AND ROMAN ANTIQUITIES.

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A GUIDE

TO THE EXHIBITION ILLUSTRATING

REEK AND ROMAN LIFE.

SECOND EDITION.



WITH A FRONTISPIECE AND TWO HUNDRED AND SIXTY-FOUR ILLUSTRATIONS.

SELECTION OF

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In this Exhibition an attempt has been made to bring together a number of miscellaneous antiquities which formed a part of the collections of the Department, in such a method as illustrates the purpose for which they were intended, rather than their retistic quality, their material, or their place in the evolution of craft or design.

Such a series falls naturally into groups, and it has been found convenient to treat these groups in accordance with a general scheme, the illustration of the public and private life of the Greeks and Romans.

The materials forming the basis of this scheme are, primarily, bjects which already formed part of the Museum collections: or this reason it has not been possible always to preserve that roportion in the relation of the sections to the whole which uld have been studied if the objects had been selected for uisition with this purpose in view. Further, it is necessary warn visitors that they must not expect to find the subject any sense exhaustively treated here: the complete illustration very detail of ancient life would be impossible for any museum t present constituted. All that can here be done is to shape available material into a system which may at least present -ly intelligible, if limited, view of ancient life. Several new itions, made since the appearance of the first edition of Guide, have strengthened the exhibition in directions in th it was deficient, and it is hoped that this process will be med. Meanwhile, some of the gaps have been filled by

means of casts and reproductions of objects belonging to other categories in this Museum, or preserved elsewhere.

The preparation of the first edition of this Guide (1908) was entrusted to different members of the Departmental Staff. Mr-Yearnes prepared a great deal of the necessary preliminary work: Mr. Walters wrote the sections on Athletics, the Circus, Gladiators, and Agriculture: Mr. Forsdyke those on Coins, Arms and Armour, Dress and the Toilet. The remaining sections were mainly the work of Mr. Marshall.

In the present edition the section on Arms and Armour has been re-written by Mr. Forsdyke, and the remainder has been mainly revised by myself. The proofs have been read by Mr. Walters and Ma Forsdyke.

A. H. SMITH.

BRITISH MUSEUM, March, 1920.

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GREEK AND ROMAN LIFE

The exhibition is arranged in the central rectangle of what was formerly the Etruscan Saloon; it includes Wall-Cases 25-64, 94-119, and Table-Cases E-K. The subject naturally divides itself into the two chief headings of public and domestic institutions, and each of these occupies one half of the room. On the West side are grouped the sections relating mainly to Public Life, on the East those of Private Life: of the former, the section illustrating the monetary system of the ancients and its development naturally leads up to the Department of Coins and Medals. For the general scheme of the exhibition, reference should be made to the Table of Contents.

Note.—The references at the end of each section correspond to the numbers of the objects in this Guide. These numbers, which are placed near the objects in the Cases, are distinguished by being in red upon a white ground. Numbers attached to the objects (such as B77 on a case) refer to the British Museum Catalogues, which should be consulted for fuller details than can be given in the Guide.

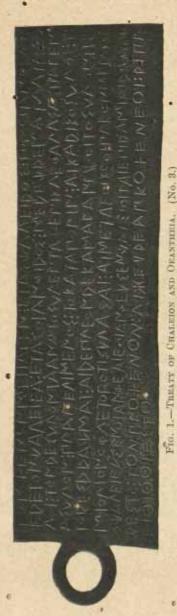
I. POLITICAL INSCRIPTIONS AND SLAVERY.

(Table-Case .K.)

A SECTION of Table-Case K contains a series of inscriptions which illustrate various sides of Greek and Roman political life.

It must be borne in mind that the Greek state was generally of very small dimensions. As a rule all life was centred within a city, which had but a moderate extent of outlying country. Aristotle describes the perfect city or state (the words are interchangeable) as the union of several villages, supplying all that is necessary for independent life. ** Greece, though small in area, was

thus divided up into a large number of states, whose interests were constantly in conflict. It thus came about that it was provided



with systems of treaties, arbitrations, and consular representation such as marked a fully developed international system.

Treaties.-The bronze tablet No. 1 dates probably from the second half of the sixth century B.C., at a time when the Eleians and Heraeans of Arcadia were still dwelling in villages, and were not vet united each into a single city. It is written in the Aeolic dialcet of Elis, and records a treaty between the two peoples named. There was to be a close alliance between them in respect of all matters of common interest, whether of peace or war. Any breach of the treaty, or any damage to the inscription recording the treaty, would involve a fine of a talent of silver to be paid by the offender to Olympian Zeus, the supreme Greek deity. The tablet was brought from Olympia by Sir William Gell in 1813.

No. 2 is a cast of a similar treaty between the communities of the Anaiti and Matapii, for a fifty years' friendship. In case of a breach of the treaty the priests at Olympia have arbitrators' powers.

No. 3 (fig. 1) is a bronze tablet, with a ring at one end for suspension, recording a treaty made between the cities of Chaleion and Oeantheia on the Gulf of Corinth. It is in the Lokrian dialect, and can be dated to about 440 B.C. The main object of the treaty was to regulate the practice of reprisals

between the citizens of the respective towns, and, in particular, to prevent injury to foreign merchants visiting either port. There are also provisions for ensuring a fair trial to aliens. The tablet was found at Ocantheia (Galaxidi), and was formerly in the Woodhouse collection.

Colonization. This was a feature of peculiar importance in Greek life. In the course of the eighth and seventh centuries B.C. numerous colonists had left their homes on the mainland of Greece or on the coast of Asia Minor, and had settled principally in Southern Italy and Sicily, or round the shores of the Black Sea. The reasons for such emigration were sometimes political, but more often commercial. Between the mother-city and the colony relations of an intimate character were almost invariably maintained. Representatives from either city attended the more important festivals held in the other town, and the daughter-city not infrequently sought the advice of the mother-city in times of difficulty and danger. The inscription on the bronze tablet No. 4 illustrates the way in which colonists left one Greek state to settle in another comparatively near at hand, and also shows the relations existing between the colonists and the mother-state. At a date probably previous to 455 s.c. colonists from the Opuntian or Eastern Lokrians (inhabiting a district lying opposite to the island of Euboea) left their homes to settle in Naupaktos, a town situated on the narrowest part of the Gulf of Corinth, in the territory of the Western Lokrians. The question arose as to how far the colonists were to remain in connection with the mothercountry. The tablet shows that the settlers had the privilege of enjoying full social and religious rights on revisiting their native city, although during their absence they were exempt from paying taxes to it. Under certain conditions they might resume their residence in the mother-state without fee, and they also had a right to inherit property left by a near relative in that state. Other provisions deal with judicial arrangements affecting the new settlers.

Proxenia.—Just as modern states appoint consuls in foreign countries in order that the interests of their citizens abroad may be protected, so the various Greek cities appointed their representatives in different foreign states. These representatives were chosen from the citizens of the town in which they acted, and their appointment was regarded as a special honour, carrying with it substantial privileges. The main functions of the proxens were those of dispensing hospitality to travellers and assisting them in

cases of difficulty, and of receiving ambassadors arriving from the state which they represented. They were also expected generally to further that state's commercial interests.

Two bronze tablets recording decrees of proxenia, passed by the people of Coreyra, are here exhibited. No. 5 (fig. 2), probably of the end of the fourth century n.c., records the grant of proxenia to Dionysios, son of Phrynichos, an Athenian. It mentions the



Fig. 2,-Grant of processia to Dioxysios (No. 5). Ht. 195 in.

date, the appointment, and the right of possessing land and house property in Corcyra, the last evidently a reward granted to the proxenos for his services. No. 6 (fig. 3), of about 200 B.C., is a

Διονύσιον | Φρυνίχου | *Αθηνείον.

¹ Πρύτανις Στράτων. | μεὶς Ψυδρείς, ὁμέρα τε | τάρτα ἐπὶ δέκα' προστάτας | Γνάθιος Σωκράτενς | πρόξενον ποεὶ ὁ ὁλία | Διονύσιον Φρυνίχου | 'Αθηναίον αὐτὸν καὶ | ἐκγόνους, δίδωτι δὲ καὶ | γᾶς καὶ οἰκίας ἔμπασιν. | τὰν δὲ προξενίαν γράψων | τας εἰς χαλκών ἀνθέμεν | εἴ κ... προβούλοις καὶ προ | δίκοις δοκῆι καλῶς ἔγειν.

grant of proxenia to Pausanias, son of Attalos, a citizen of Ambrakia. He is accorded the usual honours, and the Treasurer is directed to provide the money for the engraving of the decree on bronze. Both these tablets were found in Corfu, the modern name of the ancient Corcyra. The persons appointed acted, of course, in Athens and Ambrakia respectively.



Fig. 3,-Grant of prozenia to Pausanias (No. 6). Ht. 82 in.

Law-courts at Athens.—One of the most striking features of democratic Athens was its elaborate machinery for the administration of justice. The system of popular control began in the

Παυσανίαν 'Αττάλου | 'Αμβρακιώταν.'

[&]quot;Εδοξε τῷ ἀλία, πρόξε νον εἴμεν Παυσανίαν "Ατ | τάλου "Αμβρακώταν | τῶς πόλιος τῶν Κορκυραί | ων αὐτὸν καὶ ἐγγώνους | εἶμεν δὲ αὐτοῖς καὶ τὰ | ἄλλα τίμια, ὅσα καὶ [τοῖς] | ἄλλας προξένοις [καὶ] | εὐεργέταις γέγ(ρα) | πται. | τὰν δὲ προξενί | αν προβούλους καὶ προβούκους γράψαντας εἰς | χάλεωμα ἀναθέμεν. | τῶν δὲ ταμίαν δόμεν | τὸ γερόμενον ἀναλω | με.

fifth century B.C., and reached its full development in the fourth. For petty offences the various magistrates had the power of inflicting a small fine, but graver charges were usually decided by a jury court. Those who composed these jury courts were called dikastae. They were chosen at first up to the number of six thousand from the entire body of citizens over thirty years of age, but later on apparently any citizen over thirty years of age was a qualified juryman. From the time of Perikles each juryman received three obols (about 5d.) a day for his services. The whole body of jurymen was divided into ten sections, each of which was distinguished by one of the first ten letters of the Greek alphabet (A to K). Each dikast received a ticket (#waktor), at first of bronze, but in Aristotle's day of boxwood, inscribed with his name, his parish, and the number of his section. In Aristotle's day the father's name was always given as well.1 Four of these dikasts' tickets (in bronze) are exhibited in this case, together with a fragment of

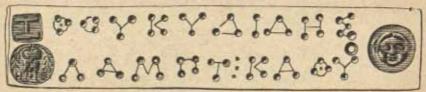


Fig. 4.—Ticker of Thukydides (No. 10). L. 44 in.

e fifth. Upwards of eighty are known, all apparently belonging to the fourth century B. The tickets shown are:

No. 7, which belonged to Deinias of Halae, of the third section (Γ). The ticket is stamped with the Athenian symbol of an owl within an olive wreath, two owls with one head, and a Gorgoneion.

No. 8, belonging to Archilochos of Phaleron, of the fifth section (E).

No. 9, 'belonging to Aristophon, son of Aristodemos, of Kothokidae. His was the third section (Γ).

No. 10, the ticket of Thukydides of Upper Lamptrae (fig. 4). He belonged to the sixth section (I). The ticket bears the symbols of an owl within an olive wreath, and a Gorgoneion.

¹ 'Αθ. Πολ. 68 : ἔχει δ' ἔκαστος δικαστής πινάκιος πύξινον, ἐπιγεγραμμένον τὰ ὅνομα τὸ ἐαυτοῦ πατρόθεν καὶ τοῦ δήμου καὶ γράμμα ἐν τῶν στοιχείων μέχρι τοῦ κ.

The lowest fragment is part of a ticket belonging to Philochares of Acharnae of the fifth section.

Ostracism.—This was a peculiar device adopted by Greek city-states for getting temporary relief from the influence of prominent citizens, whose presence was for the time being considered undesirable. At Athens ostracism was introduced by



Fm. 5.—Inscribed Potshends (Ostraka) at Athens (No. 11).

the statesman Kleisthenes about 508 B.c. The method of effecting it was as follows. The popular assembly (Ekklesia) first decided whether they desired that ostracism should be carried out. If they considered it expedient, they met and recorded their vote. The name of the person they most wished to get rid of was written on a potsherd (ostrakon), and if six thousand votes were recorded against any one name, that man had to go into banishment for ten years. In Case K is a coloured illustration (No. 11) of three ostraka found at Athens (fig. 5). The names written on the sherds are well known in Greek history. Themistokles (fig. 5a), of the deme Phrearri, was the creator of Athenian sea-power. In consequence of this ostracism (ca. 471 B.c.) he died an exiltat Magnesia on the Macander. Megakles (fig. 5b) of the deme



Fig. 6,—Porsiman of Teos (No. 12).

Alopeke, son of Hippokrates and uncle of Perikles, was ostracised in 487 s.c. as "a friend of the tyrants." In the next year, 486 s.c., was banished Xanthippos (fig. 5c), son of Arriphron and father of Perikles, on the ground of undue prominence. The Museum collection contains no ostraka of historic importance, but the potsherd inscribed by one Teos (No. 12) gives an idea of the actual object (fig. 6).

Dedications for Victory. The dedication in a temple of a part of the spoils of victory was not merely a religious observance. It was also the formal entering of a claim to victory. The Etruscan helmet

(No. 13) dedicated at Olympia by Hieron of Syracuse, is an example (fig. 7). It was found at Olympia in 1817, and was presented to

the Museum by King George the Fourth. On the side is a votive inscription:

BIARONODEINOMENEOS · KAITOI ŽVRAKOŠIOI TOIDITVRANAFOKVMAŠ

Tapow ὁ Δεινομένεις και τοι Συρακόσιοι τῷ Δὶ Τύραν ἀπὸ Κύμας
—"Hieron son of Deinomenes and the Syracusans offer to Zeus
Etruscan spoils from Kyme." Hieron was tyrant of Syracuse from
478 to 467 в.с., in succession to his brother Gelon, and was one
of the most prominent figures of the age. Gelon had nobly upheld
the supremacy of the Greeks in the west by destroying a Carthaginian
host at Himera, in the same year and, as the tale went, on the same
day as the battle of Salamis. Hieron added to the brilliance of the
Sicilian court, and signalised his naval power in the great repulse
of the Etruscans. The ancient city of Kyme, near Naples, the

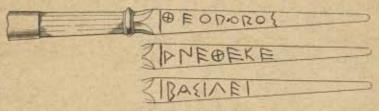


Fig. 7.—Etruscan Helmet Dedicated at Olympia by Hiebon and the Synacusans (No. 18). 1:4.

earliest Greek colony in the west, was hard pressed by the neightouring barbarians and by the givilised and powerful state of Etruria. The Greeks appealed for help to Hieron, and he sent them a fleet of warships, which beat the Etruscans in sight of the citadel of Kyme, and broke their sea-power for ever (474 a.c.). From the arms and treasure taken in the battle Hieron made the customary offering in the Temple of Zeus at Olympia, and this helmet with its eloquent inscription was part of the dedicated spoil.

For other votive helmets see below, p. 76.

The votive spear-head, No. 14, dedicated by an unknown Theodoros to (Zeus) Basileus, about 500 B.C., was probable found at Olympia. The occasion of the dedication is unknown, but it nearly resembles No. 15 (cast), which was dedicated at Olympia by the Methanians as spoil from the Lacedaemonians. The original is at Berlin. Several spear-heads of this type have been found. They do not seem to be effective for use in battle, and they are



Θεόδωρος ανέθηκε Βασιλεί.

Fig. 8.—Sprar-head Dedicated by Theodoros to (Zeus) Babileus. (No. 14) 1:3.

therefore supposed to have been specially made for dedicatory purposes. It has also been suggested that they are spear-butts, but this does not seem probable.

Emblem of Office.—The bronze caduceus (No. 17), (familiar as the emblem of the herald Mercury), is inscribed "I belong to the people of Longene," and was apparently the staff of the public herald of that town. It was found in a tomb in Sicily, and is of the fifth century B.C. The device is in the form of a staff, surmounted by a pair of intertwined serpents.

Roman military Life.—This is illustrated by two of the Latin inscriptions here shown. The oblong bronze tablet No. 18 (figs. 9a and 9b) is part of a Roman diploma, a document recording privileges in respect of citizenship and rights of marriage granted to a veteran soldier. The diploma derived its name from the fact that it was composed of two tablets hinged together

[&]quot; Μεθάνιοι άπο Λακεδαιμονίων. .

We have in the present instance only the left side or one of the tablets. The right side, which had two holes for the metal rings attaching it to the other tablet, has been broken away. The inscription is a copy of one originally engraved on bronze and set up on the wall behind the temple of Augustus



Fig. 9a, -Fragment of a Bronze diploma (No. 18). Ht. 5½ in.

ad Minercam at Rome. It is headed with the names of M. Julius Philippus, the Emperor, and of his son, who had the title of Caesar. This is followed by the grant of full matrimonial rights to the soldiers of ten cohorts and by the date, equivalent to Jan. 7th, 246 A.D. Next comes the name of the individual soldier to whom this copy of the original inscription was given, one Neb. Tullius, veteran of the fifth practorian cohort of Philip at Aelia Mursa in Pannonia. The grant of full . matrimonial privileges was a considerable one, for it meant that the veteran's wife and children gained the privileges of Roman citizens, if, as was often the case, the wife was not possessed of citizen rights at the time of The two holes in the marriage. middle of the tablet were used for the wire thread, which was

Imp. Cae(sar) M. Iulius Phili[ppus Pius]
Fel(ix) Aug(ustus), pont(ifex) max(imus), trib(unicia) p[ot(estate) III,
cos., p.p. et]

M. Iulius Philippus nobil[issim(us) Caes(ar)]
nomina militum, qui milit[averunt in]
cohortibus pretoris Phil[ippianis de-]
cem I. H. HI. HH. V. VI. VII. VIII. VII[II. X. piis vin-]
dicibus, qui pii et fortiter [militia fun-]
cti sunt, ius tribuimus con[ubii dumta-]
xat cum singulis et primi[s uxoribus],
ut ctiam si peregrini iur[is feminas]
in matrimon(io) suo imaxe[rint, proinde]

passed round the tablets three times according to the usual official custom, and had the seals of seven witnesses affixed to it. Fig. 90 is a testoration showing the original form of the document opened, the exterior of the two tablets being seen. This diploma was found in Piedmont. Parts of similar documents will be seen exhibited in the Room of Roman Britain.

Near the diploma is a small bronze ticket (No. 19), inscribed on either side. One side bears the name of Ti(berius) Claudius Priscus,



Fig. 9b. - The above diploma bestoren.

the other records that he belonged to the fourth practorian cohort and the centuria Paterni.

Corn Largesses.—From the end of the second century B.C. it had become a regular feature of Roman policy to supply the

liberos toll(ant), acxi (for ac si) ex duob(us) e[ivibus Rq.]
manis natos. a. d. VII. [idus Ian.]
C. Bruttio Presente et C. Al(b)[-----cos.]
Coh(ors) V pr(actoria) Philip[pian(a) p(ia) v(index).]
Neb. Tullio Neb. f. M(a) -----Ael(ia) Murs[a].

Descript(um) et recognit(um) ex ta[bula acrea;,
que fix(a) est Romae in muro [pos(t) templum]
divi Aug(usti) ad Mine[rvam].

populace of the city with corn either gratis or at an artificially cheap rate. After the fall of the Republic the Emperors carried still further the policy of free distributions (congiaria or liberalitates). It has been reckoned that the annual cost of their largesses averaged £90,000 from Julius Caesar to Claudius, and £300,000 from Nero to Septimius Severus. Persius, who wrote in the time of Nero, notes with a sneer that it was one of the privileges of the meanest Roman citizen to exchange his ticket for a portion of musty flour. This policy of the Emperors is illustrated by the inscribed corn-ticket (tessera framentaria) shown in this Case (No. 20; fig. 10). It is inscribed on one side, Ant(onini) Aug(usti) Lib(cralitas) II., i.e., the second special largess of Antoninus, perhaps Antoninus Pius, who reigned from 138-161 A.D. On the other side appears fru(mentatio)



Fig. 10.—Bronze Corn-Ticket (No. 20). 1:1.

LXI., i.e. the sixty-first monthly corn distribution, dating doubt less from the accession of Antoninus. The letters were originally inlaid with silver, as is shown by the remains of that metal in the numerals. The sepulchral inscription mentioned on p. 224 should be studied in connection with this corn-ticket.

Official Emblem.—The relief in Case 99 shows the Fasces (that is, the axes and the rods tied in a bundle) which were carried by the lictors before the higher Roman magistrates.

Slavery.—The circular bronze badge (No. 21) shows the Roman methed of dealing with runaway slaves after the softening influence of Christianity had begun to make itself felt. In earlier times the runaway slave had been punished with the cruel penalty of branding. Apparently from the time of Constantine onwards an inscribed badge was substituted, authorising the summary arrest of the slave if he were caught out of bounds. The inscription on the badge exhibited runs: "Hold me, lest I escape, and take me back to my master Viventius on the estate of Callistus."

Two other objects may perhaps be brought into connection with slavery. The scourge (No. 22), with its lash loaded with bronze beads, was frequently used for the punishment of slaves. It is the horribile flagellum of Horace. A scourge very similar to the present is seen on a relief in the Capitoline Museum at Rome, representing a high-priest of Kybele, whose devotees were in the habit of scourging themselves in the service of the goddess. The pair of iron fetters (No. 23), found in 1813 in a cave behind the Pnyx at Athens, bear a close resemblance to those worn by a bestiarius or beast-fighter represented on a relief from Ephesus exhibited in Case 110, (Cat. of Sculpt., II., No. 1286).



Fig. 11. - Stave Badge (No. 21). 3:5.

Two small bronzes (No. 24) show dwarf slaves undergoing the punishment of the cangue, in which neck and wrists are fixed in a board.

(1) Cat. of Bronzes, 264; Hicks and Hill, Greek Hist. Inser., No. 9; (2) Roberts, Gr. Epigraphy, No. 297; (3) Cat. of Bronzes, 263; B.M. Inser., 953; (4) Cat. of Bronzes, 262; B.M. Inser., 954; (5) Cat. of Bronzes, 333; (6) ibid., 334; (7) to (10) ibid., 329-332; Hicks and Hill, 151; I.G., IL., 886, 901, 885, 908b; (11) Jahrbuch d. Arch. Inst., II., p. 161; (12) B.S. Athens Ann., V. pl. 5, fig. 112; (13) B.M. Inser., 1155; Cat. of Bronzes, 250; (14) B.M. Inser., 948a; Journ. of Hellen. Stud., II., p. 77; (15) Roberts, Gr. Epigraphy, No. 286; (17) Cat. of Bronzes, 319; I.G. XIV., 594; cf. Hermes, III., p. 298 ff.; (18) Eph. Epigraph, IV., p. 185; C.I.L., III., Suppl. i., p. 2000. On the diplomata generally, see Smith, Dict. of Ant., and Daremberg and Saglio, Dict. of Ant., s.v.; (19) Cat. of Bronzes, 901; C.I.L., XV., 7166; Hübner, Exempla, No. 915; (20) Cat. of Bronzes, 3016; C.I.L., XV., 7201; Klio, Beiheft III., p. 21; Philologus, XXIX., p. 17; (21) Cat. of Bronzes, 902; C.I.L., XV., 7193.

Baumeister, Denkmäler, II., p. 801, fig. 867.

II. COINS.

(Table-Case K.) .

The coins which are selected to represent the Greek and Roman currencies extend over a period of just one thousand years, in the course of which the coinage went through all the developments and anticipated all the varieties of type and fabric which it has since experienced, while in artistic merit it reached an excellence which will probably never be surpassed. The Greek coinage, moreover, has the great interest of being that upon which all later coinages have been modelled for the Chinese money, which originated about the same time, and apparently independently, may be left out of account.

Greek Coins.—The character and provenance of the earliest coins agree with the best ancient tradition of their origin, in so far as it associates them with Asia Minor, although it is more probable that they were invented by the Greek cities of the coast than by the Lydians, to whom they have been credited in accordance with the Herodotean tradition.1 The most primitive pieces are found in Asia Minor, and their metal is a natural mixture of gold and silver, called electrum, which occurs in the mountains of Lydia, and was brought down to the sea in the sands of the great rivers, the golden Hermus and its tributary the Pactolus. The cities which the Greeks had planted on the Asiatic shores grew in the seventh century B.C. to a high degree of wealth, by reason of their position on a rich coastland, where they were intermediary in the trade of east and west. There were great bankers in these Ionian cities who had large stores of treasure; their gold and silver would be kept in bars or ingots of definite weight stamped with the device, in place of the written signature, of the banker. From thus marking large ingots with his own signature, it would be a short step for the banker to do the same with smaller denominations of the same weights, so producing a private coinage for his own convenience in calculation, which would come to have a limited acceptance in the quarters where his credit was good. Such pieces are probably to be recognised in the nondescript coins of which the electrum stater is an example (No. 24; fig. 12a); this is scored on one side with parallel scratches and stamped on the other with three deep punch-marks. There are many pieces in existence which have even less design than this, although their weights conform to

COINS. 15

definite coin-standards. We may perhaps regard this example as a private coin, one of the last of its kind, which immediately preceded the adoption of coinage by the state. The invention of coinage lies really in this innovation, which, however obvious it may seem to us now, was then of deep political significance. When once a state currency was instituted, the private coinage fell out of use, for no individual banker could compete with the guarantee of the state, and the state would not tolerate imitation of its own types. We may therefore take it that the successive stages in the "invention" of coinage were somewhat as follows: first, the occasional practice of stamping certain weights of metal with marks by which they could be identified; this probably continued in private use for a long period before it was adopted by a state; and finally the adoption all over the Greek world of a series of state coinages.

The example, once set, was quickly followed by the more important Greek cities, until by the middle of the sixth century the art of coinage had travelled from Ionia across the mainland of Greece to the colonies in Italy and Sicily. Owing to the peculiar political conditions of Greece, where every town held a separate and independent sovereignty, each state was jealous to assert its autonomy on its coins, with the result that the Greek coinage presents an enormous variety of types, held together, however, as the money of one people by the uniformity of their general character and of the art in which they are expressed.

We may now proceed to consider a few representative coins, which in the midst of innumerable local issues were important enough by their purity of weight and metal, or by their abundance, or by the commercial reputation of their issuing states, to predominate in the Greek world as a sort of international currency and standard of exchange.

The earliest electrum stater of Ionia is interesting on account of its fabric only, for it has no type. It is a bean-shaped lump of metal, one side of which has been stamped with a flat die marked with parallel scratches, the other with three punches, which have left deep impressions (No. 24; fig. 12a). The pieces which immediately followed, such as the silver money of Aegina (No. 25; fig. 12d), have a real type on the obverse, while the punch-mark on the reverse is more regular, and is often ornamented with some design of a special character, though it does not contain a type until later.

With the introduction of coinage into European Greece, a

change was made in the metal of the currency, for gold and electrum, which were plentiful in Asia, were not common in Greece proper, and a silver coimage was there the rule until Philip of Macedon took possession of the Thracian gold mines. The few gold issues before his time were due to exceptional circumstances; thus the gold coinage of Athens (No. 26) was occasioned by great financial stress, when treasure was melted down to supply the currency. There was, however, no lack of gold money in Greece, for after the first electrum issues came the fine gold staters of Croesus, in the early sixth century (No. 27; fig. 12b), and, on his overthrow by Cyrus, an international gold coinage was still available in the enormous issues of the Persian daries (No. 28: fig. 12c), which were in common use all over the ancient world until the Macedonian gold replaced them. A few subsidiary electrum coinages survived in Asia, the most famous being the Kyzikene staters (No. 29; fig. 12m), which were a standard exchange in the Aegean and Black Sea regions. A peculiarity of this coinage is that the distinctive type of the town, the tunny, is relegated to a secondary place, while the main type is a constantly changing design. In the piece illustrated the subject is taken from a group of the Athenian tyrannicides, Harmodies and Aristogeiton, which stood in the market place of their native city.

Another important currency, used especially in western Greece, the "colts" of Corinth, took its type from the local myth that the winged horse Pegasos was captured by Bellerophon at the fountain Peirene, which flowed from the acropolis of the town (No. 30; eg. 12e). The original punch-mark on the reverse was soon replaced by the helmeted head of Athena, who also had a part in the Pegasos myth, and these two types were constant as long as the Corinthian state existed. The money which enjoyed the fairest reputation was that of Athens, which, at the time of the Athenian empire, superseded the issues of the subject cities and became the standard currency in the Aegean Sea. It penetrated into the far East, and there are extant examples of native imitations from India and Arabia. The wide circulation of these staters among barbarous peoples was the cause of their peculiar style; for not only were the types of Athena's head and her owl and olive-branch unaltered from the first sixth-century design, but the execution was an imitation of the primitive manner, the stiffness of archaic art being reproduced in an affected archaism. As the money of Athens was the foremost in the Greek world, it is useful to note the extraordinary number of denominations which were struck in

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F10. 12.-GREEK COINS. 1:1.

silver at its most flourishing period, the fifth century n.c. A large, but still not complete, series is exhibited here (No. 31). It consists of the Decadrachm (10 drachmae, fig. 12f), an early and rare coin, the Tetradrachm (4 drachmae, fig. 12g), which was the famous Athenian stater or standard piece, the Didrachm (2 drachmae), the Drachm (fig. 12h), the unit of weight, which contained six obols, the Triobol (3 obols), the Diobol (2 obols), the Obol (fig. 12i), the Tritemorion (4 obol), the Hemiobol (4 obol), the Trihemitetartemorion (4 obol), and the Tetartemorion (4 obol, fig. 12k), the half of the last piece being equivalent to the largest bronze coin, the Chalkous (No. 32).

With the Athenian series is the bronze core of an ancient imitation of a silver stater, of which the silver plating has perished (No. 33). False coining was punished with extreme penalties even in those early days: in an extant monetary convention between Mytilene and Phocaea, of the fourth century s.c., the crime of adulterating the money is threatened with death.

On the conquest of Athens by Macedon, at the end of the fourth century B.C., the autonomous Athenian coinage was largely superseded by the Macedonian regal issues, and did not recover its position until late in the next century. It was renewed in a different form, with none of the old archaism, of which the occasion was past. The coins of the new style exemplify the thin flat fabric of the period, and although the types of Athena and the owl are preserved, their arrangement is much more complicated. The new head of Athena is a copy from the colossal ivory and gold statue which Pheidias made, and on the reverse of the coins the owl and olive spray are accompanied by many new devices, of which the most remerkable are the names, symbols, and monograms of the monetary magistrates; eminent personages sometimes figure in this place. On the coins exhibited (No. 34; fig. 12l) one of the officials is Antiochos, who was afterwards Epiphanes, king of Syria.

In the interval between the old and new coinages, when the Athenian money was scanty, the currency was supplied by the regal issues of the Macedonian kings and their successors. Under Philip II. and his son Alexander the Great, the Macedonian monarchy extended its dominion by conquest, not only over the isolated Greek cities, but over the ancient empire of Persia. The opportunity was thus provided for a universal coinage, and it was realised in the gold and silver issues of Philip and Alexander (Nos. 35, 36;

¹ Michel, Recueilides inser. grecques, No. 8.

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fig. 12n-q). The acquisition of the Thracian gold-mines gave Philip the means for an abundant coinage of gold, the first considerable Greek issue of the kind, which contributed in no small measure to his political success. The style of these coins of Philip is not different from that of other Greek money, except that they are inscribed with a personal name of Philip instead of the name of a whole people, and the types, a horse and jockey and a twohorse chariot, are also personal, as they commemorate the racing successes of the king. The fine heads on the obverse, however, are still divine, that of Zeus appearing on the silver and the young Apollo on the gold, for the idea of representing a living personage on a coin was still distant. Of this money the gold especially was struck in enormous quantities, and the types were imitated more and more crudely, as time went on, in Gaul and Britain. (See the series shown in the Room of Roman Britain.) The coinage of Alexander was even more widely spread. His types were more orthodox than those of Philip: the head of Athena and a Victory on the gold, and the head of young Herakles, wrapped in the lionskin, with a figure of Zeus enthroned, on the silver staters, although in the head of Herakles there is some suggestion of the features of Alexander. These coins were struck all over the world which Alexander conquered, and lasted after his death as the money of his successors and of independent cities, in some cases even for two centuries; but the kings who divided his great empire modified the type by introducing real portraits of Alexander, as a deified hero, and later of themselves, as living deities, so that the representation of a ruler's head on coins, which is still practised to-day. began with quasi-religious Greek coin-types. The regularity of the Greek coinage which Alexander established was only temporary. and his influence was fast disappearing when the subjection of the world by the Romans in the first century B.C. merged all provincial issues in the complete uniformity of the Imperial mint.

Roman Coins.—As gold in the Asiatic coastlands and silver in European Greece, so in Italy the native medium of exchange was bronze. In the earliest times the raw metal was circulated in broken knobs of indefinite weight (aes rude), which required in all transactions the use of scales. The rude metal was afterwards superseded by cast ingots of an oblong shape, which bore a device to indicate their purpose as money (aes signatum). Yet the weights were still irregular, and no mark of value accompanied the types, so that the pieces were not strictly coins. A survival of this primitive currency is seen in the large ingot which has on

one side a tripod and on the other an anchor (No. 37; fig. 13). This piece itself belongs to a later period, when the lighter coined money was already in use. The special purpose for which this



Fig. 13.—AES SIGNATUM (No. 37), 1:3,

and similar pieces were intended is quite uncertain. The first coinage of Rome was less massive than this, but being entirely of bronze, was still inconveniently large and cumbrous (aes grave). The Roman of the fourth century B.C., when he found it necessary to transport any considerable sum, took his money about with him in a waggon. The use of bronze for a token currency, as in Greece, was not possible without a superior coinage of gold or silver to secure its value.

A typical series of the Roman heavy bronze money is exhibited (No. 38; fig. 14). The system is based on the pound of twelve ounces, and the denominations of the various pieces are distinguished by the heads or obverse types, and by the marks of value which they bear. The series consists of the

As, or pound (1), the half, Semis (S), the third, Triens, of four ounces (...), the quarter, Quadrans, of three ounces (...), the



Fig. 14.—Ars Grave (No. 38). As, Semis, Quadrans, and Uncia. 1:2.

sixth, Sextans, of two ounces (...), and the Uncia, or ounce, the dower unit (.) (cf. p. 160). Each of these is further differentiated

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by the obverse head. The as has the double head of Janus, the god of beginnings, whose coin opened the series of money, as his month begins the year. The semis has the head of Jupiter, wearing a laurel wreath; the triens, Minerva armed; the quadrans, Hercules in the lion-skin; the sextans, Mercury, the messenger, with wings in his cap; and the uncia, a head of Bellona, the goddess of battle. All the reverses have a common type, the prow of a ship. This device may mark the date of the introduction of the Roman coinage, which coincided with Rome's first essays on the sea, in the middle of the fourth century before Christ. It remained as the reverse type of the bronze money all through the Republic, and even in later times, when a coin was tossed, the cry was "heads" or "ships."

The heavy bronze coinage of the city of Rome was only one among many similar currencies of the central Ifalian states. As the Romans conquered the neighbouring territories, where there existed local weight-systems, which, in the interests of commerce, it was well to preserve, instead of imposing their own money, they inaugurated subordinate issues at the dependent mints. On this principle it was natural that when the march of Roman conquest came upon the peoples of South Italy, where a silver currency had been long ago introduced by the Greek colonists, a local issue for those parts was instituted as a subsidiary coinage. To this class of Roman money belongs the silver stater or didrachm with Campanian types (the head of Mars and the bust of a horse) which was struck by the Romans-as the legend ROMANO(rum) shews-in Capua for the use of the Campanian district (No. 39 > fig. 15a). With the extension of power and territory the old bronze pieces were inadequate, and in the year 268 B.c. a silver coinage was begun at Rome itself. At the same time the Campanian mint was closed, and the heavy bronze coins, being subordinated to the silver unit, were issued as token-money in a reduced and more convenient size.

The first Roman silver coinage bears the types of the goddess Roma, wearing a winged helmet, and on the reverse the patron deities of trade and commerce, Castor and Pollux, the Heavenly Twins or Dioscuri (No. 40; fig. 15b-d). They are armed with spears and ride on horseback, with their stars above their heads. These types occur on all three denominations of the earliest silver, the *Denarius* (marked \times), which was worth 10 asses; its half, the

Macr. Sat. i. 7, 22, pueri denarios in sublime iactantes capita autinavia exclamant.

Quinarius (V); and the Sestertius (nS) of $2\frac{1}{2}$ asses, which became the unit in reckoning accounts. The two smallest silver pieces were not always struck; but the denarius, with the reduced copper for small denominations, remained in use during the period of the Republic at Rome and long into the Empire. Although both series had a great variety of types, the fabric and general appearance were unaltered.

With the change to the Empire, reform in all directions was begun, and the coinage was set on a new basis. Gold was introduced to meet the needs of the metropolis of the world, and two new coins, the Aureus and its half, were struck in this metal. They were modelled on the silver pieces. The standard silver coin was still the denarius, and the only change which it expemenced was in type. The head of the emperor took the place of those of deities, with a superscription, which was the forerunner of modern coin-legends. It consisted of the name and titles of the emperor, often with the date of striking, arranged in a circle round the edge of the coin. The minting of gold and silver was assumed by the emperor, but the lower denominations were left to the senate, whose authority is expressed on each piece by the letters S.C (Senatus Consulto, "by decree of the Senate"). The senatorial series consisted of the Sestertius, the equivalent of the smallest silver coin, now valued at 4 asses instead of the original 21: the Dupondius, of 2 asses; the As, and fractions of the as, Semis and Quadrans, which are of less frequent occurrence. These coins sometimes differed as to the metal used, the as and semis being of Sopper, and the dupondius and sestertius of brass; or in the style of the emperor's head; for, as in the case of the coins exhibited, the as is marked I and the dupondius II (fig. 15h and i). Usually, however, the two pieces are confused, and are loosely termed by collectors "second brass," the sesterce being "first brass," and all denominations lower than the as "third brass." The reverse types were very numerous, and, with the exception of the mark S.C on the senatorial issues, none of them was peculiar to any denomination. The series which is selected here to illustrate the Imperial coinage is of the reign of Nero (54-68 A.D.); all the pieces, therefore, bear the image and superscription of that Caesar, and their reverses have complimentary references to the emperor and his family, or topical allusions to current events (No. 41; fig. 15e-l).

Nero was the first emperor to reduce the weight of the denarius, and from his time the degeneration was rapid. A series of seven pieces, from Tiberius to Probus (14-281 A.D.), illustrates the

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Fig. 15,-Roman Coins, I: L.

debasement of the metal, which is apparent to the eye (No. 42). By the time of Gordianus Pius (238-244 A.D.) no trace of silver is visible, and the coin of Probus here exhibited is plainly copper. Yet these pieces represent the only silver money which was then coined.

Many of the coins which have come down to us have been preserved by the care or avarice of their former owners, who hid their wealth for security and were unable to recover it. Portions of two such hoards are shown at the end of the case. One consists of Athenian staters of the late fifth century B.c. (No. 43), which were found in the Greek settlement of Nankratis, and the other is a large collection of late Roman coins of the fifth century A.D. (No. 44). These were buried in another Egyptian town, Hawara, in the egg-shaped jug which is shown with them. At Pompeii, a city which was overwhelmed by the volcano in the midst of its daily life, money, like all other things, has been found ready to hand and actually in use. There is in this Case all that the fire has left of a Pompeian money-box, and among the coins which it contains is a brass sesterce of Nero, whose reign ended eleven years before . the catastrophe. Shreds of a net purse are also visible in the box (No. 45).

Special uses of Coins.—A silver stater of Sikyon (No. 46), is marked by an inscription punctured by the dedicator—To Artemis in Lakedaemon. A religious character attaches also to the bronze coin of Laodikeia in Phrygia, which is pierced and suspended from a wire loop for wearing as a charm against sickness, by virtue of the figures which it bears of Asklepios and Hygieia, the deities of health (No. 47).

A curious coin, struck for a special religious purpose, is the copper piece of Nemausus (Nimes, in the South of France), which is made in the shape of a ham for dedication to the deity of the local fountain (No. 48). The offering was probably originally paid in kind.

Ancient false Coins.—With the exception of the Italian heavy copper, which was cast, nearly all ancient coins were struck in dies, and most of the false pieces which have survived are defective in the quality of the metal, while the fabric is good. In the later Roman Empire, when all the standard money was of base metal, the surface was so bad that the coins could easily be counterfeited by casting, and great numbers of the clay moulds used by forgers or by the monetary authorities date from this period. Among the large collection here exhibited (No. 49) there are some unbroken moulds, and some with the run metal still adhering. Base metal

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was detected by the use of the touch-stone, and pieces of doubtful weight were tested by the balance. An ivory folding balance is shown (No. 49°). The long arm is made just too light to counterpoise a good denarius—the test being that if the coin were heavy enough it would fall off the plate at the end.

For Greek and Roman coins in general, see Hill, Handbook of Greek and Roman Coins (with the Bibliography there given); G. Macdonald, Coin Types (Glasgow, 1905); Head, Historia Numorum (2nd ed. 1911.)

III.—DRAMA.

(Table-Case K and Glass Shade above.)

THE antiquities illustrating the ancient drama are placed in one half of Table-Case K, and under the glass shade standing above it.

Greek Drama — This was in its origin essentially religious, and retained up to the decline of tragedy at the end of the fifth century B.C. the character of a religious ceremony. Thus tragedy gradually developed out of the rude dances in honour of the wine-god Dionysos, which were performed at country vintage festivals.

The name tragedy means "goat-song," and is probably to be associated with the sacrifice of the goat, the enemy of the vines.

The dramatic part of a tragedy was at first confined to a dialogue between a single actor and the leader of the chorus, with long musical interludes, but the number of actors was gradually increased, with the result that more stress was laid on the dramatic action. Aeschylos introduced a second actor, Sophokles a third, and Euripides, the last of the great tragedians, reduced the lyrical element of the play to comparatively insignificant proportions.

Comedy underwent a development not unlike that of tragedy. It also had its origin in the coarse buffoonery common at the rustic festivals which celebrated the vintage. Introduced into Athens from the neighbouring Megara early in the sixth century B.C., it did not receive recognition from the state until the middle of the fifth century. The comedy of the closing years of that century is inseparably connected with the name of Aristophanes, who combined merciless political satire with exquisite poetry.

In the fourth century B.C. a great change came over comedy at Athens. The later plays of Aristophanes mark the beginning of the comedy of manners, which took the place of the old political comedy. The master of this new comedy was Menander. Through Roman translations and adaptations of Menander and his fellow poets by Plautus and Terence, comes the comedy of Moliere and modern Europe.

The theatre, in which these ancient plays were performed, was of slow development. The grassy slopes of a hill, bordering on a circular dancing-place (orchestra), satisfied the carliest audiences. Later on, a definite place was set apart for theatrical performances, and a wooden structure erected for the actors. It was not until the fourth century that permanent stone seats were laid down in the Theatre of Dionysos at Ashens, although performances had been given there for more than a century.

Roman Drama.—The drama at first met with a determined opposition from Romans of the old school as a new-fangled thing from Greece. The taste of the people, also, was not inclined to favour so cultured an amusement as the drama. The Romans preferred to see a fight between men or beasts rather than to listen to a play, and on one occasion, when listening to a play of Terence, they rushed pell-mell from the theatre, because a rumour arose that a combat of gladiators was going to take place.

The more important Roman comedies were adapted from the New Comedy of the Greeks. These adaptations are familiar to us from the surviving plays of Plautus (254-184 a.c.) and Terence (ca. 185-159 a.c.). Actors at Rome had long to be content with temporary wooden structures, which were pulled down when the performances were over. A permanent theatre was not erected in Rome till 55 a.c.

The objects illustrating the ancient drama can conveniently be divided into (a) representations of scenes from plays, and (b) figures of actors and masks.

(a) Scenes from Plays.—The vase (No. 50) placed under the glass shade is valuable as an illustration of the beginnings of Athenian drama. It is a plate of Athenian fabric of the sixth century B.C., with designs which probably represent the sacrifice made to Athena at the Panathenaic games, and two scenes relating to dramatic contests. The first of these scenes shows a tragic chorus with the goat, which was the prize of victory. The second shows a comic chorus, in which a man seated at the back of a mulecar appears to be making jests at the expense of another man who follows. This "jesting from a car" became a regular phrase to express ribald joking.² None of the men who took part in these

¹ Hecyra, prolog., 30 ff.

 ^{*2} Cf. Dem., de Cor., 122: και βούς μητά και δρρητα δυομάζων, ώσπερ έξ άμαξης.

DRAMA.

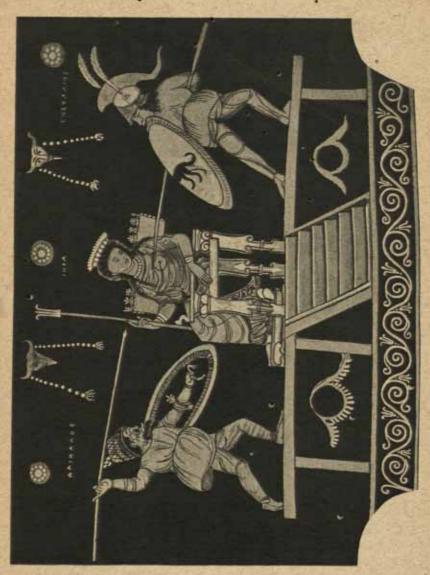


FIG. 16.-SCHNE PRON A MOCK-THAGEDY. COMBAY BETWEEN ARES AND HEPHAESTOR BEFORE HIBRA (No. 52).

contests is distinguished by any peculiarity of costume. Another early vase, however (No. 51), gives a lively picture of two actors dressed up as birds. Before them stands a flute-player. Though this vase is many years earlier in date than the Birds of Aristophanes (414 B.C.), yet it may serve to give us some idea of the appearance of the chorus in that play.

The two large vases illustrate Greek dramatic performances of a considerably later date. They give us scenes from *phlyakes*, a class of burlesques which were in vogue in the Greek cities of Southern Italy, especially at Tarentum, at the end of the fourth



FIG. 17.-MARRIAGE SCENE FROM A ROMAN COMEDY (No. 54). 2:3.

and the beginning of the third century B.C. They are associated with the name of Rhinthon, a Syracusan poet. These plays dealt in the wildest spirit of farce with subjects drawn from Greek mythology and legend, as well as with scenes from daily life. One of the vases (No. 52; fig. 16) shows a contest upon the stage, between actors representing Ares (Ενευάλιος) and Hephaestos (Δαίδαλος) fighting in the presence of Hera. The grotesque mask, the padded figures, and the general air of exaggeration are indicative of the character of these plays, which earned for them the title of mock-tragedies (ἰλαροτραγωδίας). The other vase (No. 53) is a parody of the myth of Cheiron cured by Apollo. The blind Centaur, whose equine body is represented pattomime-fashion by a second actor

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pushing behind, ascends the steps leading up to the stage, where stands the slave Xanthias. Behind is the Centaur's pupil Achilles, and looking on from a cave are two grotesquely ugly nymphs.

Case K contains two interesting representations of Roman comedy and tragedy respectively. The oblong lamp (No. 54;



Fig. 18.—Scene from a Roman Tragedy. Hencules Disputing with Mars (No. 55). 1:1.

fig. 17) gives a scene from a comedy, not improbably the mock-marriage scene from the fourth act of the Casina of Plautus. The steps leading up to the door of the house divide the actors into two groups. On the left is the bridegroom (Olympio?) with his mule, in preparation for his departure into the country. On the right comes the marriage procession approaching a woman (Pardalisca?) who stands by the steps. First walks a Silenus, carrying a Cupid

on his shoulders; next comes the bride, carried aloft by a man, in order that she may be lifted over the threshold in conformity with the usual Roman marriage rite (see below, p. 212). Behind is an altar in the courtyard of the house. A Cupid waits at the door to receive the bride.

The Gallo-Roman medallion (No. 55; fig. 18) is from a vase.



Fig. 19.—Ivory Statuette of a Tragic Actor,



Fig. 20.—Terracotta Statuette of Comic Actor (Money-Lender?) (No. 60). Ht. 7% in.

It gives a picture of a Roman tragedy. On a high stage sits Jupiter enthroned, with Victory and Minerva on his right and left hand respectively. Before the stage stand Hercules and Mars, disputing. Hercules has slain Cycnus, the son of Mars, and the irate father stands exclaiming: "Be assured that I am come as the avenger of my son." To which Hercules replies: "Uncon-

quered valour can ne'er be terrified." The characters speak in iambic verse.

(b) Figures of actors and masks.—In tragedy the actors probably were a dress differing from that of the spectators only in a certain richness of material and colour, and in an adherence to

the fashion of an earlier period. Two features, however, distinguished them in appearance from ordinary men, the buskin (κόθοργος) or high-soled boot, and the tragic mask. The use of the former (which increased in height as time went on) was due to a desire to enhance the wearer's dignity by raising him somewhat above the common height of men. The wearing of the mask was brought about chiefly by tradition, partly · by the great size of ancient theatres, which rendered some easily recognized type of face a practical necessity. The tragic mask (fig. 22 below, right) was usually surmounted by a high projection over the forehead, called the onkos, on which the hair was raised to a height varying with the social position of the character. The mask illustrated (No. 56) is of ivory and finely worked. It is a mask such as would have been worn by some king in tragedy, an Agamemnon or a Kreon. The general appearance of a tragic actor is finely brought before us by an ivory



Fig. 21.—Terracotta Statuette of Come Actor (Slave?) (No. 61). Ht. 84 in.

statuette (not in the Museum) which was found near Rieti, a place about 35 miles N.E. of Rome (fig. 19). The elaborately embroidered robe is coloured blue, and the *onkos*, mask, and buskins are clearly seen. (*Mon. dell' Inst.* xi. pl. 13.).

Adease ultorem nati m[e] credas mei. [Invic]ta virtus nusquaim) terreri potest.

The figures of actors and the comic masks exhibited under the glass shade and in Table-Case K bring before us the different characters prominent in Athenian comedy of the fourth and third centuries B.C., and in the Roman comedy derived from it. It was a comedy of everyday life, in which the same well-known types were constantly reappearing. Such were the parasite (No. 57), who bears all the marks of a fondness for good living, and carries a flask and a ham; the glutton (Nos. 58 and 59), distinguished by his large padded stomach; the money-lender (No. 60), with his acute and cunning expression, grasping his purse tightly by his side with both hands, and partially concealing it beneath his



FIG 22.—COMIC, SATVRIC, AND TRAGIC MASES (Nos. 65, 66, 56). Ca. 5: 8.

cloak (fig. 20). The adventures of the slave and his punishments were a favourite theme with poets of the new comedy. No. 61 (fig. 21) may represent the trusted elderly slave aghast at the misdoings of his young master. A still greater favourite is the runaway slave who seeks refuge from his irate master in the protection of the altar. The bronze statuette (No. 62) and the terracotta (No. 63) show him seated on the altar, and in No. 64 his hands are tied behind him. A typical comic mask (No. 65) is illustrated above (fig. 22, left), characterised by its exaggerated features, especially the wide open mouth, the snub nose and thick bushy eyebrows. The satyric play, which of the three finds of Greek drama kept nearest in spirit to the early Dionysiac

village revel, is illustrated by the satyric masks (No. 66; fig. 22, centre), with their high upstanding hair and semi-bestial features, as well as by the masks of the bald-headed Seilenos, the constant companion of Dionysos in his revels.

Most of the examples of masks shown in the case are merely representations. A few such as No. 67 with pierced eye and mouthholes, and of life size, may have been intended for use. Two heads of actors from marble reliefs (Nos. 68, 69) show to what extent the face of the actor could be seen, within the apertures of the mask.

(50) Cat. of Vases, II., B 80; Journ. Hell. Stud., I., pl. 7; (51) Cat, of Vases, II., B 509; Journ. Hell. Stud., II., pl. 14; (52) Cat. of Vases, IV., F 269; cf. Heydemann in Jahrb. d. arch. Inst., I. (*886), p. 260 ff.;
(53) Cat. of Vases, IV., F 151; (54) Cat. of Lamps, 446; Cf. Froehner, Hoffman Sale Cat., 1886, p. 38, No. 127; (55) Cat. of Roman Pottery, M 121; Gazette Arch., 1877, p. 66, pl. 12.

On the ancient theatre generally, see Haigh, The Attic Theatre, edn. 3, where references to literature will be found. For Masks, see Daremberg

and Saglio, Diet., s.r. Persona.

IV. SHIPPING.

(Wall-Cases 94-97.)

As early as the eighth century before Christ the Greeks possessed powerful war-vessels propelled by numerous oarsmen. These appear on vases of that date, as for example on a large bowl . of Boeotian fabric (described below in connection with chariots, p. 169), which shows such a ship with its double line of rowers and a man at the stern managing the big steering-oars. The crew of this vessel seems to have numbered some forty men.1 A more finished representation of early Greek ships is seen on a cup (No. 70) of the end of the sixth century B.C. (figs. 23, 24), where the contrasted builds of the war galley and the merchantman are clearly indicated. The war galley has two rows of eleven and twelve oars respectively. The merchantman has no fowers, but is entirely dependent on its sail. It has a high-built hull, suited for holding cargo. In each we see the steersman at the stern with his two steering-oars. Beside him is the ladder for embarking and disembarking A terracotta model ship from Cyprus (No. 71: fig. 25) of about this period shows the socket for the mast and the

high poop for the steersman, with the remains of an iron oar. This vessel is doubtless intended for a merchantman. The numerous small terracotta boats (No. 72) found with this merchant vessel at Amathus give a good idea of the fishing boats of the time (Case 94; see frontispiece). These boats are also interesting as reminding us of the legend that Kinyras, king of Cyprus, promised Menelaos to send fifty ships to help the Greeks against Troy. He sent but one, carrying forty-nine others of terracotta, manned by terracotta figures. After the taking of Troy, Agamemnon is said to have made it his first business to punish Kinyras for his trickery. It would seem that the story must have been based on knowledge of the fact that terracotta boats were a product of Amathus. It

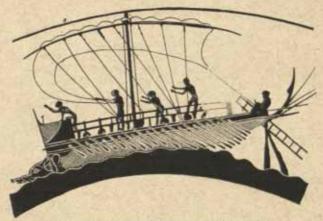


Fig. 23.- Early Greek Warship (No. 70).

is hard to suppose that it is merely a coincidence. The small model war-galley (No. 73) from Corinth, containing warriors armed with circular shields, is interesting from the place of its discovery, for Corinth was traditionally an early shipbuilding centre, and triremes are said to have been first built at that city.¹

The use of triremes (ships with triple arrangement of oars) did not become common among the Greeks till the earlier part of the fifth century B.C. This was the typical Greek warship of the period of the Peloponnesian war, and the arrangement of the rowers in it has given rise to much controversy. The crew (according to one view) consisted of two hundred rowers, sixty-two on the highest tier (θρανῖται), fifty-four on the middle (ζυγῖται), and fifty-four on

the lowest (θαλαμῦται), as well as thirty who were apparently stationed on the highest deck (περίνεω). The best ancient representation of the rowers in a trireme is that given on a relief in Athens, of which a cast is shown here (No. 74; Case 94). The upper oars pass over the gunwale, the second and third lines (if these are oars) through port-holes. In the trireme the ram was of the greatest importance, and much attention was devoted to strengthening it. An excellent illustration of the prow of a trireme is to be seen in the terracotta vase from Vulci (No. 75; fig. 26). Here are an upper and a lower ram, each armed with three teeth; the curved ornament above the ram has been broken away. The projections on either side of the handles of the vase, decorated with a

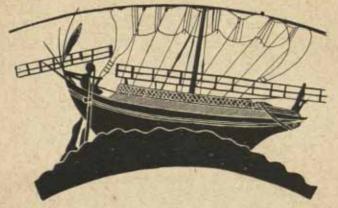


Fig. 24.—Early Greek Merchant-Ship (No. 70).

woman's head, would serve as a protection to the oars. The eye on the side is a prominent decoration in Greek ships. It is seen on the ship painted on the vase B 508 in Case 95 (No. 76), from which the diver is preparing to jump, and has survived even to the present day, for eyes are still found painted on the bows of Mediterranean fishing boats. The eyes are often supposed to be a defence against the evil eye, but the exact position they occupy on each side of the prow is suggested by the almost inevitable analogy between the prow of a vessel and the head of an animal. Roman ships did not differ very materially from Greek ships, but a special class of swift ships with two banks of oars was adopted from Liburnian pirates who inhabited the islands off Illyria, and these ships were called Liburnian galleys. A figure-head in bronze from a Roman ship, found in the sea off Actium, is shown in Case 96 (No. 77). It

represents Minerva, and probably belonged to some ship sunk in the great battle between Octavian and Antony in 31 n.c.



Fig. 25, -Terracotta Model of Merchant-Ship (No. 71). L. 12 in.



Fig. 26.—Vase in the Form of a Prow of a Triffing (No. 75). L. 8 in.

A fragment of a relief from a sarcophagus shows a Roman trireme, with a figure of a swan in relief on the prow (No 78)

Some lamps placed in Cases 96, 97 give interesting pictures of Roman harbours. In one (No. 79; fig. 27), a ship is seen entering the harbour, which is indicated by a light-house on the left. Of the crew of six, one is seated high on the stern, blowing a trumpet to announce the ship's approach; before him is the steersman, and next come three men furling the sail. The man in the bows is



F10. 27.—ROMAN SHIP ENTERING A HARBOUR (No. 79). Diam. 4 in.

preparing to let down the anchor. Another lamp (No. 80; fig. 28) shows a harbour with buildings on the quay. A fisherman in a small boat holds a rod and line in his right hand, and a fish which he has just caught in his left. Before him is a man on shore just about to cast a net into the water. In the third lamp (No. 81) Cupid is seen in a boat, hauling in his net from the water.

A marble laver (No. 82), originally decorated with a relief of Asklepios, Hygicia and Telesphoros, has been subsequently sculptured with votive dedications for a fair voyage. On the left, Poseidon stands on a ship, with a suppliant before him, on the right is a ship running before the wind. The inscriptions invoke good voyages for Theodoulos and Pedius Psycharios



Fig. 28.—Roman Fishermen in a Harbour (No. 80). Diam. 35 in.

(70) Cat. of Vases, II., B 436; Daremberg and Saglio, fig. 5282; (71)
Excavations in Cyprus, p. 112, fig. 164, No. 12; (72) ibid.; (74) Cat. of
Sculpture, III., 2701; (75) Cat. of Terracottas, D 201; (76) Cat. of Vases,
II., B 508; (77) Cat. of Bronzes, 830; Torr. Ancient Ships, pl. 8, 41;
(78) Daremberg and Saglio, fig. 5277; (79) Cat. of Lamps, 1140; (80)
Cat. of Lamps, 527; (81) Cat. of Lamps, 634.

On ancient ships generally, see Torr, Ancient Ships, and art. Navis in Daremberg and Saglio; W. W. Tarn in Journ. Hell. Stud., XXV., pp. 137, 204 ff.; A. B. Cook in Camb. Comp. to Gk. Stud., 3 ed., p. 567 ff.

V.-RELIGION AND SUPERSTITION.

(Wall-Cases 98-106.)

The wide subjects of Religion and Superstition are naturally represented in a fragmentary way in the few case devoted to them in this collection. They are roughly classified in the following description, into groups, viz.:—

- (1) Implements and methods of worship.
- (2) Votive offerings.
- (3) Superstition and Magic.

Implements and methods of worship.

Altars, etc.—The larger altars (and sepulchral chests of altar form) will be found in the sculpture galleries. Here we have

(No. 83) a small altar, from Dodona, inscribed as belonging to all the gods,¹ and various model altars, probably used in some cases for the burning of incense.

An interesting example (No. 84) of the practice of dedicating altars to members of Roman Imperial houses is furnished by the inscription (fig. 29) in the lower part of Case 98. It formed the front of a marble altar, and is dedicated to the Imperial Fortune by a freedman named Antonius, who was in charge of the "Department of Petitions," for the safe return of the Emperor Septimius Severus, his wife Julia Domna, and his sons Caracalla and Geta. But so far as Geta was concerned, the Imperial Fortune was not propitious. He was



Fig. 29.—ALTAR DEDICATED FOR THE SAPE RETURN OF SEPTIMUS SEVERUS AND HIS FAMILY (No. 84). Ht. 2ft. 7in.

murdered by his brother Caracalla, and his name was erased from this, as from all other inscriptions throughout the Roman Empire, by Caracalla's edict. The date of the inscription is about 200 A.D.

In Case 102 is an altar (No. 85) dedicated to the Bona Dea of Anneanum (a town in Etruria) by C. Tullius Hesper and Tullia Restituta. The Bona Dea was a goddess specially invoked by women. Hence we may suppose that it was Tullia Restituta more particularly who showed her thankfulness by this dedication.

¹ Ταρός πάντων θεών όδε βωμός.

In Case 98 are two examples (Nos. 86, 87) of a combined lamp and altar, for use in domestic shrines, probably of late Roman date.¹ In one of these the basin for libations is supported on a pine-cone. Akin to these is the small limestone cone and altar from the Cyrenaica.

No. 88 (fig. 30) is a bronze representing an attendant leading a pig to sacrifice. The pig (as well as the sheep and the bull) was a favourite sacrificial animal among the Romans. At the lustral ceremony of the suovetaurilia, the bull, sheep, and pig were driven round the farmer's fields to keep them free from blight and disease. Certain deities, notably Persephone and the Bona Dea, had swine



Fig. 30.—Attendant Driving Pig to Sacrifice (No. 88). Ht. 4 in.

as their special victims. In Case 105 will be seen a terracotta votive pig (No. 89) found in the precinct of Demeter and Persephone at Knidos.

In Case 98 is an elaborate model in terracotta of a temple laver from Cyprus (No. 90). In Case 100 is a terracotta model of a sacred table (No. 91, fig. 31), set with a service of vessels for the sanctuary.

Bronze Implements.—A series of early Italic bronze implements

d'Agincourt, Samrilung d. Denkmaeler d. Sculpkur, pl. viii., fig 27.

(No. 92), may have been used in sacrifice. Those with the curved claws were probably used for taking boiled meats out of a caldron. They remind us of the five-pronged sacrificial forks mentioned in Homer, and of the custom of the Jewish priests' servants as described in the Book of Samuel: "The priest's servant came, while the flesh was in seething, with a fleshhook of three teeth in his hand; and

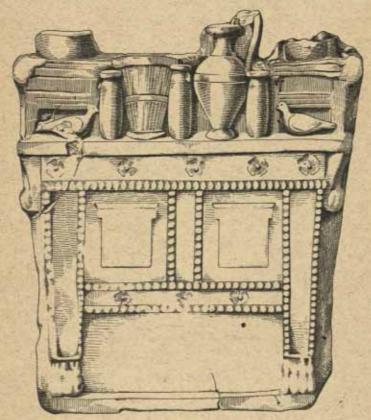


Fig. 31.—Table with Service of Vessels (No. 91) 2: 3.

he struck it into the pan, or kettle, or caldron, or pot; all that the fleshhook brought up the priest took therewith." On the right are three bronze gridirons. These, like the fleshhooks, originally

¹ Cf. ὀβελὸς τρικώλιος as the measure of a sacrificial perquisite, in the inscriptions of Cos. Paton & Hicks, *Insert. of Cos.*, No. 37, l. 53; No. 40b, l. 14.

had weoden handles inserted into their sockets. The meat was spitted upon hooks, which only remain in one instance.

A series of implements terminating in a hand bent at the knuckles (No. 93), and a pair of tongs on wheels (No. 94), are probably meant for manipulating embers.

Miscellaneous.—A small silver model of a temple key is shown in Case 100. The small alabaster statuette of a goddess with turreted crown (No. 95) is of special interest from the fact that her mouth and breasts are pierced, evidently with the object of allowing some fluid, such as milk or wine, to flow from them for the edification of



Fig. 32.—The Dioscult coming to the Theoxenia (No. 98).

her votaries. A jar (No. 96) contained perhaps the honey syrup, used in Egypt for feeding the sacred crocodiles.

Religious Rites.—Prayer.—The fifth century kylix (No. 97) shows the gesture of the raised right hand, often used in prayer. The young athlete, whose oil-flask hangs behind him, is probably praying before the altar. That athletes entered upon their tasks with extreme seriousness is clear from the oath taken by them before the image of Zeus in the Council House at Olympia, when they swore upon the cut pieces of a boar that they would be guilty of no foul play. In the Greek view athletics and religion were very closely connected.

The Lectistennium, or Theoxenia, was the ceremony in which

a banquet was set, and the gods were invited to attend. It is illustrated by the drawing of a lekythos (No. 98) from Kameiros in Rhodes (about 500 n.c.), which represents the two gods Castor and Pollux descending from heaven on horseback to take part in the festival of the Theoxenia (fig. 32). This feast, indicated by the couch on which they were to recline, was given in honour of the twin gods. Such a festival well illustrates the perfectly human interests which the Greeks attributed to their deities.

Compare with this vase the cast (No. 99) of a relief in the Louvre, from Larissa. A man and his wife, the dedicators of the relief, are represented as having set out a couch, a banquet of cakes, and an altar. The Twins descend, heralded by Victory. Beside the relief is a fragment of a lamp (No. 100) incised with a dedication to the Dioscuri, that is, to Castor and Pollux. Here also is the

inscribed base (No. 101) of a statuette dedicated to the Dioscuri by Euarchos (sixth century B.C.).

Augury. — Passing now to Italic religious ceremonies, we may notice the archaie bronze statuette of an augur (No. 102), whose function it was to draw omens from the aspect of the heavens or the flight and cries of birds. He wears a cloak drawn veilwise over his head, a common religious garb, and in his right hand holds the lituus or curved wand used for the



Fig. 33.—APHRODITE WITHIN A SHRINE (No. 104). Ht. 2½ in.

ceremonial dividing of the heavens into quarters. In connection with this statuette mention should be made of an early Greek inscription (No. 103) in the bottom of Cases 95-96. It was found at Ephesus, and is probably of about the same period as the statuette, the sixth century B.C. It gives rules for drawing lucky or unlucky omens from the flight of birds. The principal signs are the flight from right to left or vice versa, and the raising or lowering of the bird's wing.

Shrines.—In Cases 100, 101 a series of terracotta shrines is exhibited. They were doubtless for household use, employed in much the same way as modern images of the Madonna. No. 104 (fig. 33), from the early Greek settlement of Naukratis, in the Nile Delta, shows Aphrodite within a shrine supported by figures of the Egyptian god Bes, a characteristic combination of Greek and Egyptian elements. No. 105, from Amathus, in Cyprus, is also

semi-Egyptian in character, and shows a deity surmounted by a winged solar disk. Another shrine from Naukratis (No. 106) contains the sacred Apis-bull of the Egyptians. No. 107 is an example of a shrine containing a bactylic image, that is, a stone worshipped as sacred. A cone resembling the one here shown was worshipped in the temple of Aphrodite at Paphos in Cyprus. In front, a small lead model shrine (No. 108) of later date, from Sardinia, represents Aphrodite just risen from the sea-foam and wringing out her hair. The circular shrine (No. 109; fig. 34) is



Fig. 34,—Terracotta Model Shrine (No. 109). Ht. 4 in.

of Roman date, from Eretria in Euboea. Its form and more especially the indication of overlapping scale-plates on the roof remind us strongly of the famous temple of Vesta at Rome.

In Case 101 is a bronze tablet with an iron chain and staple (No. 110). The tablet, apparently of about 200 n.c., is inscribed on both sides, and seems to give a list of statues of deities, some, such as Vezkei, peculiar to the Samnites, others, such as Ceres and Hermes, of widely spread worship. It is a most important monument of the Oscan dialect, a language spoken by the early Italic tribes whose chief centre was the mountainous country above Campania. It was found at Agnone (Bovianum Vetus) in the Samnite territory.

Votive Offerings.

A votive offering is a present made to a deity, in order to secure some favour for the future, to avert anger for a past offence, or to express gratitude for a favour received. This last purpose includes offerings made in fulfilment of a vow, the vow being a kind of contract between the individual and the god. This comes out most clearly in the Roman expression voti reus—" condemned to pay a vow "—applied to those whose prayer had been granted, and who now had to fulfil their promise made in time of stress and difficulty. Votive offerings cover the whole field of life, and may include persons, lands, buildings, or objects specially appropriate either to the god or to the person who makes the dedication.

Very frequently the vow was made by some person stricken with disease, and it is to such a cause that we owe the numerous votive offerings representing some part of the human body.

The constant streams of these offerings made the ancient temples depositories of all kinds of objects, ranging from jewels of great price and high artistic merit to the roughest terracotta figure. In the Gold Ornament Room (Case 19) is a magnificent gold pin of the Ptolemaic period inscribed with a dedication to Aphrodite of Paphos, showing that the offering was the result of a vow made by Eubule, the wife of Aratos, and one Tamisa. Overcrowding led to periodical clearances of objects of the least intrinsic value. To prevent things dedicated returning to the uses of common life, they were frequently broken and thrown into heaps. This accounts for the masses of débris, consisting chiefly of terracottas and vases, which have been found within the precincts of great sanctuaries.

The vast accumulations of treasure in the various temples naturally demanded careful cataloguing, labelling and supervision on the part of the temple officials (see examples of marble labels from the sacred enclosure of Demeter at Cnidos). From time to time elaborate inventories were drawn up, and (after the manner of ancient documents) inscribed on stone. Such inventories have been discovered in large numbers at Delos, Athens, and elsewhere, An example is shown in the lower part of Case 97, being an inventory (No. 111) of various garments dedicated to Artemis Brauronia. who had a shrine upon the acropolis of Athens. We know that it was the custom of women after childbirth to dedicate garments to Artemis, and in particular to Artemis Brauronia. That the garments were often anything but new is shown by the fact that several are described as "in rags." A typical extract from the inscription may be given: "A purple dress, with variegated chequer pattern. Dedicated by Thyaene and Malthake." entries range in date from 350 to 344 B.C.

The principal objects here exhibited as illustrating the ancient custom of dedication may now be mentioned. In Wall-Case 96 is an inscription of the fifth century B.C. (No. 112) found in the ruins of the temple of Poseidon on Cape Taenaron in Lakonia. It records the dedication by one Theares of a slave named Kleogenes to the temple-service of Poseidon. The names of an ephoros, probably an official of the temple, and of a witness are added. In some cases the dedication of a slave to a god is equivalent to enfranchisement.

Among votive offerings specially appropriate to the god, we have

already mentioned the reliefs dedicated for a good voyage (No. 82) and the Theoxenia relief (No. 99). The pedestal (No. 112°), with an inscription that it was restored "whether sacred to god or goddess," is a parallel to the altar inscribed with a dedication "to an unknown god," which caught the eye of St. Paul when he was viewing the antiquities of Athens.

In the bottom of Case 102 is the base of a statuette (No. 113; fig. 35) found at Curium in Cyprus. It bears an inscription, written both in Greek and in the native Cypriote syllabic characters: "Ellooikos, the son of Poteisis, dedicated this as a vow to Demeter and the Maid." The inscription is of the fourth century B.C., and is of special interest on account of its bilingual character. Two other large objects in marble of a votive character are exhibited in the bottom of Cases 103 and 104 respectively. The chest-like stool (No. 114) was offered by a priestess named Philis to Persephone, the basket (No. 115) by one Xeno to Demeter



Fig. 35.—Base with Dedication to Demeter and Persephone (No. 113)

and Persephone. The basket is dedicated with peculiar fitness to the goddesses of corn and fruit, for it was in such woven baskets that the ears of corn were ingathered, while the chest is also closely associated with Demeter and Persephone, who are frequently represented seated on it. Both of these last objects were found by Sir Charles Newton in the precinct of Demeter at Knidos in Asia Minor.

We now turn to the votive offerings personal to the donor, and we find that not infrequently, where the object itself is perishable, or otherwise unsuitable as an offering, a sculptured representation takes its place.

Two curious examples of such dedicatory tablets (Nos. 116, 117) are seen in the casts placed in the upper and lower parts respectively of Case 101. The originals, from Slavochori, probably the site of the ancient Amyklae near Sparta, are in the Hall of Inscriptions. The first was dedicated by Anthusa, daughter of Damaenetos, a imsorairρω or under-tirewoman in the service of a temple, possibly

that of Dionysos, for we know that this god had a temple near Amyklae, which none but women might enter. On the relief is a series of objects connected with the toilet, such as a mirror, a comb, a box of cosmetics, a case containing a sponge, a pair of slippers, etc. Possibly the dedicator was in charge of objects of this nature. The other relief, from the same place, was dedicated by a priestess named Claudia Ageta, daughter of Antipater, and shows a very similar series of objects. Both these reliefs are of Imperial date.

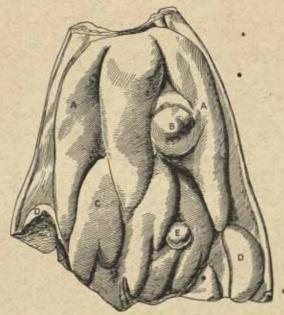


Fig. 36,-Terhacotta Model of the Internal Organs (No. 122). 1:2.

A similar substitution of a representation for the object is found in the series of offerings which commemorate recovery from disease or bodily injury. The upper part of Cases 103-166 contains a set of marble reliefs (No. 118) found at the foot of the Pnyx at Athens, the rocky semicircular meeting-place of the Athenian people. They are dedicated by women—Eutychis, Isias, Olympias, and others—to Zeus the Highest, and have representations of various parts of the human lody, such as eyes, breasts, arms, etc. These reliefs, which are of Roman date, are clearly thank-offerings for recovery from disease. There must have been a regular trade in these models, for

Clement of Alexandria, writing about 200 A.D., salks of "those who manufacture ears and eyes of precious wood and dedicate them to the gods, setting them up in their temples." No. 119, from a shrine of Asklepios in Melos, is a relief representing a left leg, dedicated, as the inscription shows, by way of thank-offering to the deities of healing, Asklepios and Hygieia. Next it is a small relief from Cyrene (No. 120), showing a right ear. There are several other objects here exhibited which were probably offered by grateful votaries in return for healing mercies. Such are the bronze ticket with a bronze leg suspended from it (No. 121), inscribed with the name of the donor Caledus, and two arms with a chain

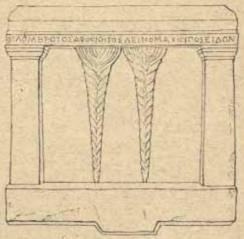


Fig. 37.—Sculptoned Locks of Ham Dedicated to Poseidon (No. 123), Ht. 134 in.

for suspension. In Cases 105 and 106 a whole series of terracotta votive hands, feet, eyes, breasts, etc., doubtless represents the thank-offerings of the poorer classes. With these is a curious terracotta model (No 122; fig. 36) of the lungs (A), heart (B), liver (C), kidneys (D), spleen (E), and other internal organs of the human body. Though primarily of a votive character, it is of considerable interest to the student of ancient anatomy. A votive relief of rather different character is placed on the upper shelf. It represents two plaited locks of hair dedicated (as the inscription regords) by Philombrotos and Aphthonetos, sons of Deinomachos, to Poseidon, god of the sea (No. 123; fig. 37). It was a common

custom in Greece to dedicate hair at important crises of life, particularly to deities connected with water. Achilles, on the death of Patroklos, shore off for him the hair he was growing long

as an offering to the river Speacheios.1

Other objects illustrating the frequency and variety of Greek and Roman dedications may best be described in approximately chronological order. Two objects, which are more fully dealt with in other sections, may here be mentioned. In the sixth century B.C. the athlete Exoidas dedicated to the Dioscuri, patrons of athletic exercise, the bronze diskos (fig. 50: No. 157) with which he had conquered "the high-souled" Kephallenians in athletic contest. The helmet, dedicated by Hieron after his naval



Fig. 38. BRONZE VOTIVE HARE (No. 124). L. 27 in.

victory off Kyme, has been already described (p. 8). Other votive helmets are shown in Cases 114-5. For the votive spearheads (!) see p. 9. The huntsman, no less than the athlete and the warrior, felt that the gods took an intimate part in his successes. This is illustrated by the inscribed bronze model of a hare in Case 103, with its head thrown back in the death agony (No. 124; fig. 38). The Ionic letters, of about 480 n.c., read: "Hephaestion dedicated me to Apollo of Priene." This offering reminds us of another exhibited in the left-hand wall-case in the Greek Ante-Room downstairs. A small limestone statuette, found on the site of the Greek

^{1 11.} xxiii. 141 f. :

στὰν ἀπάνευθε πυρήν ξανθήν ἀπεκείρατο χαίτην, τήν ἡα Σπερχειῷ ποταμῷ τρέψε τηλεθόωσαν. * Τῷ ᾿Απόλλωνι τῷ Πριηληΐ μ' ἀνέθηκεν Ἡφαιστίων.

settlement of Naukratis in Egypt, represents a young huntsman with two boars and two hares slung over his shoulders. It is



Fig. 39.—Tablet, with Dedication by Lophics (No. 125). 1: 2.

inscribed "A dedication by Kallias"—probably to Aphrodite, since it was found within her precinct (Cat. of Sculpt., I., 118).



Fig. 40.—Broner Votive Axehead (No. 127). Ht. 64 in.

Other interesting Greek dedications of an early date are the bronze tablet (Case 105: No. 125; fig. 39) found in Corfu, with an inscription showing it to be an offering by one Lophios; the silver ingot (No. 126) dedicated to Zeus Lykaeos (Zeus "the wolford god") by Trygon; and the elaborate axe-head (No. 127; fig. 40), found in Calabria, which bears an inscription recording that it was vowed to Hera of the Plain by Kyniskos, a "cook," as a tenth of his earnings (sixth century R.C.).

The two bronze bulls (Nos. 128 and 129) are offerings made by Greeks to an Egyptian deity. They were dedicated by Greeks named respectively Sokydes and Theodoros, and represent the sacred bull Apis, worshipped at Memphis in Egypt as an incarnation of the god Ptah. The offering of Sokydes is here illustrated (Fig. 41).

¹ Λόφιός μ'ανέθηκε.

^{*} Τάς "Ηρας Ιαρός έμε τῶς ἐν πεδί ωι ζυνίσζο ς με ἀνέθη κε ώρταμο ς Γέργων | δεκάτων.

Inscribed : Το Πάνεπι μ' ανεστασε Σωκίδης.

Notice the elaborate saddle-cloth, and the wings of the Egyptian scarabaeus and hawk engraved on the bull's back. The date of these bronzes is the late sixth or early fifth century B.C. The Greeks must have become acquainted with the worship of Apis in the seventh century B.C., when they served King Psammetichos I. as mercenaries. That monarch was a fervent worshipper of the god, and built a great temple for him at Memphis. Herodotus i mentions the courts where the bull was kept, and says that the Greeks called



Fig. 41.—BRONZE VOTIVE BULL (No. 128). Ht. 4 in.

him "Epaphos." The bull dedicated by Sokydes was found in the Nile Delta, that dedicated by Theodoros at Athens.

The two bronze wheels in Case 103 each bear a votive inscription. The earlier (No. 130), said to have been found near Argos, was perhaps an offering to the Dioscuri (Castor and Pollux, the divine patrons of athletic contests) by Eudamos, a victor in a chariot race. The other (No. 131; fig. 42) comes from the temple of the Kabeiri at Thebes, and is dedicated by Xenon and Pyrrhippa to Kabeiros and the Child. The bronze bell (No. 132, fig. 43) is from the same temple, and was likewise offered by one Pyrrhias to Kabeiros and

the Child. The Kabeiri were deities of a mystic and subterranean character, who at Thebes apparently became closely connected with Dionysos, the wine-god. That a large element of burlesque

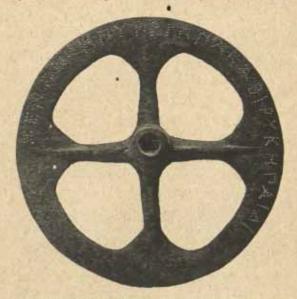


FIG. 42.—BRONEE WHEEL-DEDICATED TO KARLIBOE AND THE CHILD (No. 181). Diam. 31 in.

entered into their worship can be seen from the vases discovered on the site of their shrine (Second Vase Room, B 77 and 78).

Near this tablet are several Roman dedications. Three curious silver-gift plaques, probably of the second century after Christ



FIG. 43.— BRONZE BELL DEDICATED TO KABETROS AND THE CHILD (No. 192). 1: 2.

(Nos. 133-135), found at Heddernheim, near Frankfurt-on-Main, were dedicated to Jupiter Dolichenus. At first merely a local god, originating in the town of Doliche in Commagene, near the Euphrates, he later acquired considerable popularity throughout the Roman Empire, and his worship was carried far and wide by the Roman legionaries, who were largely instrumental in conveying these Oriental worships to the West. The silver tablet illustrated (No. 133; fig. 44) shows Jupiter Dolichenus in a shrine, holding thunderbolt and sceptre, with the eagle at his feet. The inscription,

written in somewhat defective Latin, runs: "To Jupiter, best and greatest, of Doliche, where iron has its birth." Dedicated by Flavius Fidelis and Q. Julius Posstimus by command of the god on behalf of themselves and their families." As often in late Latin inscriptions, E is written ||. Another tablet (very fragmentary) shows the god in trappings of war, holding double-



Fig. 44.—Silver Plaque Dedicated to Justice Dollichenus (No. 183). Ht. 94 in.

axe and thunderbolt, and standing on a bull (No. 135). He is being crowned by Victory. The presence of mines in North Syria will account for the recurring phrase, "Where iron has its birth." A series of similar dedications to Mars and Vulcan, which were found at Barkway in Hertfordshire, is exhibited in the Room of Roman Britain. Examples are shown in Case 104 of a third series

I(ovi) O(ptimo) M(aximo) Dolicheno, u bi ferrum nascit ur, Flavius Fidelis et Q. Iulius Possum us ex imperio ipsi us pro se et suos (sic). (No. 136, fig. 45), part of a great hoard found at Bala Hissar (Pessinus) in Galatia. These have figures of Helios, Selene, and Mithras. The last-named deity was the Persian god of light. He did not thoroughly win his way into the Roman world until the second century after Christ. But, once established, he proved himself of far-reaching power. Mithraism had in its ritual many points of resemblance to that of Christianity, and in the third and



FIG. 45.—SILVER PLAQUES DEDICATED TO MITHRAS (No. 136), 1: 3.

fourth centuries after Christ proved a most formidable rival to the spread of Christian doctrines. A memorial of Mithras is seen in the large bronze tablet (No. 137) in Case 105. Its top is decorated with knife and libation-bowl. The inscription, of about the third century after Christ, tells us that it was dedicated to Sextus Pompeius Maximus by priests of Mithras. He had held offices in the Mithraic priesthood.

There are several small bronze tablets in Case 105 with dedicatory or religious inscriptions. Among them may be mentioned No. 138,

offered to Juno by a freedman named Q. Valerius Minander, and No. 139, an oval bronze seal with a design representing the Emperor Philip (244-9 A.D.; mentioned above, p. 10, in connection with the bronze diploma), his wife Otacilia, and their son Philip. The inscription shows that the seal belonged to the religious society of the Breisean Mystae, who apparently scaled on behalf of the city of Smyrna, where was a synod of the Mystae of the Breisean Dionysos. No. 140 is the result of a vow made by Hedone, the maid-servant of M. Crassus, to Feronia, a goddess closely connected with freedmen and freedwomen.1 Her temple at Terracina, on the west coast of Italy, was specially associated with the manumission of slaves. It is likely, therefore, that Hedone's vow had something to do with her manumission. Dedications were made for safe journeys by land or by sea. In No. 141, dedicated by P. Blattius Creticus to Jupiter Poeninus, whose sanctuary was at the summit of the Great St. Bernard Pass, we have one of a number of offerings by travellers encountering the dangers of the Alps. In No. 142 we have a votive offering in the shape of a bronze plate, made to the Lares or gods of the house by Q. Carminius Optatus. The Lares are represented in art as youthful male figures, holding a cornucopia or horn of plenty, and a plate (patera) [see Case 52 of the Bronze Room, and No. 143]. The offering of a plate was peculiarly appropriate, for with the Penates these gods were supposed to ensure the food-supply of the family.

In Case 106 note the series of lead figurines (modelled on both sides). They represent warriors with helmet, cuirass, shield, sword, and greaves. These figurines (No. 144), probably of the seventh to sixth centuries B.C., were found at Amelia (Ameria) in Umbria. It is probable that they are of a votive character, though it has been suggested that they are the prototypes of the modern tin soldier. Very similar figurines have been discovered near Sparta, on the site of the Menelaon, and more recently on the site of the temple of Artemis Orthia by members of the British School at

Athens.

Superstition and Magic.—As the simple faith in the gods decayed in the Greek and Roman worlds, compensation was largely sought in the dark rites of superstition and magic. The antiquities in Cases 105, 106, indicate some of the forms which such superstition took. Prominent among them was the practice of writing down curses on lead or tale with a view to the injury

¹ Cf. Livy, xxii. 1, 18: . . . ut libertinae et ipsae, unde Feroniae donum daretur, pecuniam pro facultatibus suis conferreut.

of those against whom the writer conceived that he had a grudge, These tablets were called in Latin defiziones, because they were suppose to fix down, as it were, the hated enemy. The imprecations written on them usually run in formulae, and the gods implored to work the ruin are naturally those of the nether regions. In later times especially, all manner of obscure and barbarous demons are introduced. The examples of these tablets here exhibited probably belong to the last three centuries before Christ. They come from various quarters-Knidos, Ephesus, Curium in Cyprus, Kyme in S. Italy, and Athens. Those found by Sir Charles Newton at Knidos may be taken as typical. In one case a certain Antigone, in order to clear-herself from the charge of having attempted to poison Asklepiades, invokes curses upon herself if the accusation be true. In another, Artemeis devotes to Demeter, Persephone, and all the gods associated with Demeter, the person who withholds garments entrusted to him. These tablets (No. 145) appear to have been nailed to the walls of the sacred precinct of Demeter, where they were found. In the case of a tablet from Athens, the iron nail which fastened it to the wall is still preserved.

Nails themselves were highly esteemed as instruments of magic of Ovid, for instance, says that Medea (the typical witch) made waxen effigies of absent foes, and then drove nails into the vital parts. Examples of magical nails are seen in the series of bronze nails (No. 146) covered with cabalistic inscriptions and signs, and sometimes showing a strange mixture of Judaism and Paganism, as when Solomon and Artemis are invoked together. They may be attributed to the Gnostics, a sect which arose in the second century after Christ. Their claim was that, by a combination of various religious beliefs, they arrived at the only true knowledge of divine things. The magic nail has in one case (No. 147) been used to fasten a bronze lamp, decorated with a head of Medusa, into a socket.

On the shelf above will be noticed a number of bronze hands (No. 148; fig. 46). They are right hands, represented with the thumb and first two fingers raised. On them are numerous magic symbols in relief, such as the snake, the lizard, and the tortoise. The hand illustrated (fig. 46) is covered with such signs, prominent among which are the serpent with the cock's comb, the pine-cone, the frog, and the winged caduceus. One of the hands bears the inscription "Zougaras dedicated me to Sabazius

¹ Ov., Her. vi. 91 f.

in fulfilment of a vow"; another "Aristokles, a superintendent, to Zeus Sabazius." Sabazius was a Phrygian and Thracian deity, whose worship was widely spread in the Roman world. There can be no doubt that these hands were intended to avert the evil eye. Sometimes the hands have instruments connected with the ecstatic worships of the East depicted upon them, such as the Phrygian flutes, the cymbals, or the sistrum. Case 106 contains several specimens of the last-named instrument. It was composed of a handle and loop shaped metal frame, across

which passed several movable metal rods. When the sistrum was shaken the curved ends of the rods came into violent contact with the sides of the frame and produced a metallic clang. The sistrum was used by the Egyptians in their religious rites, and particularly in the worship of Isis. With the introduction of that worship into Italy in the first century B.C., the Romans became familiar with it. Apuleius, a writer of the second century after Christ, mentions silver and gold sistra, as well as bronze, A silver example is here shown (No. 149). The decoration is often elaborate, a favourite ornament for the top being the group of the wolf suckling Romulus and Remus, or the recumbent figure of a panther.



Fig. 46.—Bronze Magic Hand (No. 148). Ht. 52 in.

To the same class of amulets as the votive hands must be assigned the terracotta model of a mirror, covered over with numerous objects of magical virtue (No. 150). Several of these are well-known attributes of deities, e.g. the thunderbolt, the trident, the club, the crescent, and the caduceus. The object of these amulets seems to have been to propitiate the deities whose symbols are represented on them.

Implements and methods of Worship,—(83) B.M. Inser., 955; (84) C.I.L., VI., 180; (85) C.I.L., VI., 30689; Mus. Marbles, X., pl. 53; fig. 1; (86-87) Cat. of Lamps, 1407, 1408; (91) Cf. Mazois, Pompei, III.,

p. 22; Daremberg and Saglio, fig. 5; (92) Helbig, Homerisches Epos,
2nd ed., p. 353; (95) Athen. Mittheilungen, xxvi, p. 525; (96) Class. Rev.,
II., p. 297; (97) Cat. of Vases, III., E, 114; (98) Cat. of Vases, II., B 633;
(99) Guide to the Casts, 327; (100) Cat. of Lamps, 159; (101) B.M. Inscr.,
1033; (102) Forman Sale Cat., 1899, Nb. 55, pl. 2.; (103) B.M. Inscr.,
678; (105) Excavations in Cyprus, p. 112; (106) Cat. of Terracottas, C 614;
(107) Excavations in Cyprus, p. 113; (110) Cat. of Bronzes, 888.

Votive Offerings.—(111) B.M. Inscr., 34; (112) B.M. Inscr., 139; (113) Excavations in Cyprus, p. 64; (114) Cat. of Sculpture, II., 1311; (115) Cat. of Sculpture, II., 1312; (116-120) Cat. of Sculpture, I., 799-812; (121) Cat. of Bronzes, 891; (123) Cat. of Sculpture, I., 798; (124) Cat. of Bronzes, 237; (125) B.M. Inscr., 165; Cat. of Bronzes, 261; (126) B.M. Inscr., 1102; (127) ibid., 1094; (128) Cat. of Bronzes, 3208; (130) ibid., 253; (131) B.M. Inscr., 958; (132) Cat. of Bronzes, 318; (133-135) Bonner Jahrb., CVII (1901), p. 61 ff., pls. 6, 7; (137) Cat. of Bronzes, 904; (138) ibid., 899; (139) ibid., 887; (140) ibid., 897; (141) ibid., 895; (142) ibid., 906; (144) Cf. Tod and Wace, Sparta Mus. Cat., p. 228; B.S.A., XII., p. 322 ff.

On votive offerings generally, cf. Rouse, Greek Votive Offerings, passim. Superstition and Magic.—(145) Newton, Discoveries at Halicarnassus, Cnidus, and Branchidae, p. 719 ff. On these defixiones generally, see Audollent, Defixionum Tabellae, Paris, 1904; (146) Cat, of Bronzes, 3191-3194; cf. Daremberg and Saglio, Dict. des Ant., s.v. Clavus; (148) Cat. of Bronzes, 874-876; cf. Arch.-ep. Mitt., II., p. 44 ff.; (150) Cat. of Terracottas, E 129; Journ. Hell. Stud., VII., p. 44 ff.

For Greek religion, see Harrison, Prolegomena to the Study of Greek Religion; for Roman, Warde Fowler, The Roman Festivals.

VI.—ATHLETICS.

(Wall-Cases 107-108.)

ATHLETIC and pugilistic contests were already developed on Greek soil before the Homeric Age. Thus we have a steatite vase from Crete (see Cast in First Vase Room) with boxers in all positions. A pair of boxers (of about 1100 n.c.) from a vase found at Enkomi in Cyprus is shown in fig. 47 (No. 151). In the Homeric poems athletic contests frequently occur, but only as isolated and unorganized events, without rules or system. It was only at a much later date that the games were organized on lines corresponding to those of modern sport. At Olympia, the great festivals were said, according to tradition, to have begun in 776 n.c., and it was from that year that the Greeks calculated their dates, reckoning by the periodical return of the meeting every fourth year.

The events at the games which may specially be called athletic were six in number: the pentathlon (or "five contests") was a competition made up of the jump, the foot-race, throwing the diskos, throwing the javelin, and wrestling. The pentathlon was decided by a system of "heats," and the victor enjoyed a great reputation as an exceptional "all-round" man. The pankration

was a combination of wrestling and boxing, which tended to develop the type of heavy professional athletes.

The victorious athlete was held in high honour by his native city. The prize at the games was indeed of no value—at Olympia it was a crown of wild olive—but on his return home the victor entered the city in triumph, feasts were held and odes were sung in his honour, he was maintained for



Fig. 47.—Boxers of the late Mycenaean Period (No. 151).

the remainder of his life, and his statue was set up in the place where his victory had been won.

We will first deal with the events of the pentathlon in order:—
The Jump.—For the ancient jumping contests the competitors used jumping-weights (halteres). Their use is shown on the vase, E 499 (No. 152). One youth is about to leap, another stands waiting, and the trainer holds a short switch. On the vase E 561

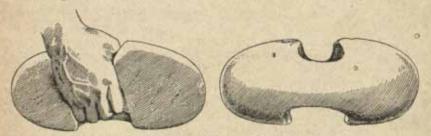


Fig. 48.—Stone Jumping-Wright (No. 154*). L. 111 in.

(No. 153) a youth is also on the point of leaping. Examples of the jumping-weights are shown. The pair in lead (No. 154) are of a type which is seen not infrequently on Greek vases, consisting of blocks of lead widened at each end. The weight for the left hand, which is completely preserved, weighs 2 lb. 5 oz. (cf. also

Summed up by Simonides (cf. Bergk, No. 153) ἐνίκα * ἄλμα, ποδωκείην, δίσκον, ἄκοντα, πάλην. fig. 53). With this pair may be compared the cast of a single stone jumping-weight (No. 154°) found at Olympia and now at Berlin (fig. 48). It differs from the pair just described, and resembles the type described by Pausanias, who travelled through Greece in the second century of our era, as forming half of an elongated and irregular sphere. It probably dates from about 500 s.c. Another type is represented by a remarkable but cumbrous example in limestone, from Kameiros in Rhodes, a long cylindrical instrument with deep grooves for the thumb and fingers, to give a firm hold (No. 155; fig. 49).

The Foot Race.—A somewhat conventional foot race of armed hoplites is shown on the vase B 143. This is a Panathenaic amphora,

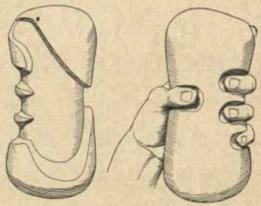


Fig. 49,-Stone Jumping-Weight (No. 155). L. 71 in.

that is, one of the two-handled vases, won, as the inscription on the other side states, at the games at Athens. They always bear on one side a figure of the patron goddess Athena, on the other a representation of the contest in which they were won. Many examples may be seen in the Second and Fourth Vase Rooms.

Throwing the Diskos.—This was one of the oldest and most popular contests at the great festivals. It was already known in Homeric times, and we read of Odysseus using a disc of stone, and of one of iron hurled at the funeral games in honour of Patroklos; but all existing examples are in bronza except a lead disc at Berlin which cannot have been used in athletics. The diskos was used.

not like the modern quoit, with the object of hitting a mark, but with a view to throwing as far as possible, as in the modern contest of putting the weight.

Existing discs vary considerably in size and weight, and were doubtless made to suit various degrees of strength, like modern dumb-bells or Indian clubs. The plain bronze example in this Case (No. 156) weighs as much as 8 lb. 13 oz. The small disc (No. 157; fig. 50), which was dedicated by Exoidas to the Dioscuri after a victory over his Kephallenian competitors (cf. above, p. 49), weighs only 2 lb. 12 oz. The weight used at modern athletic sports weighs 16 lb. and has been put 48 ft. 2 in.

Diskos-throwing reached its greatest popularity in the sixth and fifth centuries, and it is to the middle of this period that the

remarkable votive disc here shown (No. 158; fig. 51) may be assigned. It is engraved with finely-incised designs, representing on one side an athlete with jumping-weights; on the other, another holding a hurlingspear 2 in both hands. This disc weighs rather more than 4 lb. The method of handling the disc will be readily understood from the bronze figure and representations on vases exhibited in this Case; they should be compared with the copies of the famous Diskobolos



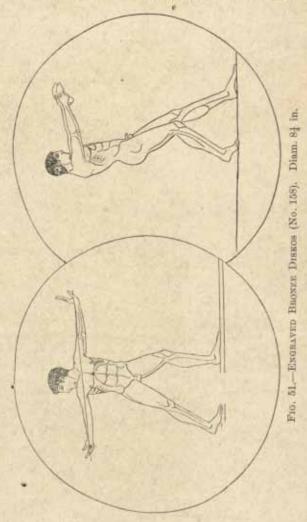
Fig. 50.—Dishos of Exoldas (No. 157). Diam. 6% in.

of Myron in the second Graeco-Roman Room and the Gallery of Casts.

Javelin-Throwing and Wrestling.—These sports are frequently shown on the Panathenaic vases already described (p. 60). Other games of a varied character also occur, and we find such contests as tilting from horseback at a suspended shield, the torch-race,

> ¹ Έχσοιδα(ς) μ'ανέθηκε ΔιΓώς Θούροιν μεγάλοιο: χάλκεον ωι νίκασε Κεφαλάνας μεγαθύμους.

The lines on this side appear to have been worn down and re-cut, but the restorer has misunderstood the apear, and left it as a single fine line. and races in full armour depicted. A specimen (B 134 in the Second Vase Room) shows four athletes engaged in four out of the five contests of the pentathlon (cf. also B 361 (No. 159) in this Case).



Boxing, one of the most ancient contests (see above, fig. 47), was long practised at the games with gloves of ox-hide, which was torn into long strips and bound round the hand. Such wrappings, like modern boxing-gloves, were intended rather to protect the wearer than to injure his opponent. At a later date, probably in the fourth

century B.C., a more dangerous glove was introduced, in the form of a pad of thick leather bound over the fingers. This new form must have inflicted severe wounds; it is apparently used by the two African boxers in terracotta seen in this Case (No. 160).

But in the decline of the Roman Empire, when the brutality of the spectators had to be satisfied at all costs, a still more cruel glove was invented, which had a heavy addition in metal, and must have been an appalling weapon. See the fragment in terracotta (No. 161, fig. 52). A cast from a terracotta

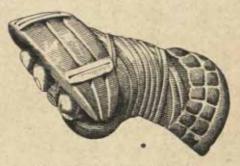
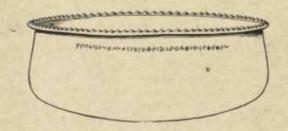


Fig. 52.—Later Boxing-Glove (No. 161). 1: 2.

relief (No. 162) shows a statue of a victorious boxer.

The other objects in this case are less directly connected with athletics; the most noteworthy is a large bronze caldron (No. 163, fig. 53), of about the sixth century B.C., which was found at Kyme,



PATELLONO WASTOTO DE DI LEO A DVOIS E DE BAN

Έπὶ τοῖς 'Ονομάστου τοῦ Φειδίλεω ἄθλοις ἐθέθην. Fig. 58.—Prize Vase from the Games of Onomastos (No. 163), 1: 6.

in South Italy, and was given as a prize at games held in that district. It is inscribed: "I'was a prize at the games of Onomastos." He was doubtless a wealthy citizen at whose expense the contests, were arranged, a form of public service very common in Greek

cities. A piece of corrugated tile (No. 164) comes from the floor of the palaestra (wrestling place) at Olympia.

(151) Cat. of Vases, I., 2, No. C 334; (153) cf. Jüthner, Ant. Turngeräthe, p. 3 ff.; (154) Furtwängler, Olympia, IV., (Die Bronzen), p. 180; (156) Cat. of Bronzes, 2691; (157) ibid., 3207; B.M. Inser., 952; (158) Cat. of Bronzes, 248; (160) Cat. of Terracottas, D 84, 85; (162) ibid., D 632; (163) I.G., xiv. 862; (164) Adler, Olympia, II. (Baudenkmaeler) p. 115.

On Greek athletics generally, see Greek Athletic Festivals, by

E. N. Gardiner,

VII.-GLADIATORS AND THE ARENA.

(Wall-Case 109.)

GLADIATORIAL combats were not native to Rome, but had long been known in Etruria as an adjunct to funeral ceremonies, and were probably introduced thence into Rome by way of Campania, where the amphitheatre of Pompeii is the oldest in existence. The first show of gladiators at Rome took place in 264 B.C., but only three pairs of combatants were engaged in it. In course of time the number of gladiators increased, and such contests were given with greater frequency, although they remained a mere accompaniment of funeral ceremonies until 105 B.C., in which year they were for the first time offered as official amusements to the people. During the empire, gladiatorial shows were organised on a vast scale, and amphitheaties were built in all the provinces. It was inevitable that the influence of Christianity should make such exhibitions impossible. But it was not till nearly a century after the Emperor Constantine had recognised Christianity as a state religion, that Honorius put an end to the exhibition of gladiators in Rome (404 A.D.).

The serious combats in the Roman arena were announced by a procession and a preliminary fight with the weapons used in practice. This mock struggle excited the men, and made them ready for the terrible trial of skill which followed. Lots were drawn, and the combatants arranged in pairs, but sometimes mélées were planned, in which large numbers were engaged. It was possible for a man to draw a bye, and so to fight only with the winner of a previous cround; probably, however, a gladiator seldom fought more than two fights in a single day.

A fight might end in three ways: (1) the better gladiator might kill his adversary in the heat of the fray; (2) the vanquished gladiator might lay down his arms and raise his left hand as a sign of defeat and a prayer for mercy. See lamp, No. 165 (fig. 54). It rested officially with the giver of the spectacle to grant or refuse the defeated man's request, but the matter was really decided by the spectators, who expressed their desire that he should be spared by shouting for his discharge, waving a piece of cloth in the



Fig. 54.—Fight between "Samnite" Gladiators (No. 165). Diam. 31 in.

air, or raising the left hand. The opposite decision was expressed by pointing the thumb downwards and shouting "slay," (jugula). (3) If two men fought on equal terms and displayed great courage, they might both be discharged before the combat reached a definite result (stantes missi). The victor, when finally discharged from service in the arena, was presented with a wooden sword (rudis), similar to those used in practice, as a sign that he had fought his last serious fight. Horace alludes to this in his Epistles, when asking Maecenas if he may retire from his service.

Gladiators were divided into classes according to their equipment and mode of fighting. The following were the most important:-(1) The Samnite (figs. 54, 55). He wore a helmet with high crest, one or sometimes two greaves, and a guard on the right arm. He also had an oblong shield. The equipment is well shown in the bronze statuette (No. 166, fig. 55), lately acquired from the Gréau and Weber collections. (2) The retiarius or net-thrower (No. 167, fig. 56), who carried a trident, a dagger, and a large net in which he tried to envelop his adversary. The net-thrower was matched against a



F10. 55. - BEONZE STATUETTE OF A "SAMNITH" GLAD-1ATOR (No. 166).

gladiator called a secutor, who was armed like the Samnite, and perhaps received his name because he was the follower (secutor) of his lightly-armed foe. (3) The Thrax (Thracian), armed with the Thracian curved dagger, a small shield, and a helmet. He fought the hoplomachus, another variety of Samnite. (4) The mirmillo, the origin of whose name and nature of whose equipment are not certainly known. He was opposed to the net-thrower, and later to the Thracian. Among other classes of less importance may be mentioned the mounted gladiators (equites), who appear on the left of fig. 57 (a Pompeian relief).1

A curious marble relief from Halikarnassos (No. 168; fig. 58) gives a vivid picture of an unusual form of gladiatorial combat, between two women. They are armed like the Samnites, but without helmets, and the fight seems to take place on a sort of platform on either side of which the head of a spectator is visible. Their

names are given as Amazon and Achillia, and above their heads is inscribed in Greek "discharged," ἀπελίθησαν. It is known that women fought in the arena under the Empire 2; but under Septimius Severus (193-211) so much scandal was caused by a specially furious combat of a large number of female gladiators that such exhibitions

The objects exhibited in illustration of gladiatorial shows are

¹ Mus. Borb., XV., pl. 30.

² Of. Tac., Ann. xv. 32; Suet., Dom. 4.

Dio Cass., lxxv. 16.

numerous and varied, though not artistically remarkable. The subject was especially popular with the smaller craftsmen, the



Fig. 56,-Retianius (No. 167). Diam. 38 in.



Fig. 58.—Combat of Women Gladiators (No. 168). Width 2ft. 7 in.



makers of bronze statuettes and the potters of Italy and Gaul, who produced terracotta lamps and vases for a large but uncritical

public. A selection of some dozen lamps (No. 169) is here given illustrating different stages of the combat, or single gladiators; one is simply ornamented with specimens of gladiatorial armour (helmets,

greaves, shields, and daggers),

No complete example of a gladiator's helmet is shown in the Case, but the bronze visor (No. 170), a small bronze model (No. 171), and a model in glazed pottery (No. 172) suffice to give an idea of the usual type. The illustration (fig. 59) of a helmet at Pompeii shows the arrangement of the visors. The cast (No. 173) is from a relief from Ephesus (the original is in the Sculpture Galleries)

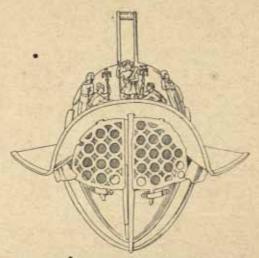


Fig. 59.—Gladiaton's Helmer.

which shows combats and corn-waggons (see Case 50) the panem et circenses demanded by the Roman populace.

Some interest attaches to the series of ivory tickets (tesserae), which are inscribed with the names of gladiators, and are valuable as being dated by the names of the consuls in office (No. 174). They range from the beginning of the first century B.C. to the time of Domitian (81-96 A.D.); those shown in the Case extend from 85 B.C. to 32 A.D. The usual formula of the inscription gives (1) the gladiator's name, (2) the name of his master, (3) the letters SP and the date of the day and month, (4) the consuls of the year. The meaning of the letters SP is disputed, but the most likely explanation is that they stand for spectavit, "became a spectator," with reference to the honourable discharge of the

recipient. Several examples are known in which the word is thus written in full. The ticket of which an illustration is given in fig. 60 bears the inscription, "Cocero the gladiator of Fafinius became a spectator on the 5th of October in the Consulship of Lucius Cinna and Gnaeus Papirius" (85 B.C.).

The contests in the arena were not limited to those between gladiators. Combats of animals, and of men with animals enjoyed equal popularity. In the latter case the men might be hunters (venatores), lightly armed, and able to escape by agility and skill. They might also be criminals or martyrs (who were counted as criminals) exposed to wild beasts without hope of resistance or escape. Two terracotta reliefs (Nos. 175, 175*) are shown in



Fig. 60.—Gladiaton's Discharge Ticket (No. 174). L. 13 in.



Fig. 61,—Man and Bean (No. 177).

this Case, of about the time of Augustus, which, though fragmentary, evidently relate to exhibitions of this kind. A better and more complete example is the sculptured relief from Ephesus (No. 176) with four panels, in each of which is a man in combat with a lion, probably successive stages in a single event. A lamp (No. 177; fig. 61) shows a man and a bear, separated by a kind of turnstile, called a cochlea.

See also Daremberg and Saglio, s.v. Gladiator, and Venation

(165) Cat. of Lamps, 663; (166) Gréau Cat., 264; (167) Cat. of Lamps, 976; (168) Cat. of Sculpture, II., 1117; (173) ibid., II., 1285; (174) for a recent theory that the tesserae are records of an incubatio at a medicinal sanctuary (cf. p. 185) see Daremberg and Saglio, s.v. Tessera p. 136; (175) Cat. of Terracettas, D 624; (175*) ibid., D 655; (176) Cat. of Sculpture, II., 1286; (177) Cat. of Lamps, 1068.

VIII.-CHARIOT-RACING AND THE CIRCUS.

(Wall-Case 110.)

Chariot-racing was one of the oldest of Greek sports, and is described in the *Hiad* as one of the contests held at the funeral of Patroklos. At that time the two-horse war-chariot was used in the race, and a special type of racing-car does not seem to have existed.

The introduction of chariot-races in the great athletic contests



Fig. 62.—Roman Racing-Charlot Turning the Post (No. 179). L. 16 in.

was a concession to the wealthy inhabitants of prosperous cities. To enter a chariot with a team of four horses, which was now the usual number for the great race at Olympia, demanded almost as large a proportionate expenditure as to run a horse for the Derby to-day. Rich men in Greece Proper found rivals in the tyrants of Sicily and Cyrene, who ruled over cities with large revenues and districts providing good opportunities for successful horse-breeding.

At Olympia four-horse chariots raced for the first time in

680 s.c., chariots with two horses not until 408. Between those dates a race for horsemen was started, and won on the first occasion by a native of Thessaly, which, owing to its rich plains, was celebrated in antiquity for a magnificent breed of horses. A winner in the horse-race is depicted on the vase No. 178 (exhibited in Case 107), about to receive a wreath and a tripod as his prizes, while a herald proclaims: "The horse of Dysneiketos wins."

The race of four-horse chariots was, perhaps, the greatest event in the Olympian Games, and certainly the most exciting to the spectators, as accidents were frequent, especially at the turn. Consummate skill was necessary to double the post as close

and as fast as possible Readers of Sophokles'

Electra will remember the account given by the messenger of the alleged death of Orestes in a

collision of chariots turning the post.1

The Romans probably derived their custom of chariot-racing from the Greeks, as also the plan which, with some alterations in detail, they adopted for their circus. In the early days of Rome the marshy valley between the Palatine and Aventine Hills was the place chosen for the games, and remained so through the succeeding centuries, during which the course was gradually surrounded with an immense building; this in the fourth century after Christ held not far short of 180,000 people.

In the later Roman Empire the chafioteers were hired by factions, which were distinguished by different colours, and excited violent enthusiasm



Fig. 63. —Ivory STATURITE OF A CHARIOTERR (No. 180). 5:8.

among all classes of Roman society. The passion survived the introduction of Christianity, and was perhaps even more violent at Constantinople than at Rome; it was said that the inhabitants of the new capital of the Empire divided their interests between a passion for chariot-racing and theological discussion. Successful charioteers were transferred from one faction to another like modern football-players. Records exist of the number of victories gained by famous whips, and of the proportion won under the different colours.

The costume of the charioteer was always distinct. In Greece he wore a long robe girt at the waist, which is well seen on the ' El. 680 ff. bronze statue from Delphi, and on the chariot-racing reliefs from the Mausoleum. At Rome his dress was peculiar, and is illustrated by the terracotta relief (No. 179; fig. 62) and other objects in this Case, notably the small ivory statuette (No. 180; fig. 63). It consisted of a close-fitting cap, and a shirt fastened round the



Fig. 64.—Lamp Showing Charlot-Race in Cincus (No. 181). Diam. 3] in.

waist. Chara teristic thongs called fasciae were wound round the ribs. The thongs of the reins were also wound about the body. A knife was stuck in the belt so that the reins might be quickly cut in the event of an accident.

¹ Cat. of Casty, No. 94.

[&]quot; Cat. of Sculpture, II., Nos. 1036, 1037.

A sort of bird's-eye view of the whole circus, with a race in progress, is given on the lamp No. 181 (fig. 64), on which we see on one side the carceres or barriers with folding-doors from which the chariots started; on the other a stand with rows of spectators, while in the lower part of the design is the spina, or central rib of the circus, crowded with various structures. Not less instructive



Fig. 65.—Victorious Horse (No. 182). 34 in.

is the scene on the terracotta relief (No. 179), though only one chariot is there represented (fig. 62, above). Two lamps (Nos. 182, 183) illustrate respectively the return of a victorious horse (fig. 65) and a victorious four-horse chariot. The former is accompanied by men bearing palm-branches and a tablet probably inscribed with the name of the successful competitor.

The cast No. 184 is taken from a mould in the Terracotta Room

(No. E-79) for the central panel of a large lamp. Its chief figure is a successful charioteer, crowned with a bulky wreath.

(178) Cat. of Vases, II., B 144; (179) Cat. of Terracottas, D 627; (181) Cat. of Lamps, 626; (182) ibid., 788; (183) ibid., 671; (184) ibid., 1398.

For the circus in general see Daremberg and Saglio, s.v.

Two interesting sarcophagus reliefs, with scenes in the circus, are shown in the Roman Gallery (Cat. of Sculpture, III., 2318, 2319).

IX.-ARMS AND ARMOUR.

(Wall-Cases 111-119, and Table-Case E.)

The arms and armour of the ancients are contained in Wall-Cases 111-119, and in Table-Case E. The weapons of attack date from the beginning of the use of metal, in the prehistoric period, but all the defensive armour belongs to the historical age.

Armour. There is not much literary evidence for the armour of antiquity, but military subjects are very commonly represented in works of art, and these, with the actual remains of armour. give a good idea of the ancient panoply. The armour of the prehellenic civilisations of Greece, as described by Homer, is a subject of dispute, and as this collection possesses no specimen of such remnants as have been found, there is no need here to discuss the question. It is enough to say that the armour of the inhabitants of Greece of the Mycenaean or Bronze Age was entirely different from that of the Hellenic period, which began with the introduction of iron in the place of bronze, and that the heroes of the Homeric poems, who are so frequently portrayed in classical art, are represented in the armour not of their own day, but of that of the artist. The earliest Greek fashion is seen in a small bronze figure of a soldier from Dodona, a cast of which is exhibited in Case 113 (No. 185; fig. 66). The original is in the Antiquarium at Berlin, a Its date is about 500 B.C. The man was striking with a spear; he carries a shield on his left arm, and wears a metal helmet, cuirass and greaves. These three pieces of body-armour were worn throughout classical times, being adopted from the Greeks by the Romans. All are represented in this collection.

Helmet.—The earliest type of helmet is known as Corinthian, because it is worn by the goddess Athena in the well-known cointype of Corinth (fig. 12e). It was a complete metal casing of the head and neck, open only in front of the eyes and mouth; the nose was protected by a vertical strip which was left between the eyes, and the rest of the face was covered as by a mask (fig. 66). In the earliest specimens (No. 186) the metal is everywhere of the same thickness, the cheek-pieces large and clumsy, the nose-piece straight, and little attempt is made to curve the back so as to fit the neck. Later helmets were more gracefully designed: the nasal and cheek-pieces are shaped and curved, the crown is distinguished



Fig. 66,—Greek Soldiel. Cast of Bronze Statuette from Dodona (No. 185). 2:3.

from the lower part, the neck has a natural contour, and is set off from the rest of the helmet by a notch on each side of the bottom rim (No. 187; fig. 67). The lines of hair and eyebrows are often indicated in embossed and engraved patterns (Nos. 188, 189; fig. 78).

It would seem that the Corinthian helmet at its best was a cumbrous piece of armour. The ears of the wearer were covered, and the ill-fitting shell must have sat loose upon the head, so as to be easily displaced by a sudden turn. This and the chafing of the metal were obviated in some degree by a lining of felt or leather, which was sewn inside the helmet in the rows of holes along the edges. In No. 189 the actual fastenings may be seen as well as the holes: thin twine along the bottom rim, and rivets in the holes elsewhere. This is an unusually well preserved helmet; the wooden peg on which the plume was tied is still in place (fig. 78). A leathern cap was also worn, and is seen on the coins of Corinth (fig. 12e), where the helmet is represented in the position in which it was carried when the wearer was not fighting, i.e., pushed back until the lower rim projected in a peak over the forehead. This position came to be adopted in battle also; for in the last of the Corinthian series (Nos. 190, 191, fig. 68, 192) there is not sufficient depth to the

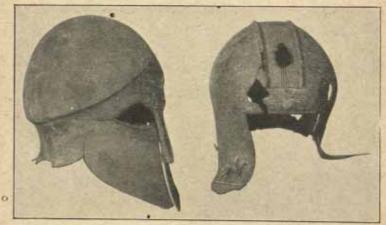


Fig. 67. Greek Helmers of "Cominthian" and "Island" Types (Nos. 187, 193). 1:5.

helmet to admit of its being worn over the face in the original way, nor are the eyeholes large enough to be of use, while in two examples these are represented only by engraving, a traditional design which shows the evolution of the helmet (No. 192). Such examples are, however, not really Greek. They come from South Italy, and belong to a late period, when the art and manners of Greek colonists were reproduced in barbarous form among the natives. Drawings of this helmet on Italian vases of the third century n.c. give a date for the class.

An additional value is given to three of the early helmets by inscriptions which they bear and which help to date them. The first (No. 188) is a record of a dedication of Corinthian spoils to Zeus by the Argives: TAPΓ[EI]OI ANEŒEN TOI ΔΙΕΙ ΤΟΝ QOPINŒOŒEN, in lettering which belongs probably to the end of the sixth century B.C.¹ The helmet was found in the bed of the river Alpheios, near Olympia, and was doubtless dedicated in the sanctuary. A shield bearing the first word of a similar inscription has since been found at Olympia, and was probably part of the same offering. Another helmet (No. 186) has five letters, OAVMΠ, scratched on the corner of one of the cheek-pieces in characters of about 500 B.C. The complete word was perhaps "Ολυμπίφ, " To the Olympian Zeus." This is said to have been found at Dodona in Epeiros. The third is inscribed on the front with the name of its owner, ΔΑΣΙΜΟΣ ΠΥΡΡΟΥ, "Dasimos son of Pyrrhos" (No. 194).



Fig. 68.—Graeco-Italian Helmht of Debased Corinthian Form (No. 191). 1:6

The date of the writing is the beginning of the fifth century. This helmet, which comes from South Italy, differs from the Corinthian only in having holes for the ears, but it is really the first of a new type, the so-called Attic.

The evidence of inscriptions, painting and sculpture shows that the Corinthian helmet was generally worn by the Greeks from the first appearance of metal armour in the eighth century n.c. to the early years of the fifth. It then became less common, but never quite disappeared, and was used, certainly as a decorative type, by the Romans of the Empire.

The Attic helmet, which gets its name from its use on the coins

Τάργείοι ἀνέθεν τῶι ΔιΕιτῶν Κορινθόθεν.

of Athens (fig. 12, f-l), appeared first in the sixth century B.C., and in the fourth was the usual type. In shape it is lighter than the Corinthian, and resembles a cap with appendages to protect the



Fig. 69.—Attic Helmet from Macedonia (No. 195). Ca. 1:4.

neck, cheeks and nose. The ear was thus left free. The finest Attic helmet (No. 195. fig. 69) has been acquired recently from the British Salonika Force. It was found with a spearhead and other objects in a grave of about 500 p.c. in the camp of the 29th General Hospital at Mikra Karabournou, in January, 1918, and was transferred to this collection from the Imperial War Museum. Thenssal is elegantly modelled, evebrows and tongues of hair over the forehead are wrought in relief, and broad spiral bands in relief decorate

and strengthen the cheek-pieces. The cheek-pieces were often hung on hinges (No. 197), and were pushed up from the face when the wearer was not fighting (fig. 81). No. 198 is a cheek-piece from



Fig. 70.—Attic Helmet Decorated with Ram's Heads on the Cheek-Pieces, At Naples,



FIG. 71.—HEAD OF HIPPOLYTE, WITH HELMET IN THE SHAPE OF A PHRYGIAN CAP.

Loryma in Caria, which repreduces the form of the face beneath it. An Attic helmet from Ruvo in Apulia (No. 196) has fixed cheek-pieces in the shape of rams' heads, which were completed

with applied reliefs like those of a similar helmet at Naples (fig. 70). The nose-piece was often omitted. The forehead was well covered, and was usually marked by a triangular frontal band, often enclosing an ornament. No. 197 has the head of a young Satyr in relief. The Attic helmet was also adopted in Italy, especially by the Etruscans. No. 199 (fig. 78) was found in an Etruscan tomb at Vulci.

These two helmets, the Corinthian and the Attic, were so far the most general among the Greeks as to merit the name of the classical types. No. 193 is an intermediate form which has been

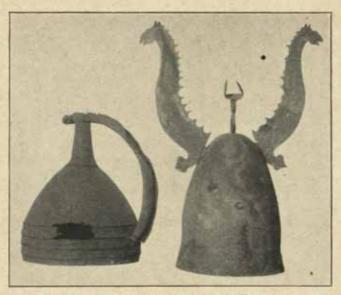


Fig. 72.—Italian Helmets with Metal Crests (Nos. 205, 202). 1:6.

assigned to the Aegean Islands because of its occurrence in vasepaintings from the Cyclades. This example was found in the river Alpheios, and was no doubt originally dedicated, like several other pieces in this collection, in the temple at Olympia. It is cut straight over the eyes, has no nose-piece and no ear-holes (fig. 67). A peculiar feature is a broad band with high raised edges which runs over the crown of the head from forehead to neck. A stout pin in front of this shows that the band was a channel in which the crest was fixed. A row of silver studs and a silver band decorate the rim of this helmet, and there are remains of ornaments in relief, palmettes on forehead and at the ears, and or each cheek-piece a horseman. These were no doubt also of silver, but the plates have come away, leaving their impress upon the cement which used to hold them in place. The style of the modelling belongs to the end of the sixth century B.C. Another Greek type has the shape of a Phrygian cap, with the addition of movable cheek-pieces, of which the hinges are partially preserved (No. 200). Such a helmet is often worn by Amazons, for instance by the Queen Hippolyte on an Attic bowl of about 450 B.C., which is exhibited in the Third Vase Room (fig. 71). It is also shewn in the cast of an Etruscan bronze statuette which stands beside the helmet (No. 201). The tall oval helmet (No. 202, fig. 72) with its barbarous pair of horns in

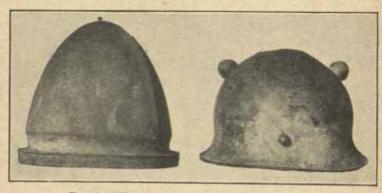


Fig. 78,—Ethuscan and Early Italian Helmhis (Nos. 207, 208). 1:5.

the shape of crests of sea-horses, is Italian, but the same type appears on Greek monuments.

Italian helmets are more like hats, giving no protection to the face unless cheek-pieces are added. An early form, from Ancona, is almost hemispherical, with wide brim and two large bosses on the sides (No. 203, fig. 73). The bosses would stop glancing blows on the head. The smaller knob on the front of this example may have held the crest; if so, the corresponding knob behind has been lost. Two helmets from Cannae are later developments of the same type (No. 204, fig. 74). They are decorated and stiffened with two curved bands in relief, one on each side of the crown. The bosses and brims are broken away. The earliest helmets of this shape belong to the seventh century s.c. Our later specimens were probably worn in the battle of Cannae (216 s.c.). They have wrongly

been called Carthaginian because of their discovery on this battlefield, but the type is European, and has been found at Hallstatt. The helmet with sharp pointed top also belongs to a class which extended to France and Germany in the early Iron Age (No. 205, fig. 72). The arched socket for the crest is a peculiarity of this example, which is of later date, about fourth century B.C. More strictly of Italian origin are the heavy Etruscan helmets resembling reversed jockey-caps, with a knob on top, a short peak covering the

wearer's neck, and attached cheek-pieces (No. 206, fig. 75). They are east; nearly all other helmets are hammered work. Their date is from the fifth to the third century s.c. The Etruscans also used an oval helmet with ridged crown, of which the most notable



FIG. 74.—ITALIAN HELMET, PROM THE BATTLEFIELD OF CANNAE (No. 204), 1:5,



Fig. 75.—Ethuscan "Jockey-Cap" Helmet with hinged Cheer-Pieces (No. 206). 1:5.

example comes from Olympia, where it was dedicated as part of the Greek spoils from the naval battle of Kyme (B.C. 474). This helmet is described above among the Greek Inscriptions (p. 8, fig. 7, No. 13). Other examples are heavier, and have a broad decorated rim (No. 207, fig. 73).

There is no specimen of a Roman helmet in this collection. The scarcity of remains of Roman armour is due to the fact that it was mostly made of iron, which has decayed. Representations of different shapes may be seen, in a statuette of an officer (No. 219, fig. 85), a small model of a trophy (No. 233), a cast of a large marble

relief (No. 236), and a drawing of a soldier from the Column of Trajan (fig. 90). All these show close-fitting caps with broad chinstraps, which also serve as cheek-pieces. They are varieties of the



Fig. 76.—Roman Legionary Helmet found near Berkhampstead. Ca. 1:4.

Attic type. Some Roman helmets found in England are exhibited in the Department of British and Mediaeval Antiquities. One of them is reproduced in fig. 76. It is evidently related to the much older Etruscan" jockey-cap." The hinged cheek-pieces are wanting.



Fig. 77.—Parade Helmet Masks (Nos. 209, 208).

It is likely that the Romans would combine Greek and Italian patterns in designing a uniform helmet for their own army.

A peculiar fashion of Roman helmet is represented by two bronze vizor-masks in Case 117 (Nos. 208, 209, fig. 77). A complete helmet of the same kind, exhibited in the Room of Roman Britain, was found at Ribchester in 1796, and two other specimens, a fragmentary iron helmet and a bronze mask, have recently been excavated at Newstead on the Tweed. The Newstead helmet has remains of padding still adhering, which prove that these strange helmets were actually worn, though Arrian, writing on tactics in the second century A.D., says that they were used for display, and not in battle. The earlier of our examples (No. 208, fig. 77, right), which probably belongs to the first century A.D., is said to have been found on the face of a skeleton in a grave at Nola in Italy in the eighteenth century. The other (No. 209, fig. 77, left), which has the more usual type of features, has lately been presented to



Fig. 78.—Helmets with Wooden Peg for Plume and Tube for Feather (Nos. 189, 199). 1:5.

the Museum, having been purchased at Aintab in Syria during the occupation of the country by British troops. Both masks are pierced at eyes, nostrils and mouth, and show traces of attachment to the helmet above the forehead. No. 209 has remains of white metal plating on the face, the hair being left in the colour of bronze.

Crests are shown on all kinds of helmets, as in the Greek, Etruscan and Roman statuettes (figs. 66, 81, 85), and the drawings on Greek and Italian vases (figs. 79, 86, etc.); it is not uncommon to find three on one helmet. They had thick horsehair plumes, sometimes simply wired to the helmet, sometimes mounted in sockets. Very few helmets show original fittings for the crests. These must have

been added by the owners. Some helmets have holes drilled in the crown; No. 186 has remains of wire in the holes. No. 189



Fig. 79. — Italian Helmet decorated with Horns, Wings and Plume.

has a bronze socket still holding a wooden peg, but this is only fastened with cement, and its rough make is not in keeping with the fine finish of this helmet (fig. 78). The flanged channel and pins of No. 193 (fig. 67) are peculiar to that type of helmet. An Etruscan helmet of Attic shape (No. 199, fig. 78) had a pair of tubes to carry single feathers, only one of which remains (cf. fig. 80). It was an Italian habit to wear fantastic ornaments. The head of a horseman from a wall-painting at Capua shows horns, wings, and a plume or feather (fig. 79). A Corinthian helmet from Apulia has a pair of curved horns like those in the wallpainting (No. 190). An Attic helmet

belonging to a suit of armour which was found in a grave at Capua, and is exhibited here on loan from H.M. Armoury in



Fig. 80.—Italian Vase-Painting, showing Feathered Helmet and the Metal Curass.

the Tower of London (No. 210), has horns of coiled wire (perhaps clips for feathers), and a pair of wings. The oval bronze hat

(No. 202, fig. 72) has two crests of sea-horses mounted as horns, with the support for a plume between them. These accessories are detachable; they are cut out of thin sheet metal and fit on to flat ears on the helmet. Two of the latest of the Corinthian class (No. 191, fig. 68) have such attachments.

Cuirass.—The earliest metal cuirass consisted of two bronze plates roughly shaped to fit the body, and fastened together at the sides and shoulders. The bottom edge was turned up so as not to



FIG. 81.—ETRUSCAN BRONZE STATU-ETTE WITH PLATED CUIRASS, 1:4.



Fig. 82.—A SOLDIER PUTTING ON HIS CUIRASS.

cut the hips. The Greek statuette from Dodona (No. 185, fig. 66) shows the form. It was contemporary with the Corinthian helmet in Greece, and was probably discarded there for the same reason, that it was as much a burden as a protection. In Italy it had a longer life, but in an improved shape which is represented in Italian vase-painting (fig. 80), and is shown here in the cast of an Etruscan statuette (No. 201), as well as in some actual specimens from Italy (Nos. 210, 211, 212). These fit closely to the body, of which

the fown is moulded in free style on the metal plates, and the bottom edge follows the line of the waist. A fringe of leather was often attached to the rim. The fastenings are rings for lacing, and pins in sockets which serve either as hinges or clasps. The other cuirass was generally used in Greece from the beginning of the fifth century B.C. An Etruscan statuette in the Bronze Room shows every detail of the type (fig. 81). It was made of leather plated with bronze, with shoulder-straps to buckle down upon the breast. In scenes of the arming of soldiers, for instance on a vase by the painter Douris, at Vienna (fig. 82), the method of putting on this cuirass is often represented, and the construction of the various parts is shown. The bronze plating might be in the form of square tabs

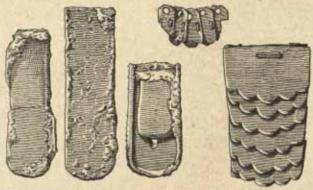


Fig. 83.—BRONZE PLATING FROM CUIRASSES (Nos. 214, 213). 3:5.

or round scales. Two fragments of such plating are exhibited (No. 213, fig. 83, right). The larger consists of six plates of bronze with the lower edge scalloped, sewn with wire on a leathern coat, and overlapping in such a way as everywhere to present three thicknesses of metal. The leather of this example is modern. The other is of five much smaller scales, similarly wired together. The larger fragment is from France, the smaller from Oxyrhynchus, in Egypt. Some pieces of heavier bronze plating, one of them still clasping a shrivelled tongue of leather, may have served as the long tabs which form a skirt to this cuirass. They were excavated at Kertch in the Crimea (No. 214, fig. 83, left).

A peculiar Italian type is represented by a triangular bronze breastplate filled with three circles in relief (No. 215). This breastplate often appears on third-century vases of South Italian fabric, and a number of such plates have been found in tombs of the beginning of the Iron Age. It is therefore an ancient pattern, but this example is contemporary with the vases (fig. 84).

Another piece of native Italian fashion is the metal belt (No. 216) which is also represented in vase paintings of the third century B.C. (fig. 84). It was worn with the triangular breastplate. Rows of holes along the edges show that the belts were lined with cloth or leather. The fastening is simple, one end hooking into the other. Many elaborate hooks are exhibited (No. 217). Two oval bronze plaques (No. 218) may have belonged to belts of different type.



Fig. 84.—Vase Paintings showing Italian Breastplate and Metal Belt.

Remains of Roman cuirasses are as rare as of the helmets, and for the same reason; but the general type of the armour worn by the legionary soldier is illustrated by a small statuette (No. 219; fig. 85). The cuirass is of the same design as the flexible Greek type; it is made of overlapping bands of metal, which are fastened down the front. There are shoulder-pieces of similar construction, and straps are brought over from the back to hold the armour in place. Underneath is a kilt of leather or metal strips. Two other varieties of Roman cuirass are shown in the cast of the relief representing pieces of armour (No. 236), and a fourth is the coat of mail, which appears in the reliefs of the Columns of Trajan and Marcus Aurelius at Rome

(about,110 and 190 a.D. respectively). It is represented here by fragments of two different patterns and sizes (No. 220).

Greaves.—The third part of the Greek body armour is the greaves. Metal greaves may have been worn towards the close of the Mycenaean Age (the pair from Enkomi in Cyprus dates from about 1100 n.c.), but their general use was due, like that of the metal cuirass, to the adoption of the small shield, which necessitated a better covering of the body and legs. The poet Alcaeos says that



Fig. 85.—Bronze Statuette of a Roman Legionary Soldier (No. 219), 2:3,

the greave was a protection against missiles. It was a thin sheet of bronze, shaped to fit the leg, which it clasped and held of its own elasticity. Only the greaves from Enkomi (No. 221) are laced with bronze wire. Warriors putting on their greaves are often represented on the Attic vases. Fig. 86 is from the same scene as fig. 82. An ankle-pad was worn to keep the bottom edge from chafing. There is little difference of shape or decoration in the existing specimens. Some reach only to the knee, and some extend above it to cover part of the thigh (Nos. 222, 225). With the exception of the pair from Enkomi, all these date from the sixth to the third century B.C. Two of the finest (No. 223: fig. 87) from Ruvo in South

Italy, are decorated on the knee with a figure of a Gorgon. The tongue and eyes were made of ivory. The style points to Ionia as the place, and the sixth century as the time of manufacture. Rather later is the pair with incised palmettes above the knees (No. 224). The only other decoration is the expression of the muscles of the leg to correspond with the similar representation of the body on the breastplate. As in the belt and helmet, there is usually a row of holes along the rim for the attachment of a lining. In the Roman army the greave was worn from early

times, but under the Empire it became a mark of distinction for the centurions.

Some rare pieces of armour are arranged with the greaves. No. 226 is a thigh-piece, of which the provenance is not known. A similar piece was found at Olympia. Armour for the thigh is represented on some Greek vases of the sixth century B.C., but not on later monuments, although both Xenophon and Arrian mention it as part of the equipment of cavalry. A guard for the upper part of the right arm, from Italy, which is more familiar as armour of



Fig. 86.—A Soldier putting on his Greaves,



Fig. 87.—Pair of Bronze Greaves Decorated with Figures of Gorgons (No. 228). 1:6.

the later gladiator, dates from the fifth or fourth century B.C. (No. 227). It was fastened to the shoulder of the cuirass. Another piece of different shape is mounted with the suit of armour from Capua (No. 210). There are three pairs of shin-guards from Italy (No. 228). The ankle-pieces are designed to protect the "Achilles" tendon at the back of the foot (No. 229; fig. 88). These subsidiary pieces of leg-armour were probably worn by the Italians of the fourth century B.C., when the long greave was going out of fashion. Armour of an unusual kind is represented by the pair of bronze shoes, which are also from Ruvo (No. 230; fig. 89). The metal

covering is only for the top of the foot, and the toes are on a separate plate, which is hinged at the joint. Part of a single shoe of the same type was found at Olympia.

Shield. An essential part of the ancient panoply was the shield,

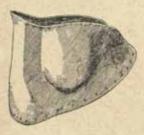


Fig. 88.—BBONZE ANKLE-GUARD (No. 229), \$1:4.

but actual remains are rare. Greek shields were probably made of wood or leather studded or plated with metal. The prehistoric shield of Homer's time we know was a large bull-hide, which enveloped the man from head to foot, and was slung round his neck by a strap. Herodotus says that this unwieldy weapon was superseded by the smaller shield, an invention of the Carians, held on the left arm by a loop and a cross-bar (fig. 102). The common

shapes were circular and oval; more fanciful patterns, lozenges and crescents, belonged to less civilised neighbours of the Greeks. Leather construction is seen in the shape of the Boeotian shield (so called from its use as the national coin-type of Boeotia), which



Fig. 89,-Bronze Shoes (No. 230). 1:4.

the Dodona soldier carries (No. 185; fig. 66). This is oval with a gap in the middle of each long side, a shape produced by stretching a hide on a long frame with cross-bars at top and bottom. Strings for tightening the leather cover are drawn inside a shield in fig. 102.

Two circular bronze shields are exhibited, both from Italy. The large one is decorated with narrow bands of Sphinxes, rosettes, palmand lotus-patterns in relief, in the oriental Greek style of the sixth century B.C. (No. 231). The smaller (No. 232), which has a spiked boss and punctured geometric patterns, is probably Italian of about the same date. Neither of these examples has the fittings of a shield inside. They may have been made for decorative or votive use.

No Roman shields are represented, and none have survived entire, for they were also made of wood and leather, and only the central boss and the framework were of metal. ordinary type is illustrated in the reliefs of the Trajan Column (fig. 90). where the legionaries are perhaps distinguished from the auxiliary soldiers by their oblong shields. These are further differentiated by the badges of the various legions; the illustration shows a thunderbolt. The Greeks also carried devices on their shields, mostly figures of animals (fig. 102, a bull's head), which would be chosen as the emblem of a man or family, like coats of arms in mediaeval Europe. Some states also had their badges; men of Lacedaemon, Sicyon, and Messene bore the initial letters of the names of their towns.

Trophies.—A peculiar usage of war among the Greeks, which was



Fig. 90.—Roman Legionary Soldier prom the Trajan Column.

afterwards practised by the Romans, was the erection of trophies of the arms captured from a defeated enemy. Soldiers of all ages have celebrated their achievements by the display of armour or similar spoils which they have stripped from their opponents; but the custom of building effigies with the empty armour, to be left for a monument on the battlefield, as a token of victory, belonged properly to the Greeks. Helmet, cuirass and greaves were slung in position on a tree-trunk, and the shield and other weapons were bound to the arms of a cross-piece. An inscription was affixed, giving an account of the victory and the

dedication of the monument to a deity, as other spoils were dedicated in the temples. In the centre of the Wall-Cases 116-117 two suits of armour are set up in this fashion (Nos. 210, 211). In Case 111 there are a small bronze model of a Roman trophy (No. 233), and two lamps with designs of the same subject. One of them has a trophy of barbarian arms, a horned helmet and oblong wooden shields, with a man and a woman captive at the foot (No. 234). The other is more fanciful: a trophy is borne aloft by a Victory, who is poised with her foot on a globe, to symbolise the subjection of the world (No. 235).

The Greeks had established customs in raising trophies, and these were strictly observed. The trophy was an assertion of victory, and was accepted by the vanquished and left inviolate

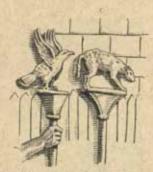


FIG. 91.—ROMAN LEGIONARY BADGES USED AS STANDARDS, FROM THE TRAJAN COLUMN,

by them. But it was contrary to usage for the victors to repair it, or to make the supports of anything more durable than wood. The native Roman practice was to fix captured armour in the house, like trophies of the chase. The built trophy was borrowed from the Greeks, but it was not necessarily erected on the battlefield. At Rome there were many trophies commemorating provincial victories, and the custom was continued in the representations of spoils on the triumphal arches and other monuments of the Imperial age. A marble relief of pieces

of armour from one of these monuments is reproduced in a cast (No. 236). The arms are mostly Roman, but the dragon-standard and loose tunic belong to the Dacians, a barbarous people who made trouble on the north-east frontier of the Roman Empire in the second century after Christ.

Standards.—Military standards were not much used by the Greeks, but in the Roman army, which was a regular institution, not a temporary levy of citizens, they were elaborately developed. The eagle was the standard of the legion. It was a gilt image of the bird with spread wings, holding a thunderbolt in its claws. Marks of military distinction bestowed upon the legion—crowns, wreaths, and medallions—were carried on the staff which supported the eagle or on the eagle itself (fig. 109, p 105). Smaller standards belonged to the companies of the legion (maniples or centuries). These

were originally banners (vexilla) mounted on spears, with honorary wreaths and medallions attached to the shafts. A cast of such a standard is exhibited (No. 237). The cross-piece represents the bar on which the banner was hung, the sloping and vertical members at its ends are derived from the cords which fastened the cross-bar to the pole. The other standards shown in fig. 91, figures of birds or animals carried on a plain shaft, are also represented here, in the bronze boar (No. 238). Such standards were probably used by detachments of the legion. The regimental

emblems were chosen or bestowed for various reasons; some legions had several badges, and the same badges are found with several legions.

The boar is known to have belonged to the 1st (Italica). 2nd (Adjutrix), 10th (Fretensis) and 20th (Valeria Victrix). The bronze hand (No. 239) may have been part of a standard, but its poor structure votive use. An open hand was the proper standard of the maniple, the



rather indicates Fig. 93.—Silver Coin of Valens votive use. An open hand was the proper standard of BARBARIANS.

[364-378 a.d.) Showing the Emperon Holding the Laborum, TRIUMPHANT OVER BARBARIANS.

FIG. 92.—ROMAN MANIPULAR Vezillum, FROM THE TRAJAN COLUMN. Roman company of two centuries, which, indeed, derived its name from this device (manipulus, a handful). The Roman explanation, as recorded by Ovid and others, was that when Romuius first organised his men by hundreds, he gave

each company a standard consisting of a handful of twigs or grass on the point of a spear. In any case the maniple took its name from the hand, and the hand is often represented as the standard of the maniple; fig. 92 is taken from the Trajan Column. The cross-bar, which originally carried the banner, and its hanging tassels are shown in this standard, as in No. 237, but the more important part of the cord, which fastened the bar to the shaft, has been omitted from the design. This fortuitous pattern of a cross was eagerly recognised by the early Church as a military

emblem of Christianity, and the famous labarum, the miraculous standard which Christ gave to the Emperor Constantine on the eve of the battle of the Milvian Bridge, was a cavalry vexillum of the Roman army with the monogram of Christ emblazoned on its banner (fig. 93).

The pieces of armour are described in the Catalogue of Bronzes to which reference should be made for fuller details. The Catalogue numbers are painted on the objects.

(185) Bronzen aus Dodona in den Kgl. Museen zu Berlin, p. 13, pl. 2;
(201) Friederichs, Kleinere Kunst, 2197; (208) Cat. of Bronzes, 877;
Benndorf, Ant. Gesichtshelme, p. 15, pl. 3; for the class see Curle, A
Roman Frontier Post and its People, p. 179; (221) B.M. Excavations in
Cyprus, p. 16, fig. 26; (236) Cat. of Sculpture, 2620; (237, 238, 239)
reproduced by Daremberg and Saglio, Dict. Ant. s.v. Signa Militaria.

Weapons.—The weapons of offence, which are exhibited in Table-Case E, differ from the majority of the antiquities shown in this room, in that many of them were made at a remote period in the history of Greece and Italy, some even dating from the beginning of the Bronze Age, when the use of metal had not long supplanted that of stone. In a few examples from the island of Cyprus, the metal is almost pure copper. It is therefore not strictly accurate to call these weapons Greek and Roman, for they were made a thousand years before those nations began; but they come from the lands which were afterwards inhabited by the Greeks and Romans, and are valuable as representing the development of arms in those parts of the world, and as being the work of the primitive races in whom the Greeks and Romans had their origin.

Early Greek Bronze Age.—The first class consists of arms which belong to the Early Bronze Age in Greece, a period preceding the mature and extensive civilisation to which the name of Mycenaean is commonly applied. The general date of 3000 to 2000 B.C., which is assigned to the weapons of this period, serves rather to indicate their chronological relations than to give their precise age. In any case they stand as a definite beginning of the history of arms in Europe. In these early times the sword had not been invented, and short daggers or spear-heads only were produced by workmen with a still imperfect mastery of metallurgy. The most ancient form was a short thick blade, with rivets in the base, where it was fastened to the hilt or shaft. A more secure attachment was contrived by prolonging the broad hase of the blade into a tang, which was let

into the handle and held by a rivet through the end. But the greatest advance was the discovery that if a rib were left up the middle of the blade, the edges could be fined down and tapered to a sharp point without loss of strength. In the final development

the stiffening rib and the tang were connected, so that the strongest part of the blade was continued down into the handle. Yet in spite of progress and improvements in design, the old patterns remained in use to the end of the Bronze Age, and even later, so that a chronological classification based on the forms of early weapons is untrustworthy.

All the stages in the development are shown in these examples. The most primitive types are represented by a series of blades from Cyprus (No. 241: fig. 94a), which, from material and technique, might be placed at a very early period; but they were excavated from Mycenaean tombs of the end of the Bronze Age. To the same island belong the narrow blades with long tangs, which are turned round at the end in a hook to hold the handle (No. 242; fig. 94b). This type is said to have been found in graves of 3000 B.C. It is certainly a primitive shape, and peculiar to the pre-Mycenaean civilisation of Cyprus. Another local variety is known in the leaf-shaped blade with a sharp tang and two slits, one on each side of the midrib, through which the shaft was lashed in place (No. 243; fig. 94c). The pattern is characteristic of the contemporary civilisation of the Cycladic Islands. Two pointed blades with no tang belong to the same early period. The smaller

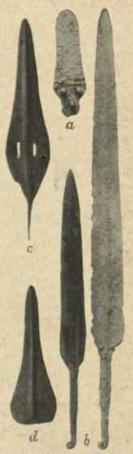


Fig. 94.—Primitive Bronze Spear- and Dagger-Blades, from Greece and Cyprus (Nos. 241-4), 1:4.

of the two was found at Athens (No. 244; fig. 94d).

Mycenaean swords and daggers.—The next period was the close of the Bronze Age in Greece, occupying the second millennium before Christ. It has been called, from its

best-known centre at Mycenae, the Mycenaean Age. In this period, by improvement in metal-working, the short daggers

were lengthened into swords, which, towards the end of the age, were made even a yard long, and very slender. Such weapons were used mainly for thrusting, for they would break with a direct blow. Homer records many such accidents on

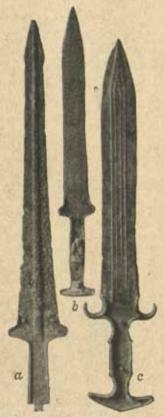


Fig. 95.—Bronze Swords of the Michaelan Period (Nos. 245, 247-8). 1:4.



FIG. 96,—BRONZE SWORDS OF LATE MYCENAEAN TYPE (Nos. 249-50), 1:4.

the battlefield. At the same time the spear-head was differentiated from the dagger-blade, being provided with a socket for the shaft. Mycenaean weapons are represented here by swords and spear-heads

found mainly at Ialysos in Rhodes, and belonging to the end of the period. The swords are short and heavy, and are made in one piece with the hilt. The guard is straight in the earlier specimens, and the pommel of the hilt was a round knob, of which the tang remains (No. 245; fig. 95a). This is the form of the well-known daggers from Mycenae, which have the blades inlaid with designs in coloured metals, the hilts and pommels embossed and chased in gold. Electrotype copies of the Mycenae daggers are exhibited in the Gold Ornament Room Passage. A closer parallel to these is a blade from Cameiros which has the rivets still in place (No. 246). In other swords the raised flange on the edges of the hilt is continued to form a crescent-shaped pommel. The hollow space was filled with an ornamental material for the grip. The rivets are usually in place, and on a small dagger from Karpathos a great part of the ivory mount is preserved (No. 247; fig. 95b). The last form of this hilt appears in a heavy sword, formerly

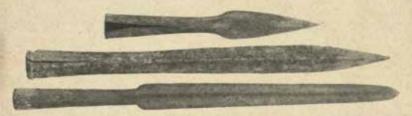


Fig. 97.—Bronze Spearheads of the Mycenaean Period (No. 251). 1:4.

in the Woodhouse Collection (No. 248; fig. 95c). The projection of flanges and pommel is accentuated, and the ends of the guard are curled up like horns. This type survived into the Hellenic period. Another late Mycenaean form is seen in a long and slender sword with a broad base to the blade, which contracts again towards the hilt (No. 249; fig. 96a). At the other end of the hilt are two divergent tongues of metal, which are better preserved in another example, of heavier fabric, from Enkomi, in Cyprus (No. 250; fig. 96b). The type is that in which the earliest iron swords of Greece were made (No. 263; fig. 101b), and which was the prototype of the common bronze sword of the rest of Europe. The lighter specimen (No. 249) is from Scutari in Albania.

Mycenaean spears and arrows.—The spear was in Homeric times the soldier's most important arm, a long and heavy weapon which was thrown with great force or used forthrusting. Mycenaean spearheads are illustrated in a series from Ialysos (No. 251; fig. 97). They are skilfully made to secure the greatest strength with the least expenditure of material; in most cases the shaft runs far up into the blade, which is narrow and springs gently from the socket, some being wider near the point than at the base. There is considerable variety of shape, but all are characterised by the thin blade with shallow curves. Mycenaean arrowheads from the same site are of more primitive design (No. 252; fig. 98). The best are large and heavy, and have long barbs; a tang and no socket to take the shaft. Others are curiously flat and weak, and are plainly metal reproductions of a stone pattern.

Italian Bronze Age. The Bronze Age of Italy is represented

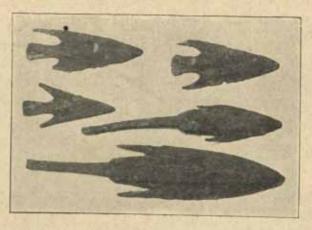


Fig. 98.—Mycenaean Bronze Arrowheads from Ialysos (No. 252). 2:3.

here by daggers and spears which date from about the fifteenth to the tenth century B.c. Italian daggers are remarkable for the use of engraved geometrical decoration on the blades. The first class resembles the Mycenaean weapons in the form of the hilt with edges raised for inlay and crescent-shaped pommel, and the round base of the blade is also similar to an early Mycenaean type. The haft of one dagger is wound with bronze wire, another has an ivory handle bound with gold (No. 253; fig. 99a), and a third has the pommel filled with ivory (No. 254). Some of the blades were made separately, and riveted to the hilt after the primitive fashion (No. 255; fig. 99b). In that case the hilt was split to receive the tang, and overlapped the base (No. 256). Some of these daggers diverge still further

from the Mycenaean in having the blade with recurving edges which is characteristic of a cutting sword (No. 257; fig. 99c). The sheaths are of peculiar shape, being made of a thin plate of bronze with an ornament at the end in the form of a large round



Fig. 99.—Early Italian Bronze Swords and Sheaths (Nos. 253, 255, 257-9). 1: 6.

knob or several discs on a peg (No. 258; fig. 99 e, f). They are decorated with the same linear designs as the blades. A later variety of Italian sword, known from the horned extremities of the pommel as the *Antennae* type, is represented by two specimens

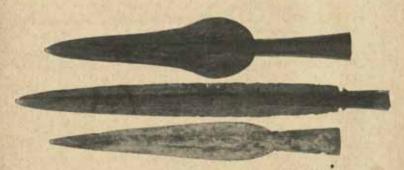


Fig. 100,-Italian Bronze Spearheads (No. 260).

(No. 259; fig. 99d). In the first, the horns are simply curved projections, in the other they are developed into large rings or spiral coils. The type is of frequent occurrence throughout Europe, even in the north.

Italian spearheads do not suggest so much connection with

Mycenaean types. Some of them are narrow, but most have broad and strongly-curving blades which spring sharply from the sockets (No. 260; fig. 10). A spearhead from Sicily is remarkable for

its great size (No. 261): it is thirty-five inches long.

The rest of the arms belong to the historical period. The usual weapons of the Greeks were the spear and sword. The bow was a special arm, which did not form part of the equipment or the ordinary soldier, and its use, like that of the sling, was practised by men of certain districts, who served as mercenaries to other states. The axe was a barbarous weapon, and is generally represented in the hands of Amazons, who brought their mode of warfare from the wilds of Scythia (see fig. 109).

Greek swords.-The earliest Greek swords in this collection date from the tenth century B.C., when iron was fast taking the place of bronze; but forms common in the Bronze Age were still reproduced in iron, just as those peculiar to stone implements were for some time preserved in This conservative tendency is bronze. noticeable in three iron swords, of which two are from Cyprus (Nos. 262, 263; fig. 101b). They reproduce the general form of the bronze sword from Enkomi in the same island (No. 250; fig. 96). A short iron dagger is similar to the common Mycenaean type (No. 264; fig. 101a).

The ordinary Greek sword of the fifth century s.c. is represented by three examples. The type appears frequently in works of art. On a vase in the Third Vase Room (E 468; Pedestal 6) there is a drawing of the combat of Achilles and Memnon, in which Memnon is armed with this sword. In the sheath

by his side is another, so that it is possible to see both hilt and blade at once (fig. 102). The shape is entirely different from that of prehistoric times. The hilt is round and the pommel a small knob,



Fig. 101.—IBON SWORDS, SHOWING THE SURVIVAL OF MYCENAEAN TYPES (NOS. 263-4). 1:4.

while the guard is a plain crosspiece. The blade, which, being made of iron, is long and thin, swells from the hilt towards the point in the manner characteristic of the cutting sword. All these features are visible in the examples (No. 265; fig. 104a, b). The swelling blade

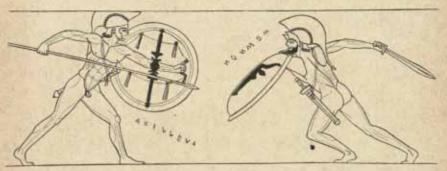


Fig. 102.—Vase-Painting of the Combat Between Achilles and Memnon, showing the Classical Greek Weapons.

is best seen in the largest specimen, while the iron-handled fragment, which was excavated from a tomb near the Mausoleum at Hali-karnassos, shows the original form of the hilt. The small dagger with a bone hilt and the bone end of the scabbard forms part of

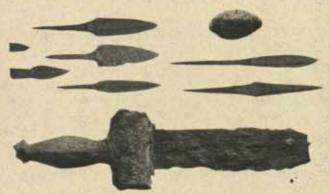


Fig. 103.—Weapons from the Battlefield of Marathon (No. 266). Co. 1:3.

a group of weapons which were found on the battlefield of Marathon (No. 266; fig. 103). The others are iron spearheads, arrowheads both of bronze and iron, and leaden slingshot, two of which are marked with a thunderbolt and the Greek name Zoilos.

Another common type of Greek sword is the heavy knife-like sabre with a hilt in the shape of a bird's head (No. 267; fig. 104c). Its original appearance may be seen on the Athenian bowl already mentioned on page 80 (fig. 105). The classical name was machaira.



Fig. 104.—Greek Iron Swords (Nos. 265, 267). 1:5.

Xenophon recommends it as a cavalry weapon, because of its heavy down-stroke. This example comes from Spain, where many similar swords have been found, but the origin of the type is Greek or even Oriental. The dagger with a cylindrical bronze hilt of which the pommel is a lynx - head, appears from the style of the decoration to be Graeco-Roman (No. 268). models in terracotta from Naukratis give the types of the Hellenistic period (No. 269).



FIG. 105.—THE Machaira, WITH HILT IN THE SHAPE OF A BIRD.

Greek and Roman spears.—Classical spears are represented by a variety of heads both in bronze and iron. The earliest Greek type is an iron head found with pottery of the tenth or ninth century B.C. in a grave at Assarlik in Asia Minor (No. 271). Those with three and four blades are a small class, examples of which came to light at Olympia, and suggest as a date the end of the sixth century B.C. (No. 272; fig. 106a). To the same date may belong the decoratively modelled bronze spear from Kameiros, and another

of plainer design from the same place (No. 273; fig. 106b, c), with two from Olympia, and a large iron one (No. 274) found with the fine Attic helmet (p. 78) in Macedonia. A curious spearhead, or perhaps a butt, from Olympia is shown among the Greek Inscriptions (p. 9, No. 14, fig. 8). Spearbutts are not uncommon. Some are plain tapered ferrules (No. 279; fig. 107), others end in twopronged forks (Nos. 280, 281; fig. 107). The bronze forks are from Egypt, the iron one (fig. 107, bottom centre) was found on the bank of the Tiber with the spearheads mentioned below. The unusually long iron head, which was found in Spain with the iron machaira, is probably a later Greek form (No. 275; fig. 106d). This example exhibits in a high degree the superiority of iron to bronze. Other iron spearheads are from Italy; some are from the Tiber (No. 276). Three specimens, one with remains of the wooden shaft and the lashing of wire, were found near the village of Talamone on the west coast of Italy (No. 277; fig. 108), where in 225 B.C. the Romans won a decisive victory over the Gauls, who had marched successfully to within a few days of Rome. and were returning home with their plunder. Like the helmets from Kyme and Cannae, and the arms from Marathon, these spears are relics of one of the famous battles of antiquity. The Roman soldiers of later times carried spears of a different kind. They had no thrusting lance, but an extremely heavy weapon, the pilum, which

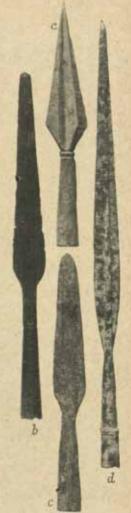


Fig. 106.—Greek Speak-HEADS (Nos. 272-3, 275). About 1: 4.

they threw with great effect at close quarters. The small iron heads from Licenza (No. 278) have much the same shape as the head of the pilum. They probably belonged to light throwing-spears.

The purpose of the long head was to bend and encumber the enemy after piercing his shield or armour.

Roman swords.—The collection of swords ends in those which belong to the Roman period. A fragment of a sword with a heavy iron blade seems too big for the natives of Italy, and may have been used by a Gaulish invader (No. 282). The large



Fig. 107.—BRONZE AND IRON SPEAR-BUTTS (Nos. 279-81). Ca. 1:5.

sword with a flat guard and an ivory and bronze handle (No. 283) is perhaps a Roman gladius, which was afterwards superseded in the army by a sword of Spanish pattern.

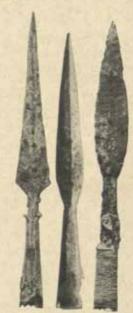


FIG. 108.—IRON SPEARHEADS FROM TALAMONE (No. 277). About 1: 4

The later Roman sword is excellently represented by the so-called "Sword of Tiberius," which was found in a field at Mainz on the Rhine (No. 284; fig. 109). The short iron blade is of the usual type, measuring twenty-one inches in length and two and a half in width at the base, from whence it tapers gently to a sharp point. The scabbard was made of word covered with a plate of silver-gilt



Fig. 109.—Roman Legionary Sword and Scarbard found at Mainz (No. 284). 1;4. Reliefs, 2:3.

which is decorated with reliefs in gilt bronze. The plates of the bands which were hooked to the sword-belt are ornamented with wreaths of oak. At the hilt is a group which represents the Emperor Tiberius receiving his nephew Germanicus on the latter's return, in the year 17 A.D., from his victorious campaigns against the Germans, in the course of which he had recovered one of the legionary eagles which Varus had lost. The emperor, robed as a deity, is seated on a throne, resting his left arm on a shield which is inscribed FELICITAS. TIBERI—"The Good Fortune of Tiberius"—and holding in his

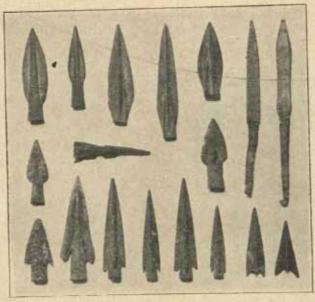


Fig. 110.—Greek and Cypriote Bronze Arrowheads (Nos. 290, 288). 2: 3.

right hand a small figure of Victory with wreath and palm, which he has just taken from his returning general. Germanicus stands before him in military attire, with his right hand stretched out. In the background is an armed figure, and behind the emperor a winged Victory brings a shield upon which is the legend VIC AVG—"The Victory of Augustus." The middle of the scabbard is occupied by a medallion charged with a portrait of Tiberius, and at the point is a larger plate which is divided into two fields. The uppermost has a representation of a Roman eagle in a temple, and in the other is an Amazon armed with battle-axe and lance. It

might not be wrong to connect the eagle with that of Varus; and the figure of the Amazon calls to mind the ode of Horace (Carm. iv. 4) celebrating the success of Drusus, the father of this Germanicus, against the Germans of the Danube, in which the poet expresses surprise that those barbarians should be armed with the Amazonian axe. Perhaps the next generation attributed this legendary weapon also to the Germans of the Rhine, and the Amazon is an allusion to the campaigns which the sword commemorates. From the contrast of the elaboration of the design with the cheapness of the execution, it would seem that the weapon is one of many copies which were turned out for some official purpose, probably a sword of honour presented to officers who had served with Germanicus.

Other remains of Roman swords are less complete. There are several fragments of scabbards, a bronze guard, two ivory pieces



F10. 111.—ROMAN ABROWHEADS (No. 298). 2:3,

which may have been pommels of the hilt or caps of the sheath, and a good specimen of an entire hilt in bone (No. 285). This is very similar to the classical Greek pattern.

Sling-shot and arrowheads.—Weapons which show little difference of form in Greek or Roman times are the sling-shot (No. 286) and arrowheads. Sling-shot are mostly cast in lead, but some are of bronze and stone. The inscribed sling-bolts from Marathon have already been mentioned, and others similarly bear inscriptions in raised letters: a personal name, of the maker or the general or the slinger; or the name of the state from whose army it was shot—"From the Corinthians"; or a message to the bullet or to the enemy—"Strike hard," and "Take this." A large bronze arrowhead from Olynthus (No. 291) bears the name of Philip, probably the father of Alexander the Great, the Macedonian king against whom Demosthenes wrote his Olynthiac and Philippic orations.

Some of the arrowheads have already been described, the

Mycenaean from Rhodes (No. 252; fig. 98), and those from Marathon (No. 266; fig. 103). The large iron heads with knifelike blade and long tang are Oriental (No. 287); those from Marathon were no doubt used by Persian bowmen. A similar group from Cyprus, but of bronze, shows long square heads (No. 288; fig. 110, top, right). A bundle of six bronze arrowheads of broad leaf shape, found in a grave at Enkomi in Cyprus, has rusted together as the arrows lay in the quiver, remains of which and of the wooden shafts can still be seen (No. 289). Greek examples belong to two classes; they are all made of bronze. The commoner class has sockets and blades like miniature spearheads; (No. 290; fig. 110). Many of these have three blades; the large inscribed

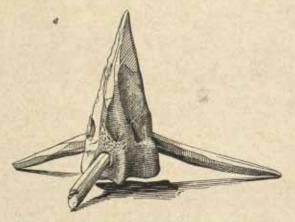


Fig. 112.—Bone Calthrop from the Crimea (No. 296). 2:3.

head from Olynthus (No. 291) is of this shape, but barbed. Another variety, which always has barbs, is triangular with a central hole for the shaft. The second class consists of heavy heads with long barbs and tangs (No. 292). These appear to be related to a Mycenaean form (see fig. 98), and as they are often represented on coins of Crete, they may perhaps be identified as the arrows of the Cretan bow. The Roman period is represented by six iron arrowheads from Xanten (Castra Vetera) on the Rhine. They show the spearhead and triangular shapes, and are all barbed (No. 293; fig. 111).

Such is the regular series of classical weapons. Exceptional pieces are the bronze double axe (No. 294), if this can be called a weapon, the ridged mace-head from Rome (No. 295), and the calthrop

(No. 296; fig. 112), a contrivance for disabling cavalry. This singular object, which was found at Kertch in the Crimea, is cut from a human radius bone.

The bronze weapons are more fully described in the Catalogue of Bronzes under the numbers painted on the objects.

(269) Cat. of Terracottas, C 629 ff.; (271) Journal of Hellenic Studies, VIII., p. 64; (284) Proc. Soc. Ant. Lond., N.S. III., p. 358; Cat. of Bronzes, 867; (289) Excavations in Cyprus, p. 17, fig. 28; (296) McPherson, Antiq. Kertch, p. 101.

X.-HOUSE AND FURNITURE.

(Wall-Cases 25-40.)

Cases 25-40 contain furniture, lamps and lamp-stands, cooking utensils, objects used in connection with the bath, and objects illustrating the methods of heating buildings and supplying them with water. With the house itself, its plan and its appearance we are not concerned in this work. It is enough to say that the fundamental distinction between the ancient and modern house is that the one looked inwards, the other looks outwards. The ancient house received its light and air either from the open court-yard, round which it was built, or else from a large aperture in the roof. The former was the prevailing arrangement in Greece, the latter (in the earlier period) that adopted in Italy. The outside of the average Greek house was probably very destitute of architectural ornament, presenting a wide space of blank wall broken but by few windows.

The Roman house in its final development assumed a form closely resembling that of the Greek house just described. At an early period it was based on the early Italian house. This consisted merely of an oblong chamber, with a small opening in the roof for the admission of light and emission of smoke. This chamber wa called an atrium, perhaps because walls and roof were black (ater) with soot from the smoke of the fire. Gradually the opening in the roof became larger. Rain fell in the centre into a basin called the impluvium. The atrium lost its character as a living room, and further courts and rooms in the Greek manner were added to it.

We may now deal with the internal arrangements and the furniture. The objects may be described as they concern (1) the

general furniture of the house; (2) the lighting; (3) the kitchen; (4) the bath; (5) water supply; (6) the warming. (7) Annexed is

a small type series of vases.

The Furniture of the house.—In the nature of things, wooden furniture rarely occurs outside Egypt, except in South Russia. Thus we have a wooden table leg: a dog springs upward, from an acanthus leaf, surmounting an animal's leg (No. 300). This comes from Kertch in the Crimea. In general, the remains of furniture shown in this section are the metal accessories and fittings. These are for the most part of Roman date, but Roman furniture was so largely derived from the Greek, that they may be regarded as illustrating Greek furniture as well.

Some remarkable examples of bolster-ends in bronze, bronze inlaid with silver, and ivory, are shown in Cases 27, 28. They usually terminate above in a head of a mule, or of a duck, and below in a medallion bust.



Fig. 113.—Bronze Couch (Restored).

The seat (No: 301) is incorrectly put together. It is composed of the parts of one or two couches which should be restored as in fig. 113.

Below is a small bronze stool (No. 302), without arms or back, of a type not uncommon at Pompeii. Two tripods with expanding legs are placed in the bottom of Cases 27-28. One of these (No. 303) has an arrangement similar to that of the candelabrum h. No. 307, whereby it could be heightened at will. These tripods Mywere used as small tables. Of a much older period is the fragment coip of 304) from the leg of a large bronze tripod, from Palaekastro in Crete.

Lighting.—In Cases 25, and 28, 29 are placed several candelabra used either for the support of wicks floating in an oil-bath or for lamps, or torches. Those stands which have come down to us are chiefly of bronze, but the cheaper ones in ancient times were made of wood. Martial, in an epigram, warns the possessor of such a wooden candelabrum to take care that the whole stand does not

turn into one blazing candle.\(^1\) A primitive example of lamp and candelabrum shaft combined is shown in No. 305, (fig. 114), from Cameiros (about seventh century B.C.). A female figure, of columnar form, supports a lamp with three nozzles. The Etruscan candelabra and many of the candelabra found at Herculaneum and Pompeii consist of a base in the form of three legs or paws,

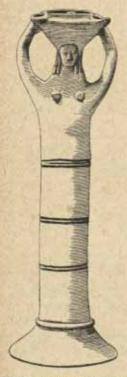


Fig. 114.—Archaic Lampstand and Lamp in Thuracotta (No. 305). Co. 1:7.



Fig. 115.—Roman Bronze Lampstand. (No. 306*) 1:4.

very commonly those of lions, a tall stem, and a circular support or spreading arms for the lamps at the top. The stem may be a fluted, or may be knotted like a stem of a plant, or divided like a reed. In Roman times another variety is also common, composed

' Martial, xiv. 44:

Esse video lignum ; serves nisi lumina, fiet De candelabro magna lucerna tibi. of a massive base with three or more spreading arms, from which lamps were suspended. Such a stand (No. 306) is seen on the upper shelf of Cases 29–30. A point which may be specially noted in regard to some of the bronze stands of the Roman period is the decoration of the shaft, which often takes the form of a climbing animal. That shown in fig. 115 (No. 306°) has a panther, a cock, and a bearded serpent on the shaft. An ingenious expanding Roman bronze lampstand (No. 307) from the Hamilton Collection should be noticed in the lower part of Case 29. The central rod attached to the circular lamp-support can be raised at will, and secured in place by means of a bronze pin passed through one of the pairs of holes pierced in the side rods.

The lamps themselves (in Cases 31 and 32) are of terracotta,



FIG. 116.—BRONZE LAMP FROM ENKOMI (No. 308).

bronze and marble. The greater number are of the Roman period. One of the earliest is a primitive lamp (No. 308; fig. 116) of the prehistoric period known as Mycenaean, and was found in the course of the Museum excavations at Enkomi in Cyprus. It was thrust, by its spike, into the masonry joints of a built tomb, and must have had a wick floating in the oil, or supported at the spout. The essential parts of a lamp in the developed form are (1) the well for the oil, formed by the body of the lamp and fed from an opening above; in the bronze lamps this opening is covered by means of a

lid, sometimes hinged, sometimes secured by a chain, as in No. 309, fig. 117; (2) the nozzle for the insertion of the wick. The nozzle generally takes the form of a projecting spout, but the arrangement varies very considerably in different lamps, and a single lamp is often furnished with several nozzles. The lamps might either be simply placed on a candelabrum or else suspended from it. Several of the bronze lamps have chains for the latter purpose (No. 309; fig. 117). A peculiar bronze hook, of which there are several examples in these cases, was sometimes used in the Roman period for hanging up the lamps; in the example illustrated (No. 310; fig. 118) it is seen hinged to the lamp in such a way that the lamp could be suspended, supported from the ground, or carried in any way desired.

The numerous Graeco-Roman bronze lamps in these cases show a great variety of form. Heads of Seilenos, Pan, negroes, etc., appear side by side with a fir-cone, a foot, a duck, a snail, or a wolf. The handles often terminate in an animal's head, e.g., that of a horse, a dog, a lion, or a swan (cf. fig. 117). A fine example, with



Fig. 117.—Roman Bronze Hanging-Lamp (No. 309). Ca. 1:4.



Fig. 118.—ROMAN BRONZE LAMP WITH HOOK FOR SUSPENSION (No. 310). Ca. 1:3.

a tragic mask on the handle (No. 311; fig. 119) was found at Rome in 1912. But the choicest example of a bronze lamp will be found in the Bronze Room (Case B). It is a double lamp for suspension, and was found in the Roman Baths at Paris. A silver lamp with Heracles strangling the serpents, on a boat-shaped cradle (No. 312), is shown in Case 29. The cheaper terracotta lamps are freely decorated with designs taken from daily life or mythology.

Numerous specimens of these lamps will be seen in Table-Case B in the Fourth Vase Room. A very elaborate example (No. 313) in the form of a ship is seen here in the bottom of Case 30. The twenty-three holes for wicks and filling should be noted. The lamp fillers, as may be seen from the bronze specimen exhibited, closely resembled the lamps themselves (No. 314).

Candlesticks are race. In the Etruscan candelabra (Nos. 315, 316; Bronze Room Cases 57-60) projecting spikes seem to be intended for piercing candles, as shown by a tomb painting at Orvieto (fig. 120; see Bronze Room, Case 60). Two candlesticks



Fig. 119.—ROMAN BRONZE LAMP. TRAGIC MASK (No. 311).

of modern type (which rarely occurs) are shown in Case 30 (No. 317; fig. 121).

Besides lamps and candles, lanterns were also largely in use, especially for outdoor purposes. Such a portable Roman lantern (in Case 32) is here illustrated (No. 318; fig. 122). It is cylindrical in shape and has a hemispherical cover, which could be raised from the body of the lantern. The latter was enclosed with plates of some transparent material such as horn, bladder, or linen. That tale was also used is shown by the fact that several of the lanterns in the Museum at Naples have their walls made of this material. Just below the lantern is a small bronze statuette, which has formed

the body of a knife (No. 319). A grotesque figure is walking with a lantern in his right hand, and a basket slung over his shoulders. It was found at Behnesa, in Egypt, and probably represents a bird-catcher returning in the evening with his spoils. The lantern carried by him very closely resembles the one described above.

Cheaper forms of perforated clay lanterns are also exhibited (No. 320; fig. 123).



Fig. 120.— ETBUSCAN CANBLE HOLDER, FROM A TOMB FRESCO.

The Kitchen.—Cases 33-36 contain cooking implements and remains of ancient fruit and grain. The vessels give a good idea of the furniture of a Pompeian kitchen, although there is no example of the more elaborate contrivances for preparing hot drinks and keeping food warm, such as have been found at Pompeii, and may be seen in the Museum at

Naples.

The kitchen implements arranged in these cases do not differ materially from those in modern use, except that they are made of bronze, and frequently have some graceful and appropriate ornamentation. One or two of the objects call for special remark. On the second shelf from the bottom of Case 34 is an implement with a long handle and a rectangular pan furnished with six circular depressions (No. 321). A circular pan



FIG. 121.— BRONZE CANDLESTICK FROM SYRIA (No. 317).

with twenty-eight such depressions was found at Pompeii, and is now at Naples. These pans were probably used either for baking cakes or frying eggs.

In Case 36, on the same shelf as the pan for baking cakes, is a bronze frying-pan (No. 322), with a spout at one corner. Instead of butter, fat, or dripping, the Romans, like the inhabitants of southern countries at the present day, were accustomed to use oil in frying. The shelf above the pans is occupied with ladles, dippers, and other implements. The handles of the ladles usually terminate in a beautifully modelled head of an animal, such as that of a

duck, swan, or dog. One wine dipper (No. 323) is hinged so as to fold for the pocket. On the next shelf above are two painted plates of about the beginning of the third century s.c. They belong to a



Fig. 122.—Bronze Lanters (No. 318), 1:4.

well marked class (cf. Fourth Vase Room, Cases 26-7) of plates of Campanian fabric, distinguished by the fish and other marine creatures painted upon them. It is probable that they were intended for the serving of fish. Of the two examples shown in this

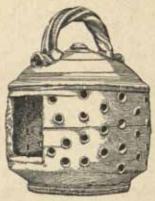


Fig. 123.—Earthenware Lantern (No. 320).

case one (No. 324) is decorated with a sea-perch, a sargus (a fish peculiar to the Mediterranean), and a torpedo, the other (No. 325; fig. 124) with a red mullet, a bass, a sargus, and a cuttle-fish.

The strainers (No. 326), with perforated designs, on the right of Case 36, were

used for clearing wine and other liquids. In Cases 36, 37 are bronze moulds for shaping food in the form of shells.

Some remains of ancient walnuts, grain, and fragments of

calcined bread from Pompeii, and a black cup from Rhodes, containing eggs, are shown in the middle shelf of Case 35.

The process of bread-making is illustrated by the terracottas shown in this case. One (No. 327) from Kameiros in Rhodes represents a woman kneading dough on a board placed in a circular trough resting on three legs. Another (No. 328), of much rougher



Fig. 124.—Fish-Plate (No. 325). Diam. 8% in.

workmanship, shows a bearded man engaged in a like occupation. A third (No. 329) shows a woman kneading in front of the oven. A small terracotta model of an oven shows two cakes baking (No. 330).

In antiquity knives and forks were little used at table, fingers being mainly employed. Only one three-pronged fork (No. 331) is here shown. Spoons, however, were common, and a considerable number of ancient spoons (No. 332) are exhibited in Case 36. The series of large ivory spoons with elaborately ornamented handles belong to an early period, a similar one coming from the Polledrara tomb at Vulci in Etruria, of the seventh century B.C. The small spoons in bronze or ivory, with round head and handle running to a point, were probably used for the eating of eggs and the extraction of snails from their shells. Snails were a favourite dish with the Romans, and the spoon got its name (cochleare) from being employed in this way.

In the lower part of Case 36 are examples of pestles and mortars (No. 333). The pestle usually takes the form of a bent thumb, or of a leg and foot.



Fig. 125.—ATHLETE USING STRIGIL.

In early times cooking was done either in the courtyard of the house or in the principal living-room. Pompeian houses are, however, generally provided with separate kitchens, small rooms opening off the court of the peristyle. The hearth is a simple rectangular structure of masonry, sometimes furnished with projecting supports for holding vessels over the fire. Much, however, of the warming and working was done over small braziers, such as are shown on a small scale, and by a model, in the lower part of Case 36. The terracotta braziers are of characteristic form, with three internal projecting knobs to support the cooking vessel. These are generally ornamented with masks of Hephaestos, Satyrs, or the like

(No. 334). Compare examples in the Terracotta Room (Cat. of Terracottas, p. xix., C 863 ff). See also in Case 36 a terracotta food warmer, from Olbia, in the form of a shrine (No. 335).

The Bath.—Certain implements shown in Case 37 illustrate the routine of the bath, which occupied a large place in the life both of the Greeks and Romans. Celsus, who wrote on the art of medicine probably early in the first century after Christ, recommended the bather first to go into the moderately heated room (tepidarium), and perspire slightly, then to anoint himself and to pass into the hot air room. After perspiring there he was to pour

1 Cf. Martial, xiv. 121:

Sum cochleis habilis, sed nec minus utilis ovis: Numquid scis potius cur cochleere vocer? hot, warm, and cold water alternately over his head, then to scrape himself with the strigil, and finally to anoint himself—the last probably a precaution against taking cold. This description will enable us to understand the use of the implements carried by bathers. Of these the strigil is most important. It was a curved piece of metal, usually bronze, but sometimes iron, employed by athletes for removing dust and oil after exercise, and by bathers for scraping away sweat and dirt. The accompanying figure

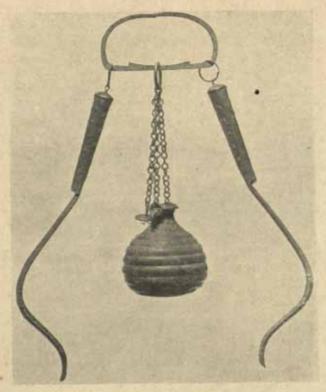


Fig. 126.—Bronze Strigils and Oil-Flask (No. 337). Cp. 2:7.

(fig. 125), drawn from a Greek vase of the fifth century B.C., shows an athlete resting after exercise, and about to use the strigil. Some times a strigil, oil-flask, and sponge are seen on vases, suspended from the wall of the palaestra where youths are exercising. In Case 37 a small lekythos (No. 336) shows an athlete with a strigil, and an impression from a gem illustrates the method of using that

implement. The strigils here seen range in date from about the sixth century h.c. to the third century h.D. Many of them are inscribed with the name of their owners, and some have small figures, e.g., a man dancing or a horse galloping, stamped upon them. Two strigils which deserve special mention are the silver one found in the sarcophagus of the Etruscan lady, Seianti Hanunia (second century B.C.), and exhibited with that sarcophagus in the Terracotta Room, and the beautiful bronze ornamental strigil in the Bronze Room (Pedestal 3), with the handle in the form of a girl herself using the strigil. A complete bather's outfit of Roman date (No. 337), found near Düsseldorf, includes two bronze strigils

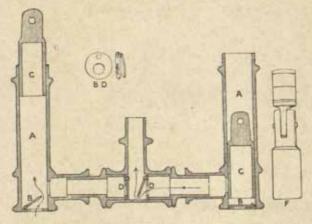
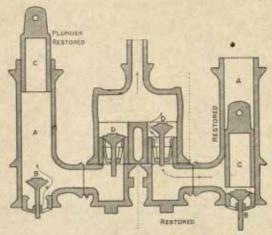


Fig. 127.—Section of Roman Bronze Pump from Bolsena (No. 888). 1:5.

and an oil-flask attached by rings to a handle (fig. 126), and several glass vases for use in the toilet.

Water Supply.—A few objects in Cases 38–39 illustrate the methods of water-supply among the Romans, which are characterised by their completeness and excellence. The remains of two Roman double-action pumps in bronze from Bolsena in Etruria (Nos. 338, 339; figs. 127, 128) are of special interest. These are constructed on a principle invented by Ktesibios of Alexandria, who probably lived in the third century B.C. They were worked by alternating plungers, raised and lowered by a rocking-beam. The first illustration (fig. 127) shows the less advanced but more complete pump in section, and explains the method of working. The bottoms of the cylinders (A) were connected by pipes with the reservoir, and are furnished with fiap-valves (B), opening

upwards. When the plunger (C) was raised, a vacuum was created, and the water lifted the valve and rushed in. When the plunger was raised to its highest point the valve fell again and retained the water; when the plunger descended it forced the water from the cylinder into the central discharge pipe through another flap-valve (D) at the end of the horizontal pipe. BD in the figure shows the structure of the flap-valves, which the Greeks called ἀσσάρια ("pennies") from their likeness to coins. F is a complete plunger of the same type as those used in the pump illustrated, but not belonging to it. Only two-thirds of the second pump (No. 339) survive, but the missing part (marked off in the diagram by a dotted



Pig. 128.—Section of second Roman Bronze Pump, from Bolsena (No. 389).

line) is supplied in the section (fig. 128). In this example the more advanced spindle valve takes the place of the flap valves, and the two valves side by side open into a central domed chamber, in place of the simple central cylinder of No. 338.

There are here several jets and spouts for the emission of water, one (No. 339) in the form of a pine-cone, pierced with small holes for sending out a spray, others in the form of dolphins (No. 340) and the fore-part of a horse (No. 341). The bronze stop-cocks seen in Case 39 were used for controlling the flow of water from the cisterns to the various parts of the house. They were inserted in the lead water-pipes, portions of which still adhere to them. Their arrangement is excellently illustrated by those discovered at the Roman villa at Boscoreale, near Pompeii (see

Mon. Ant. vii., p. 454, fig. 45a). See also a gargoyle in the form of a lion for rain water (No. 342), and a bronze grating from the Mausoleum of Halikarnassos (No. 343) for draining it away. Various lead supply pipes and clay drain pipes are shown in case 39.

Heating.—In early times houses were heated by means of a large open hearth placed in the middle of the principal room, whence the smoke escaped as it might, through the door, or between the roof beams. Next followed the use of portable braziers in bronze, such as have been found in Etruscan tombs from the seventh century B.C. (cf. Italic Room, Cases B, C). The small braziers used for cooking, etc., in the Hellenistic period have been mentioned above, p. 118. A system of heating by hot air was introduced by the Romans, but was used chiefly for the warming of baths. For the general heating of houses such an arrangement was, until about the third century A.D. exceptional, and Seneca, writing in the first century A.D. regards it as an enervating luxury. Several examples of Roman terracotta flue-tiles (No. 344) for the transmission of hot air are seen in the bottom of Cases 39, 40.

Shapes of Vases.—Case 40 contains a small type-series of the leading shapes of Greek vases, intended to teach the names current in archaeology (No. 345).

(306) Cf. Ant. du Bosph. Cimm., pl. 81, where a restoration of a table with a leg of this kind is shown; (301) The couch in fig. 113 is after the restoration of a couch from Boscoreale, given in Arch. Anzeiger, 1900, p. 178; (304) Cf. Furtwaengler, Olympia, IV., Die Bronzen, pls. 28, 34; (305) Cat. of Lamps, 137; (308) ibid., 1; (309) ibid., 66; (310) ibid. 97; (312) Journal of Hellenic Studies, XXVIII., pl. 33; (313) Cat. of Lamps, 390; (314) ibid., 1437; (318) Cat. of Lamps, 1435; (320) ibid., 1511; (323) Excavations in Cyprus, fig. 148, No. 4; (324, 325) Cat. of Vases, IV., F 259 and F 267; (338-339) Cat. of Bronzes, 2573-4; (343) Newton, Hist. Disc., II., p. 143.

On the Greek house generally, see Daremberg and Saglio s.v. Domus and B. C. Rider, The Greek House. On the Roman house, see Daremberg and Saglio, loc. cit., and Mau-Kelsey, Pompeii.

XI.—DRESS AND TOILET.

(Table-Case F.)

THE objects connected with the toilet in Case F are those accessories in metal and other materials that have been preserved. The actual fashion of the dress of the Greeks and Romans can be best studied elsewhere—in the Vase Rooms, the

Room of Terracottas, and the Sculpture Galleries. A few words only need be said here as to the principal varieties of costume.

Greek Female Dress.—The very singular and modern-looking dress of the Minoan ladies may be seen in the facsimiles of Cretan statuettes and carvings in the First Vase Room.

The earliest dress of women which is represented in the art of historical Greece is that which was known as the Dorian chiton, or tunic. It was an oblong sheet of woollen cloth, measuring rather more than the height of the wearer, and about twice the span of her arms. This blanket was folded as shown in the annexed diagram (fig. 129) The tunic then fell into position about the figure, leaving the arms bare, as in the illustration, which is taken from a toilet-box (E 772) in the Third Vase Room (fig. 130). The dress in its simplest form was now com-



FIG. 129.—DIAGRAM ILLUS-TRATING THE ARBANGEMENT OF THE DORIAN Chiton.

plete, but as one side of it was open, a girdle was usually worn to keep the edges together. At Sparta, where Dorian manners were



Fig. 180 .- THE DORIAN Chiton.

preserved in their primitive severity, the side remained open. Elsewhere it was partially or completely sewn up. About the beginning of the 6th century B.C. the Ionian chiton was introduced into Greece from Asia Minor, and became the ordinary undergarment of women, in Italy as well as Greece, throughout the classical period. It was in effect a loosely-fitting dress with wide sleeves, girt at the waist. Being of fine linen instead of wool, a mantle or wrap was worn over it to make up for the thinness of the cloth. This construction is plainly shown in a drawing on the inside of a cup (E 44) by the potter Euphronios, which represents a woman busy with the knot of her girdle (fig. 131). The material



Fig. 181-The Ionian Chilon,

was soft and heavy, yet thin and transparent enough to reveal the form of the figure beneath it. It is only in a dressing scene, such as this, that the Ionian chiton is represented alone. Otherwise a mantle (himation) was worn in addition. These mantles were of various shapes and sizes, though always rectangular, and their arrangement did not follow any fixed rule, Distinct fashions, however, in the wearing of the overmantle can be remarked at certain periods. Thus, when the Ionian dress first came into use at Athens, an extraordinary elaboration was cultivated, the folds being arranged with such precision as to suggest that the garment is not a rectangular wrap, but a made-up shawl artificially pressed and gathered. This style of dress is best known from a large series

of statues which were discovered in excavations on the Acropolis of Athens. They are relics of the city which was destroyed by the Persians in 480 B.C., and give an accurate date for the prevalence of the fashion. The type is represented in a statuette in the Bronze Room (fig. 132): the lady stands in an attitude of archaic severity, and holds up with her left hand the skirt of the soft Ionian chiton which is underneath the shawl.

The outer garment was afterwards larger than this, as well as more simply arranged. Often the whole figure was wrapped in the mantle, which was also drawn over the mouth and the back of the head. This heavy style was favoured in the fourth and third

eenturies s.c., and constantly appears in the most numerous products of that period, the terracotta statuettes from Tanagra and elsewhere. Fig. 133 is from one of these, and others in the Terracotta Room show very clearly the beautiful and varied draperies of the himation.

Greek Male Dress.—A dress worn in early times was a tunic



Fig. 192.—Greek Bronze Statuette, illustrating an Early Fashion of Women's Dress, 1:2.



Fig. 183.—Terracotta Statuette of a Lady of the Hellenistic Period. 1:2.

falling to the feet, with or without the mantle. It continued in use as a ceremonial and festal attire of elderly men, minstrels and charioteers. It is illustrated in a drawing of Peleus by the vase-painter Amasis (?) (fig. 134), in which the soft texture of the long white Ionian chiton is indicated by wavy lines, and the heavy mantle hangs stiffly across the shoulders. Subsequently the long tunic was discarded, and

either a short form of the same garment, which had been in use before for outdoor exercise, was adopted in its place, or the outer cloak was worn alone. The short tunic was worn as before by men engaged in active pursuits, and by boys, workmen and slaves. A common fashion of wearing it was to fasten the shoulder on one side only, so that the right arm and breast were free for violent movement. A series of statuettes in the Bronze Room represents the blacksmith god Hephaestos in this working garb (fig. 135). The ordinary costume of the citizen was the himation or a mantle

of smaller size. With this the right shoulder was usually left free, as with the tunic; it is the common dress of men on the red-figure Athenian vases (see the Third Vase Room), from one



FIG. 134.—
PELEUS WEARING
THE IONIAN
Chiton.

of which (E 61) the illustration is taken (fig. 136). Men of leisure or high rank affected a more elaborate arrangement of the himation, by which the whole body was enveloped and the free movement of the hands impeded. The statue of Sophokles in the Lateran Museum at Rome is a good example of the care which a cultivated man of



Fig. 135.—Bronze Statuette of Hephaestos, wearing the Sught Chiton, 2:5.

the fifth century bestowed upon the adjustment of this garment (fig. 137).

Other mantles were of various sizes and were distinguished by many names. The chlamys was the smallest, and differed from the rest also in shape, though its scheme was still rectangular. It was rather longer in proportion to its width, and was clasped round the neck by a brooch. Its origin was in Thessaly, where it was the cape of the native horsemen, and it continued to be used for this purpose in the rest of Greece. Young men were it especially when riding, and it was a light and convenient dress for travellers. A young

horseman on a cup by the painter Euphronios (fig. 138) has a gaily embroidered chlamys hung evenly across his shoulders, and underneath is seen the skirt of the short chiton.

Roman Dress.—The dress of Roman women was the same as that of the Greeks of the Hellenistic period, who are vividly portrayed in the terracotta statuettes (fig. 133). Their undergarment was the Ionian chiton, now called *tunica*, of which two were sometimes worn together, and the overmantle was the Greek himation, by its Roman name, palla.



Fig. 136. — Man wearing the Himation, (From a vase of Hieron.)



Fig. 137.—Statue of Sofhokles Wearing the Himation.

For men there was also a tunic similar to that worn by the Greeks; but in place of the himation the Roman toga was worn, a garment of entirely different shape. In the relief of a cutler's shop, which is exhibited in Case 41, the shopman wears the tunic without a belt, while the customer, who has just come in from the street, wears the toga as well (fig. 193). In that of the forge, in Case 48, both the smiths have the tunic alone, with but the right shoulders unfastened and the skirts girt up to the knee in Greek fashion (fig. 192; compare fig. 135). Yet the Roman tunic seems already to have departed from the Greek pattern in having sleeves, though only to the elbows. Sleeved tunics were not unknown to

the Greeks, whose slaves are often represented in this dress; but it was a foreign habit, and as such avoided,

The shape of the toga was roughly semicircular, the straight edge being about six yards long and the width in the middle about



Fig. 138.—A Horseman Wearing the Chlamys.

two yards, as in the diagram (fig. 139). The simplest mode of putting it on was to place one end on the left shoulder, with the straight edge nearest the centre of the body and the point almost



Fig. 139,-Diagram illustrating the Shape of the Toga.

touching the ground. The left hand would be just covered by the curved edge. The rest was then passed behind the back, over or under the right arm, and over the left shoulder again, so that the point hung almost to the ground behind. This was also a method

of wearing the Greek himation, and it is difficult to distinguish the two garments when so arranged; but a close examination will discover the sharp point and the curved edge in the case of the toga. At the end of the Republic and under the Empire, to which period most of the monuments belong, more elaborate fashions were developed, as in fig. 140, from a statuette in the Bronze Room.

We turn to the accessories of the dress and the toilet in Table

Greek and Roman Footwear.—The general distinction was that the Greeks were both sandals, and also boots or shoes. The



Fig. 140.—Bronze Statuetth of a Roman wearing Tunic and Toga. 1:2.

Romans were the boot, the calceus, but disapproved of the sandal.

Part of Cicero's charge against Verres was that he were sandals,
as well as other Greek dress.

The objects shown in Case F are either actual shoes and sandals or representations of them from works of art, such as fragments of statues; or applications of the device of a foot to the decoration of such things as vases, lamps, tripod-feet, etc.

The extant specimens include a Roman leather shoe (No. 344) of cut leather work, found in London; slippers from Antinoe in Egypt (No. 345), with coloured and cut leather work; a pair

of cork soles from Egypt (No. 346), the edges of which were formerly gilt. A well-preserved pair of soles is exhibited (No. 347). They are made of wood, divided at the instep, and plated with bronze, held in place by iron nails. These appear to be of Etruscan origin, as several examples have been found at Vulci (Mus. Etr. Vat., I.,



FIG. 141 .- FOOT OF THE HERMES OF OLYMPIA (No. 349). 1:9.

pl. 57, fig. 7). The sandal in its simplest form, as in the vase B 587 (No. 348), consists of a sole attached to the foot by thongs passing between the great and second toes, and round the heel. The arrangement of the thongs gradually became more elaborate, with the result that the uncomfortable separation of the toes could be

avoided. In the case of the foot of the Hermes of Olympia (No. 349; fig. 141) there is no toe-thong, but only a reminiscence of the ornament from which it formerly started. An undershoe or sock now became possible, and the shoe and laced sandal in combination (cf. the statue of Mausolos, about 350 B.C.) became highly elaborate.

See also the cast of a relief in the Third Graeco-Roman Room (No. 350) and the feet in marble and bronze. In effect, the result was not greatly different from the Roman military boot (caliga) bound up the leg with thongs.

A simpler boot or shoe of modern pattern was also in use. In its plainest forms it represents the Roman boot (calceus). Several examples (No. 351) are shown in this case. See also a vase (No. 352) in the form of a modern lace-boot. The nails on the sole are arranged so as to impress alpha and omega, and the mystic Fig. 142.—BRONZE STATURITE symbol of the swastika on the ground. A delicate gold model of a boot



OF A NEGRO SLAVE CLEANING A Boor (No. 355). 1:2.

(No. 353) has (ΤΑΤΟΥ) πατοῦ " walk ! "(?) on the sole.

shoe has been found in Egypt, impressing at every step the invitation ΑΚΟΛΟΥΘΕΙ (" follow! ") The shoemaker at work in his workshop is seen in the fifth century Kylix (E 86; No. 354).

He is in the act of cutting the leather with the semicircular knife of the form still in use.

In conclusion, attention should be drawn to the bronze statuette (No. 355; fig. 142) of a kneeling negro slave cleaning a boot.

On Greek Dress, cf. Lady Evans, Greek Dress; E. B. Abrahams, Greek Dress; on Roman, Heuzey in Rev. de l'art ancien et moderne, 1897; Daremberg and Saglio, s.v. Pallium, Peplos, Toga. On shoes and sandals, see ibid., Calceus, Caliga, Solea.

Fibulae.—Although the straight pin (cf. p. 137) was used for fastening the dress, fibulae—that is, brooches on the safety-pin principle—were most commonly worn. This method of fastening was of early origin, and its use can be traced in all parts of Europe, but, curiously enough, it seems to have been unknown in Egypt and the East. The fibula experienced in the first centuries of its

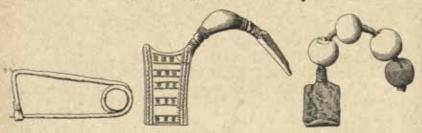


FIG. 143.—FIRULA OF THE MYCENAEAN PERIOD (No. 356). 1:4.

Fig. 144.—Greek Fibula with Geometric Decoration (No. 357). 1:2.

Fig. 145. — Early Greek Fibula (No. 358). 1:2.

existence and in the hands of different peoples so many variations and developments of form, that these can be classified in distinct types, and their presence in tombs and other deposits affords valuable evidence of the date and origin of the objects with which they occur.

The reader who wishes to pursue the study of the fibula with more detail is referred to drawers 1-8 in Case D of the Bronze Room, and to the collections in the Iron Age Room. In this case of toilet accessories only a few of the typical forms are shown.

The simplest form of fibula is represented here by examples excavated at Enkomi in Cyprus, which belong to the end of the Bronze Age, before 1000 B.c. (No. 356; fig. 143). Starting from this primitive form, the history of the fibula is one of progressive development and elaboration. It must be observed in the first place that the whole class of fibulae may be divided into two great

groups—viz., an older group, in which the coiled spring is unilateral, that is, a plain spiral, between the bow and the pin; and a younger group, in which the spring is bilateral, that is a symmetrically disposed double coil, on each side of the pin. We deal first with the Unilateral group. In Greek regions the development of the form, fig. 143, was mainly a development of

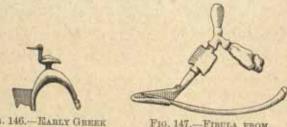


Fig. 146.—Early Greek Fibula (No. 359). 1:2.

Fig. 147.—Fibula From Cyprus (No. 360). 1:2.

the catchplate in a vertical plane—that is in the plane of the bow of the fibula. This plate, often with incised patterns (Fig. 144; No. 357) was a characteristic of the period of geometric art in Greece. Two very large examples are shown above Case D in the Bronze Room. The plainly curved bows may have some further ornament, such as beads strung on them (No. 358; fig. 145) or imitation bead patterns, or a figure of a standing bird (No. 359; fig. 146). All these examples come from the island of Rhodes.

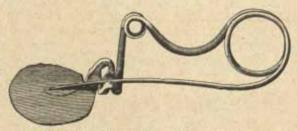


Fig. 148,-Italian Fibula (No. 361). 1:2.

Some from Cyprus are quite distinct, and seem to have no connection with the others (No. 360; fig. 147). In the classical period the fibula was little used in Greece, in consequence of modifications in dress which rendered such fastenings unnecessary.

In Italy, on the other hand, the fibula flourished exceedingly. The plain wire original, such as that given above (fig. 143) was soon elaborated. In the catch-plate it developed either horizontally,

that is, by a beating out of the plate in a plane at right angles to that of the bow (No. 361; fig. 148) or longitudinally, by the elongation of the catch-plate as in Nos. 362-3 (figs. 149-150). At the same time developments were taking place in the bow. It became larger (fig. 149), and then was hollowed out to save weight and material (fig. 150), and assumed forms known as leech-shaped and boat-

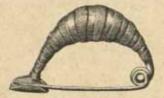


Fig. 149.—Italian Fibula of Leech Shape (No. 362). 1:2.



Fig 150,—Italian Fibula (No. 363). 1:2.

shaped—and these threw out lateral knobs and ornaments (fig. 150), often of great elaboration. Alternatively, the bow makes a second convolution (fig. 148), and may be adorned with horn-like pairs of projections (No. 364).

An independent form is chiefly found at Hallstatt, in cemeteries of the early European Iron Age. In this, two, or perhaps four, spiral coils make the whole decoration of the brooch (No. 365, fig. 151).

The Bilateral form.—The fibulae with the spring coiled on each side of the central bow came into use about 400 B.C., in the

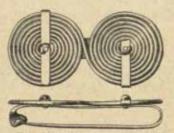


Fig. 151,—Fibula of Hallstatt Type (No. 365). 1:2.



Fig. 152.—Fibula of La Têne Type (No. 366). 1:2.

late Iron Age civilization, called the La Tène period, from the site on the Lake of Neufchatel, where the richest finds have been made. Together with the introduction of the double spring, there is a continued elongation of the catch-plate, which is turned up as in No. 366 (fig. 152) and attached to the bow as in No. 367 (fig. 153). Later its structural origin is forgotten, and it becomes a solid framework (No. 368).

The fibula of the Roman Empire was more like a brooch than a safety-pin, if a distinction can be drawn between the two. The bow became broad and heavy, while the pin was often made separately and attached by a hinge. But it shows a strong connection with the La Tène types, especially in the double coil of the spring.

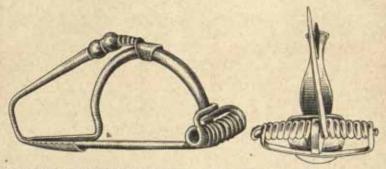


Fig. 153.—Fibula of La Têne Period (No. 367).

Fig. 154.—Fibula from below showing the Bilateral Spring (No. 369).

which was often protected by a sheath (No. 369; fig. 154). Even when the spring went out of use, the fibula retained this cross-bow shape (No. 370; fig. 155). The elaborate bronze brooch in the form of a ribbed band passing through a ring (No. 371; fig. 156) is stamped underneath with the name of the maker (VLATI), in

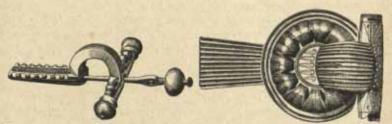


Fig. 155.—Roman Fibula of Cross-Bow Shape (No. 370), 1:2.

Fig. 156.—ROMAN FIBULA (No. 871). 1:2.

the manner of the Roman pottery. Enamel or metal inlay was liberally applied in the decoration of the later brooches. A large collection with great variety of shapes is exhibited. The effect of the bright colours is best seen in the big round pieces which were popular in the third and fourth centuries A_iD. (No. 373; fig. 157). Animal forms were also common at this time, and were similarly

decorated with inlay (No. 374; fig. 158). These types were widely spread over the western provinces of the Empire, and continued in use among the nations who succeeded to the Roman power.

Somewhat akin to the fibulae are the strap buckles, which appear to have come into use at a late period only. A group, nearly of the modern form, is exhibited (No. 374*).



Fig 157.—Late Roman Enamelled Figura (No. 373). 1:1.

Fig. 158.—Late Roman Enamelled Fibula (No. 874). 1:1.

Jewellery and Ornaments.—Jewellery in gold and silver can be best studied in the Room of Gold Ornaments. The examples shown here are chosen as types of the forms, rather than as choice pieces.

Bracelets.—A favourite form of bracelet or armlet was modelled in imitation of a snake coiled round the arm or wrist. See the small silver bracelet of about the fourth to third century B.C., inscribed with the names of its owner Kletis (No. 375; fig. 159).

The same design is also used for fingerrings (No. 376). Snake-coils of a large size were also worn on the legs, as shown by a small terracotta torso from Ephesus, which has this ornament on the thigh (No. 377). This torso also has a chain of beads passing over the shoulders and crossing between the breasts. Such an arrangement is common on figures in vases of the fourth to third century B.C.

Finger-rings.—The rings are generally set with an engraved gem or bezel; some have revolving scarabs which are

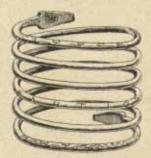


Fig. 159.—Bracelet of Kletis (No. 375).

pierced through the middle (No. 378), another has a gold intaglio portrait of the Empress Faustina (No. 379), while an enormous bronze ring has the design cut in the bezel itself, a double head of Hermes and a Seilenos (No. 380). These examples are in bronze and of poor workmanship, but they serve to illustrate the general style of ancient rings. A great number in gold and silver, arranged

in order of date, are exhibited in the Room of Gold Ornaments, where the subject can be more adequately studied. The intaglio designs were for use in sealing, which was more commonly practised by the ancients than it is now. Others have a purely decorative purpose, and were worn in profusion. The bronze hand (No. 381) has rings on the upper joints of the fingers, in accordance with a common fashion of the Roman Imperial period. Fragments of bronze and terracotta also show the fashions of wear. The Greeks of an early period did not usually wear ornamental rings, although signets were in constant use, and it was not until the fourth century B.C. that rings were worn for display. In Rome there were class restrictions on the use of the gold ring, but these were lessened as time went on, until in the late Empire they practically disappeared. Betrothal rings were customary among the Romans, but in Greece there is

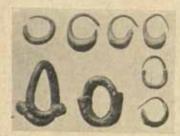


FIG. 160.—GREEK BRONZE EAR-BINGS OF EARLY DATE, FROM EPHESUS (Nos. 382-3). 3:4.

no record of their use. A gold betrothal ring is shown in Case 53 (No. 639).

Earrings.—The bronze earrings are from the site of the temple of Artemis at Ephesus, and are earlier than the sixth century B.C. (fig. 160). Two types are represented; the swelling hoop of wire, which hung like a liquid drop (No. 382) and the heavy coil, which was suspended from a ring (No. 383). For a very great collection in the Room of Gold

variety of earrings, see the Ornaments.

Bullae.—The flat bronze pendants (No. 384), with a circular receptacle in the middle, are bullae. These are ornaments of Etruscan origin, introduced early into Rome. They were designed to contain amulets and charms, and were worn principally by freeborn Roman boys, and occasionally by domestic animals.

Necklaces.—The necklaces here exhibited (No. 385) consist of beads of painted terracotta and glass. See also the imitation jewellery in terracotta, in the Terracotta Room, Table Case C. Those of more precious materials are in the Gold Ornament Room. Some fragments of terracotta show the Cypriote fashion of wearing numerous necklaces together (No. 386).

Studs, etc.—Links and studs of Roman times (No. 387) bear a striking resemblance to the modern articles, as does a coiled hook-

and-eye which dates actually from the Bronze Age Period (No. 388). A peculiar fastening is seen in the double hooks which probably served to loop together the two sides of a shawl or cloak (No. 389). They are probably of Roman date, and come in some instances from the province of Gaul.

Pins.—Some of the pins may have been used equally well to fasten the clothing or to adorn the hair; but others were evidently designed to serve only one of these purposes. Those in carved ivory are plainly hair-pins (No. 390; fig. 161). The roughly worked



Fig. 161.—Roman Ivony Hain-Pins (No. 390). 1:2.



FIG. 162.—BRONZE AND SILVER PINS, OF MYCHAEAN AND GREEK PERIODS (Nos. 391-6). 1; 2.

busts of Roman ladies of the Empire indicate the period to which the series belongs. The little statuette is intended to represent Aphrodite wringing the water out of her hair, after rising from the sea. A fine gold pin similarly modelled is exhibited in the Gold Ornament Room (Case K; No. 3034). The ivory hand, which holds a cone and is encircled by a serpent, has some magical significance, like the bronze votive hands in Case 106 (p. 57).

The metal pins are less elaborate. The simplest shape was straight and headless, a direct copy of the natural thorn which first suggested the idea. A very primitive head is seen on the small bronze pin which is bent round at the top (No. 391; fig. 162a). It was found in the island of Kalymnos, and belongs to the pre-Mycenaean age, say 2000 B.C. A silver pin is similarly bent, but as it has a head as well, is not so early (No. 392; fig. 162b). Another prehistoric type is represented by several bronze pins which were excavated from tombs of the late Mycenaean age at Enkomi in Cyprus (No.393; fig. 162c). These are pierced with eyes in which chains were fastened to secure the pins to the dress or to each other. Three pins crowned by large ivory knobs come from the same site and belong to the same period (No. 394; fig. 162d). The bronze pin with a



FIG. 163.— A WOMAN IN THE DOBIAN Chilon, SHOWING THE PIN ON SHOULDER.

head made of several discs is Greek of the sixth century B.C., as it appears in the paintings of the François Vase at Florence, which is an Attic work of that date (No. 395; figs. 162e, 163). Another classical type is the silver pin with a moulded head (No. 396; fig. 162f). Others of less remarkable designs cannot be definitely dated.

Toilet.—In the most personal aspects of life and manners there is least room for change, for in the course of ages it is not man that has altered, but his surroundings; and the study of such intimate details reveals a close similarity between the ancient and the modern worlds.

Combs.—To begin with the more necessary implements, the combs go back to a high antiquity. An ivory comb from Enkomi in Cyprus dates from the Mycenaean age (No. 397; fig. 164). It is of simpler form than later combs, having only one row of teeth. The others are of the Greek and Roman periods, and are made both

of wood and bone. The usual pattern is that of a modern tooth-comb, with a row of teeth on each side of the body—one coarse and one fine. There are wooden examples from Kertch, in South Russia (No. 398). More elaborate is the ivory piece, which is decorated with reliefs, a Gryphon and a lion on one side and two cranes at a fountain on the other (No. 399. The original is in the case of Ivories, L). Another of good Roman period is carved by an amateur hand with an inscription, doubtless in compliment to the lady to whom it belonged (No. 400; fig. 164). The legend reads MODESTINA-V-H-E-E—the four letters at the end being perhaps abbreviated epithets of the fair Modestina, $V(irg\hat{o}) H(onesta) E(t) E(gregia)$. A different type appears in the triangular pocket-comb,

which fits into a protecting case (No. 401; fig. 164). This belongs to the end of the Roman Empire, the fourth century A.D., and may already show the influence of barbarian art. Similar combs were brought to England by the Danes, and some of them which have been found at York and elsewhere are exhibited in the British and Mediaeval Department.

With the combs is a brush of vegetable bristles from an Egyptian rubbish heap of a late period of the empire (No. 402).

Toilet Boxes. - Other relics of the dressing-table are the toilet-boxes and scentbottles. There is a Greek toilet - box from Naukratis still coloured by the rouge which it contained (No. 403); and another has a carved wooden lid in the shape of a woman's head of great beauty (No. 404). A leaden box was found in a Greek tomb at Halikarnassos (No. 405). Another was given by Kratylos of Aegina to Eulimine. The inscription, the modern turn of which is perhaps not free from suspicion, describes it as a "slight token of respect from a certain small Aeginetan" (No. 406; fig. 165).1 Other boxes of bronze and ivory date from the Roman period. Most of the wooden boxes are



Fig. 164.—Ivory Combs, of the Mycenaean and Roman Periods (Nos. 397, 400, 401). 1:3.

carved in fantastic or frivolous shapes: a swimming duck, a crouching boar, and a shoe (Nos. 407, 408, 409). These are divided into compartments for the various powders, and some blocks of paint are still preserved. For liquid ointments there are an alabaster box (No. 410) and three bottles of the same material and remains of a leather bottle with its cork (No. 411). An Etruscan bronze cista, which stands on three human feet, contains a set of movable tubes, each for a different unguent (No. 412). The lid of this receptacle was crowned by the small bronze statuette which

¹ Σμικρού τινος Λίγινήτου ένδεές είμι ένδειγμα λατρείας.

stands beside it. Besides cosmetics for the complexion, the toiletboxes may have held tooth-powders, for which there are many receipts in the works of ancient writers on medicine.

Mirrors.—For mirrors the ancients were at a disadvantage. The use of glass was known, but was not common, and the ordinary



Fig. 165.—Toller Box of Eulimine (No. 406).

reflecting medium was a sheet of burnished metal. There are, however, two genuine looking-glasses—one in a leaden frame, from Olbia (No. 413), and the other set, with several fragments, in a plaster slab, from Gheyta, in Egypt (No. 414). The glass was probably backed with foil, and it is remarkable that the reflectors are convex, so that the image must have been distorted. A similar surface is attempted on the square sheet of metal, which is glazed 415).

with a vitreous enamel (No. 415).

The more usual metal mirrors have two principal forms: a circular reflector, mounted on a handle like the modern hand-glass, which is represented by a specimen in silver from Naukratis (No. 416), and a similar disc enclosed in a folding box (No. 417). Both these varieties were often decorated with engraving. See No. 417, a

mirror from Hermione, with an engraved design of Aphrodite and Eros. In the Bronze Room there are large collections of all types. A small pocket-mirror in this Case has on one side of the bronze box a head of Nero, and on the other the god Dionysos standing by a vine (No. 418). The disc is silver-plated, like most of these examples. Two similar boxes have been turned out of large

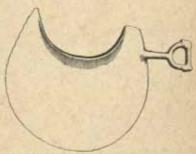


Fig. 166.—Bronze Razor of Primitive Shape (No. 421). 1:2.

brass coins of Nero (No. 419). A fragment of a silvered mirror from Amathus in Cyprus has a palm-tree engraved on its face (No. 420). Though the design indicates that this side is the front, yet the reflector was the convex back, and thus, in a spirit quite foreign to Greek art, the purpose of the thing was subordinated to its decoration.

Razors.—The razor is another toilet instrument which existed in the earliest times. No prehistoric specimens are in this collection, but a primitive shape is represented by two circular blades with

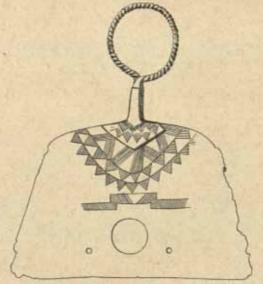


FIG. 167.—BRONKE RAZOR FROM ATHENS (No. 422). 1:2.

stirrup-like handles (No. 421, fig. 166). Others are of square spade shape, with a twisted loop handle and a hole in the blade. One of these is from Athens (No. 422; fig. 167). A third type is shown in



Fig. 168.—Bronze Razor from Sardinia (No. 423), 3:5.

three razors of Phoenician origin (from Sardinia and Carthage), with long hatchet blades (No. 423; fig. 168). These are ornamented with engraving and have handles in the shape of swan's heads. All are made of bronze, and were no doubt capable of taking an edge

so keen as to render them far more efficacious than their present appearance would suggest.

Miscellaneous Toilet Implements,—Next to the razors are placed various tools of which the functions are easily understood. There are several nail-files with a roughened surface, and a smooth



Fig. 169.—Bronze Nail-File (No. 424). 1:2.

notch for polishing (No. 424; fig. 169). Two of these are combined with ear-picks, which were in general use at Rome. They have a minute bowl at the end of a slender arm. A very elegant ear-pick, which has a leaf-shaped scraper at the other end, is made of silver (No. 425; fig. 170). Others end in a sharp point, which may have been



Fig. 170.—Silven Ear-Pick (No. 425). 3:5.

used either for a tooth-pick or in emergency for a *stilus* pen (cf. p. 199). Another ear-pick is combined with a pair of tweezers and some other tools now lost (No. 426). The tweezers were used for plucking out such hairs as Roman fashion deemed unsightly.

For Fibulae, see Catalogue of Bronzes, and Guide to Antiquities of Early Iron Age (Dept. of B. & M. Antiqs.); (375) Cat. of Jewellery, 2775; (406) B.M. Inscr., 947; (420) Excavations in Cyprus, fig. 149.

XII.-DOMESTIC ARTS.

(Table-Case G.)

In this Table Case, under the general heading of "The Domestic Arts," objects are exhibited connected with the house industries of spinning, weaving, and sewing, together with various groups of objects connected with home life, such as locks and keys, scals, knives, etc.

Spinning and Weaving.—(a) Preparation of yarn.—The process of spinning is clearly seen in the accompanying drawings

from Greek vases of the fourth and fifth centuries exhibited in this Case (Nos. 421-2; figs. 171-2). In each, a woman is holding

up in her left hand the distaff, a rod which is thrust through a bunch of unspun wool. With the fingers of her right hand she is twisting fibres drawn from the wool. The yarn is attached below to the top of the spindle, a rod of wood or metal with a disc (whorl) near the bottom to assist the rotation. When some quantity of yarn had been twisted it was wound round the body of the spindle and hitched into a hook at its upper end (see figs. 171, 173), to prevent it from unwinding. The twisting process was then recommenced. An impressive description of the ancient spindle is given by Plato in the vision of Er at the end of the Republic,1 where he likens the axis of the universe to the shaft of a spindle



Fig. 171.—Woman Spinning (No. 421). Ht. of Vase 82 in.

suspended by a hook of adamant, and the revolving starry heavens to a whorl made up of eight concentric rims, fitting one into the



Fig. 172.—Woman Spinning (No. 422). Ht. of Vase 41 in.

other like boxes. Two bronze spindles (No. 423) are seen in the Case and are illustrated on either side of fig. 173. In the same

figure are shown four ivory whorls from spindles (No. 424). Before the wool was placed upon the distaff it appears to have been rubbed, with a view to the separation of the fibres, upon an instrument known as the epinetron or onos. This was semi-cylindrical in form and was placed upon the knee. Several examples in terracotta had long been known, and were explained

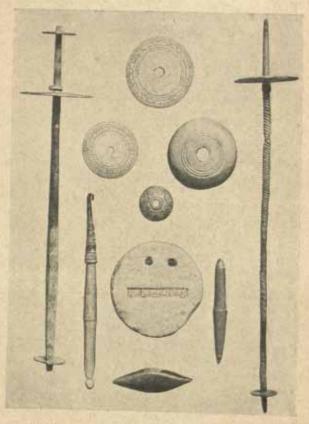


Fig. 173.—Spindles and Whorls, Shuttle and Loomweight. 2:5.

with little plausibility as covering-tiles. One, however, was found with a painted design which first gave the clue to its real use (Fig. 174). One of these epinetra B 96 (No. 425) is exhibited in this Case, together with a fragment of a second. Other examples are to be seen in the Second Vase Room (Cases 24 and 25), and one of these is illustrated here (No. 426; fig. 175). A miniature example

was found with the girl doll seated in a chair, exhibited in Table-Case J with the other dolls (p. 195, fig. 234, below).

(b) The Loom.—The only kind of loom in use in Greek and Roman times was probably the upright loom. A good idea of its

form is obtained from the illustration (fig. 176), taken from a Greek vase-painting¹ of the fifth century B.C., representing Penelope seated beside the loom, with one of the suitors or Telemachos before her. The primary part of the loom is the wooden frame (jugum) resembling two posts with a cross-bar. Near the top is a roller, about which the threads of the warp and the finished cloth are wound. The threads of the warp hang downwards,



Fig. 174.—Woman with Epinetron on Knee,

strained by weights attached to their ends. The row of nine rods fitted into sockets in the top framework is probably for holding the balls of different coloured wool used in the weaving. Coloured patterns

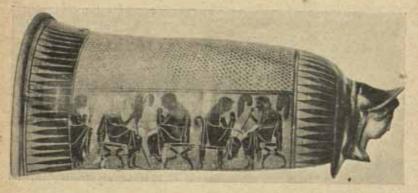


Fig. 175.—Epinetron or Spinsing Instrument (No. 426). L. 144 in.

are woven towards each selvedge of the fabric. The band of winged figures must be regarded as a piece of embroidery. (For tapestry weaving see below.) The two horizontal rods lower down are the canons, which effect the alternation of the threads of the warp. It may be noted that the threads are alternately long and short



FIG. 176.—PENELOPE AT THE LOOM.

at the lower end, so that the canon would be inserted correctly with great ease. The loom weights, which hang at the bottom.



Fig. 177.—Loom Whight (No. 428). 2:3.

closely resemble in form the sets (No. 427) of pyramidal terracotta and lead weights in this The terracotta discs (figs. 173 and 177), which are pierced with two holes and sometimes have a stamped design, are also probably loomweights. No. 428 (fig. 177) has a design of two dolphins plunging into the sea; No. 429 (fig. 173) is stamped with a name-Kleodamos. As a loom weight was needed for every thread of a warp; it is not surprising that they are found

in great numbers. Possibly the small bronze object (No. 430) seen at the bottom of fig. 173 may be an ancient shuttle, for passing the thread of the woof to and fro in a horizontal direction, alternately

before and behind the threads of the warp. Afterwards they were driven close together by the batten (σπάθη), a possible example of which is the toothed bone object seen in this Case (No. 431).

Various specimens of ancient cloth are shown here. A piece from the Crimea (No. 432), with pretty geometric patterns in black on a light ground, and a large fragment from an Egyptian tomb (No. 433), inscribed in paint "Diogenes, who was a patcher in

his lifetime," 1 may be specially

mentioned.

The art of tapestry weaving was highly developed during the later Roman Empire, especially in Egypt. See a fragment from Antinoe, fourth to fifth centuries A.D. (No. 434). The art of embroidery, that is, of working



FIG. 178. - BRONZE THIMBLE (No. 486). 2:3.

with a needle on an already woven fabric, was practised from very early times. See the small vase with a woman seated working on a four-sided embroidery frame, supported on her lap (No. 435).

The objects illustrating ancient sewing, etc., speak pretty well for themselves. Such are

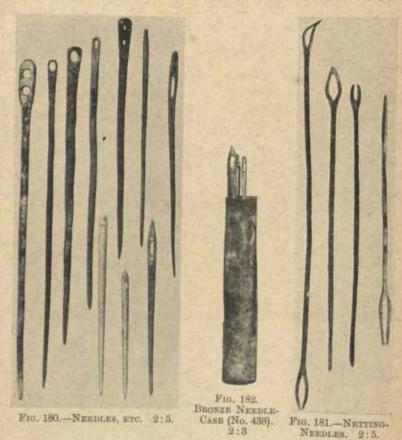


Fig. 179 .- IRON SCISSORS FROM PRIENE (No. 437). 2:3.

the bronze thimble (No. 436; fig. 178), the iron scissors (No. 437; fig. 179), and the series of pins, needles, bodkins, netting needles, etc. (figs. 180, 181). The needles and pins are arranged in the Case according to their supposed order of development, starting from the thorn or bone fragment with a hole pierced in it.

The Roman bronze needle-case from France (No. 438; fig. 182) is worthy of note. Similar cases were used by Roman surgeons for their instruments.

(421) Cat. of Vases, III., D 13; (433) Petrie, Hawara, pl. viii., 2;
(435) Journ. of Hellen. Stud., xxxi., p. 15; cf. Blümner, Technologie,



2nd ed., pp. 220, 221; (438) Cf. Deneffe, La trousse d'un chirurgien gallo-romain, pl. 2.

On the ancient loom, see Daremberg and Saglio, s.v. Textrinum; Blümner, Technologie, I., 2nd. ed., p. 135 ff.

Cutlery.—At the east end of Table-Case G will be seen a series of Greek and Roman knives, ranging from the long Mycenaean hunting knife from Ialysos in Rhodes (No. 438) to the numerous

Roman pocket-knives with bronze handles, frequently in the form of animals (No. 439). The iron blade has often rusted away, as will be seen from the illustration (fig. 183), which gives a selection of these knives. (a) represents a handle in the form of a panther catching a deer, (b) one in the form of a ram's head, with a leg projecting below to assist the grip, (e) a hound catching a hare. The iron blades are still preserved in the case of (c) and (d). The first, from Nîmes, has a bronze handle ending in a woman's head; (d) has

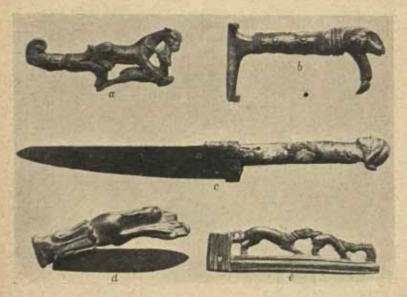


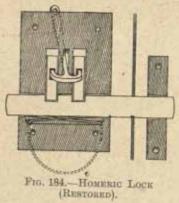
Fig. 183,-Roman Knives and Knipe-Handles (No. 439), Ca. 1:2.

a handle of the same material in the form of a hound catching a hare.

For two reliefs of a cutler's forge and a cutler's shop, see below, pages 156, 157.

Locks and Keys.—The earliest and simplest form of door fastening used by the Greeks seems to have consisted of a bar of wood set behind the door, and made to slide into a hole or staple in the sidepost. An advance on this arrangement was soon made, when the bar was pulled to by a strap from the outside, and could be opened again from the outside by means of a key passed through a hole in the door, and adapted to lift up the pegs which held the bar fast in position. This is the type of lock mentioned in

the Odyssey,1 where Penelope releases the strap from the hook to which it was fastened, puts in the key, and lifts the pegs, " striking them fairly." The key for such a lock will probably have resembled



No. 440, marked a in fig. 186 below, the working of which is shown in the sketch (fig. 184).2 It was passed narrow-wise through the central slot, then turned, and drawn back to as to lift up the pegs fitted in grooves in the side slots. The bar below would thus be freed and could be drawn to and fro by the strap. This type of lock is still sometimes used in the East.3

The majority of Roman locks, though of a more complicated

structure, are made on the same principle, as may be seen from the ancient lock No. 441 (probably from Pompeii) here exhibited,

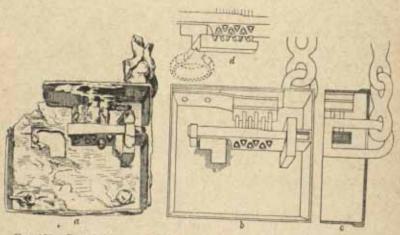


Fig. 185.—Roman Lock, with Restorations showing Original Mechanism AND USE OF KEY (No. 441). 3:7.

1 xxi, 46 ff.;

αὐτίκ ἄρ' ή γ' ἱμάντα θοῶς ἀπέλυσε κορώνης, έν δέ κληίδ' ήκε, θυρέων δ' ἀνέκοπτεν άχησε, άντα τιτυσκομίνη.

After Jacobi, Das Römerkastell Saalburg, p. 469, fig. 74, 1, 2 (modified).

See Ann. of Brit. School at Athens, IX., p. 190 ff.

together with model lock of the same type (No. 442) and a diagram showing its original arrangement (fig. 185a-d). Here the bolt has been shot through the end link of a chain, part of which remains (fig. 185c). It is secured by pins, the ends of which fit into a series



Fig. 186.—ROMAN KEYS. 2:3.

of perforations in the bolt and are kept down by a spring. The bolt was released by a key fitted with teeth corresponding to the perforations (fig. 185d). The key lifted the pins out of the holes and took their place. The bolt was then drawn aside, as the key was moved along the horizontal slot. On account of the double

movement, first vertical and then horizontal, the keyhole is in the shape r. Several bolts, keys (e.g. No. 442; fig. 186c), and door plates for locks of this type are exhibited in this Case. Three keys from



Fig. 187.

ROMAN PADLOCK,
WITH KEY BUSTED
IN IT (No. 445).
Ca. 1:3.

Syria are shown (No. 443) fitted into the wards of the actual bolts for which they were made. Notice the projections on the ring of key c, which were used for shooting a supplementary bolt, a common device in Roman locks.

The modern type of lock, in which the key works on a pivot and moves the bolt backwards and forwards by a rotatory movement, after passing through a series of wards, was also known to the Romans. This is proved by the existence of several Roman keys solely adapted to a lock of this character (e.g., No. 444; fig. 186d). Such keys are frequently found combined with finger-rings, a convenient method of lessening the danger of loss. We may conclude that this type of key was a favourite one for use with small padlocks.



Fig. 188.—ROMAN PADLOCKS (Nos. 446, 447). 1:1.

Padlocks of Roman date are common. In this Case three of a barrel form are shown. One (No. 445; fig. 187) has the key still rusted in it. The padlock has traces of a chain attachment at one

end, and was probably kept hanging to a doorpost, while the bolt was shot into the end link of a chain attached to the door. Two other Roman padlocks illustrated (fig. 188) are more ornamental in character. One (No. 446) is in the form of a circular box with hinged handle, the free end of which was fastened by pin-bolts within the box. There is also a secret catch underneath. The other padlock (No. 447) is furnished with a chain attached to one side of it. The last link of the free end was fastened inside the box, the lid of which was closed with a secret catch. The head on the

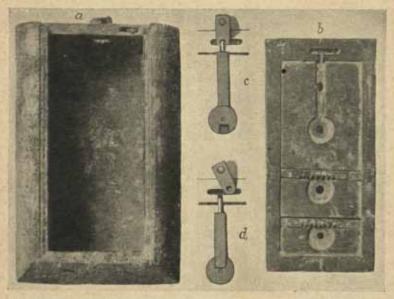


Fig. 189.—Bronee Strong-Box, with Cover seen on Inner Side. c and d explain the working of the Bolt (No. 450). 1: 2.

cover is that of a Sphinx, a hint that the riddle of opening was not easy to solve. A hole in the floor of the box makes it probable that it was fastened to the object to be secured.

Other objects deserving mention are the keys for raising latches (No. 448; fig. 186b), and the combined ward and pin keys (No. 449; fig. 186c), and also the very interesting Graeco-Roman bronze strong-box from Tarentum (No. 450; fig. 189). The box (a) has a sliding lid (b), originally furnished on the inside with four separate fastenings. Two are horizontal bolts shot home by turning toothed discs from the outside; the third

is the catch seen at the end, which was held fast in the slot by a phi-bolt (c). This bolt was moved by a disc on the outside of the cover, and was itself locked by the turning of another disc behind it; it could only be drawn back when the slot in that disc was brought into line with the bolt, as indicated in design d of the figure. The small catch on the right at the end of the box fell into position automatically when the cover was closed, and could only be unfastened by turning the box on its side. The outside of the lid shows four similar circles, over which were the revolving or sliding discs now lost (fig. 190).

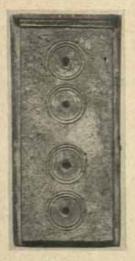


Fig. 190.—Cover of above Strong - Box (Outer Side). 1:2.

Seals-These were closely connected with locks in ancient life, and often in fact took their place, Aristophanes makes the women complain that not only did their husbands carry the patent Laconian key, but that they also (at the instigation of Euripides) carried very complicated "worm-eaten" seals,1 not likely to be forged. Several objects in this Case illustrate the use of seals. When a man wished to secure an object he tied it up with string and put a lump of clay over the knot, impressing the clay with his signet. Such impressions are seen on several baked lumps of clay here exhibited. One large lump (No. 451) has no fewer than eight Roman seal impressions (several from the same seal), while the knot of the cord remains embedded in the clay underneath. This Case also contains examples (No. 452)

of Roman seal-locks (one in wood and several in ivory). The wooden lock, found in Egypt, is shown in fig. 191a, where its probable use is indicated. The lock was suspended from the doorjamb on a pivot passed through the small hole seen at the left end. The loop or staple attached to the door was then inserted in the groove, and the movable cover slid through it, as shown in the figure. The clay or wax was next pressed into the hole behind the lid, and sealed with a signet (as in fig. 191b, top view). The door could then not be opened unless the seal or the lock was broken. Such a lock would be very useful to prevent the often-mentioned pilfering by

slaves.\(^1\) Another interesting class of objects is that of the seal-boxes (No. 453). They are small bronze boxes with hinged lids, and resemble in form a pear-shaped or circular lamp. Each box has a small slot cut out on either side, and three or four holes pierced in its floor. The cover not infrequently has a design in relief (such as might be impressed from a seal), e.g., a frog (fig. 191d). The

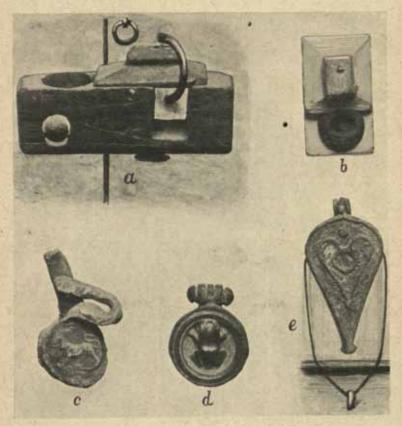


Fig. 191.—SEALS AND SEAL-LOCKS (Nos. 452-4). 1:1.

illustration (fig. 191e) shows a suggested method of using them. The box is fastened by studs (passed through the holes in its floor) to the lid of the object to be secured. The string is inserted in a staple on the front of it and tied in a knot, which is placed in the

¹ Cf. Plin., H.N. xxxiii. 26: nunc cibi quoque ac potus anulo vindicantur a rapina.

seal-box and held fast by wax stamped with a seal. The projecting stud-heads would assist the natural tenacity of the wax, so that it would be impossible to remove the string without breaking the seal. Other arrangements are, of course, possible. For instance, the staple might not be used, and string might instead be tied round the object to be secured. The ends would be brought into the seal-box by two of the holes, there be secured by the sealed knot, and would leave it by two other holes.



F10. 192.—ROMAN CUTLER'S FORGE (No. 457). Ht. 182 in.

Another form of seal was that consisting of two lead discs connected by a loop (No. 454). The discs were pressed together and stamped on the outer surfaces with a design (as in fig. 191c). In this way the loop was securely attached to the object to be protected. Probably these seals were attached to merchandise by manufacturers or customs officials, just in the same way as lead seals are used in our own time. Their use appears to have been confined almost, if not entirely, to Sicily.

A variety of labels in lead, bronze, and ivory is shown in this Case. They generally have a hole for attachment, and bear the name and initials of their owner. The bronze label (No. 455), to which a portion of the iron object to which it was attached still adheres, has the name of the owner, C. Junius Hermetus, inscribed upon it. A second label has the name of another member of the family, Decius Junius Hermetus (No. 456).

Seals were applied by the use of signet rings of gold, silver, or bronze with the impression of the seal cut in the metal or on a gem set in the bezel (see p. 136). The engraved ring was usually



Fig. 193.—Roman Cutlen's Shop (No. 458). Ht. 191 in.

employed for purely personal purposes, such as the sealing of a letter or document, and the device of the seal was more or less ornamental. For the somewhat allied group of bronze tablets, used for marking objects, rather than securing them, see p. 192.

"(441) On ancient locks, see Diels, Parmenides, p. 117 ff.; Fink, Der Verschluss bei den Griechen u. Römern; Daremberg and Saglio, s.v. Sera; (453) Cf. Num. Chron., 1897, p. 293 ff.; (454) Cf. Annali, dell' Inst., 1864, p. 343 ff.; and Mon. dell' Inst., VIII., pl. xi.

XIII-XVIII. TRADE AND THE INDUSTRIAL ARTS.

(Wall-Cases 41-53, Table Case H.)

XIII.-TRADE.

THE part of the collection now to be described deals generally with commerce and the industrial arts. We have already seen the bird-catcher (p. 115), the baker (p. 117), and the shoemaker at work (p. 130).

In the corners of Cases 41 and 48 are casts of reliefs from the gravestone of L. Cornelius Atimetus, a Roman cutler of the first century A.D. One relief (No. 457; fig. 192) shows the cutler's workshop, with two men working at some object placed on an anvil in front of a furnace. One man holds the object with the tongs, the other hammers it into shape. Above them hang a knife, sickle, tongs, etc. Behind on the left is the bellows. The other relief (No. 458; fig. 193) represents the cutler's shop, with numerous knives and sickles hanging in an open cupboard. The cutler on the right, who wears the tunic only, is showing a knife to a customer on the left, who wears the toga, as a mark of dignity.

In Case 41 is a cast of a relief of a pork-butcher's shop, in the Dresden Museum (No. 459). On the left, the butcher's wife, seated in a high chair, is busy with a set of tablets, for the accounts. The butcher is jointing a side of bacon on a massive block. Portions of bacon hang on hooks. Behind the butcher is a spare chopper and a steelyard, at present hung out of the way. The details of the steelyard such as the weight, the alternative hook for suspension, and the scalepan are shown (see below p. 161).

XIV.-WEIGHTS AND SCALES.

(Wall-Cases 41-44.)

Greek Weights.—In Case B of the First Vase Room will be seen the plaster model of a large stone object of triangular form, pierced towards the apex with a hole. It has the design of an octopus on either side, and may with some probability be regarded as a standard hanging weight (64 pounds). This object

See Ann. of Brit. School at Athens, VII., p. 42, fig. 7.

was found by Sir A. Evans at Knossos in Crete, in the "Palace of Minos," and may be dated roughly at 2000 B.C. A set of very early weights of the Mycenaean period from Cyprus is in Case 41, consisting of haematite objects in the form of sling bolts (No. 460), passing in a series of gradations from large to small. No definite system can, however, be deduced from these weights.

The Greek weights of the historic period here shown are mainly of two leading standards, known as the Aeginetan and the Solonian or Attic. The standard weight of the Aeginetan system was the heavy mina of 9,722 grains (about 12 lb. avoirdupois). The Solonian (Euboic) mina weighed normally 6,737 grains (nearly 1 lb. avoirdupois), but there was a special heavy mina in use which weighed exactly double the normal. This last was the original mina introduced by Solon, which gradually gave way to the light mina of half its weight. Weights of the Aeginetan and Solonian systems are here



FIG. 194.—LEAD AND BRONZE WEIGHTS. 2:3.

exhibited. Through incompleteness or inaccuracy they often show considerable variation from the norm. The mina was subdivided into 100 drachmae, and the drachma into 6 obols. Certain stamped devices distinguish these Attic weights, viz., the astragalos or knuckle-bone, the amphora, the tortoise, the dolphin, and the crescent. Fig. 194 shows three weights of the later Solonian standard:

(a) a mina in lead stamped with a dolphin and inscribed MNA (7,010 grs.) (No. 461); (b) a half mina in lead (3,399 grs.) with the device of a tortoise and the inscription ΔΗΜΟ (= δήμου), " of the people," (No. 462); and (c) a bronze weight of 4 drachmae (283 grs.) stamped with an amphora and the word ΤΕΣΣΑΡΕΣ (No. 463). Sometimes a half tortoise occurs, as in No. 464, a quarter mina, or a half amphora, as on No. 465, a one-third mina. Various other standards are represented in this Case, e.g. that of Kyzikos in Asia

Minor, but these need not be particularly described. A noteworthy weight is the bronze one (No. 466), in the form of a series of rising steps, inscribed on the top ΔΙΟΣ. This probably is a temple-weight, very likely used to weigh votive objects. Weights of a similar type have been found at Olympia. The peculiar series of stone weights (No. 467) decorated with female breasts was found in the precincts of the temple of Demeter at Knidos, and may be regarded as temple-weights, probably made as a votive offering. They do not seem to correspond to any known standard.

Some weights are marked as standards. A lead weight of 10,863 grains, with a design of two cornucopias (No. 468) is inscribed Έτους δλς δημοσία μνᾶ, i.e., "In the year 234 a public (or standard) mina." The date is probably by the Seleucid era, and equivalent to 78 B.c. Another example is the large square weight from Herakleia in Bithynia, with a head of Herakles in relief (No. 469; fig. 195). It is inscribed "To the divine Augusti and the people" (θεοῖς Σεβαστοῖς καὶ τῷ δάμφ) on the rim in front, and on the sides with the names of the aediles P. Clodius Rufus and Tertius Vacilius (weight 41,494 grs., nearly 6 lb. avoirdupois).

We have instances of weights of artistic form in these Cases. The hanging weights from steelyards in particular (No. 470; fig. 195) are often in the form of a head or bust.

Roman Weights.—The standard was here the libra or pound, which weighed 5,050 grains (being '721 of the pound avoirdupois, which is equal to 7,000 grains), and was subdivided into 12 uncide or ounces, the ounce again being divided into 24 scripula or scruples. The Roman weights are here grouped according to multiples or divisions of the pound, and generally have their values marked upon them in dotted characters. Thus the pound is marked I, the half pound S(emis), and so on. The series, beginning at the bottom of Case 51, runs 10, 5, 4, 3, 2, 11, and 1 pounds. Fractions of the pound are 11b. (semis) = 6 oz; 11b. (triens) = 4 oz.; 11b. (quadrans) = 3 oz.; alb. (sextans) = 2 oz.; and one ounce. Fractions of the ounce are loz. = 12 scruples; loz. = 8 scruples; loz. = 6 scruples; toz. = 3 scruples; 12oz. = 2 scruples; and one scruple. Some of the numerous dark stone weights have inscriptions, showing that they had been certified by proper authority. Thus one libra (No. 472) is inscribed: "On the authority of Q. Junius Rusticus, city-prefect " [167 A.D.]. In Sicily and Magna Graecia a weight called a litra was used instead of the Roman pound, weighing rather less than the libra. A set of litra weights in bronze, of late Imperial date, is shown in Case 41 (No. 473). An ounce weight

(marked & . A in silver, and weighing 389 grains), belonging to this series, is seen in fig. 194 above.

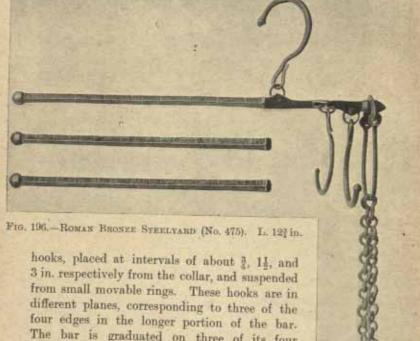
Weighing Instruments.—Of these there are two chief varieties, the simple balance (libra), and the steelyard (statera). In the former weight is set against weight, at equal distances from the point of suspension. In the latter the object to be weighed, suspended from the short arm of the lever, is set against a small weight in an appropriate position on the long arm. The Greeks seem to



Fig. 195.—Bronze Weights of Artistic Form (No. 400, etc.). 4:7.

have used the former only; the Romans used both. The use of the balance is illustrated by the Greek vase with the design of Hermes weighing the souls of Achilles and Memnon, and by the Roman lamp showing a stork weighing an elephant and a mouse (No. 474). The steelyard was widely used in the Roman world. Owing to its portability, it was doubtless much employed by hawkers and street-sellers, as at the present day. We have also seen it above (p. 158) in the pork-butcher's shop (No. 459). Out of the several steel-yards exhibited here, one example, from Catania in Sicily (No. 475;

fig. 196), may be described in detail. It consists of a bronze rod of square esection, divided into two unequal portions. The shorter portion has (a) two hooks suspended from chains attached to the end of the rod by a movable collar working in a groove (the object to be weighed was of course attached to these hooks); (b) three



from small movable rings. These hooks are in different planes, corresponding to three of the four edges in the longer portion of the bar. The bar is graduated on three of its four faces, viz., on the first with nine divisions, each subdivided into twelfths. This scale was used when the steelyard was suspended by the hook nearest the graduated bar (as in the fig.). Objects weighing up to nine Roman pounds could thus be weighed by moving a sliding weight along the bar. The figure V will be seen at the fifth pound, the half pounds are marked by three dots, and the twelfths correspond to the unciae. The second face begins with VL and

with VI and goes up to twenty-three pounds. It was used when the steelyard was suspended by the middle hook. The third face starts with XXII pounds, and goes up to fifty-nine pounds. In the second and third scales, multiples of five and ten pounds are marked by the figures V and X. Fifty pounds is indicated by the letter N,

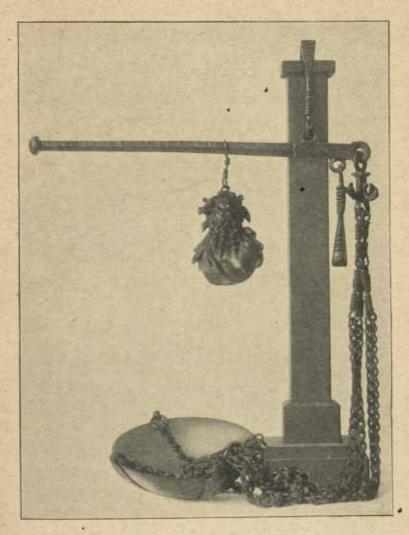


Fig. 197.—Steelyard from Smyrna (No. 476).

which has that numerical value in the Greek notation. This third scale was used in conjunction with the hook nearest the collar. The sliding weight (now lost) must have weighed about 17,000 grs (23 lb. avoirdupois). All the other steelyards here shown work on this principle, though many have only two graduated scales and two suspending hooks.

Fig. 197 shows a highly ornate example of a steelyard (No 476), lately acquired from the neighbourhood of Smyrna. The weight is in the form of a bust of Silenus. The larger hooks are designed as heads of serpents, and the smaller hooks as heads of eagles.

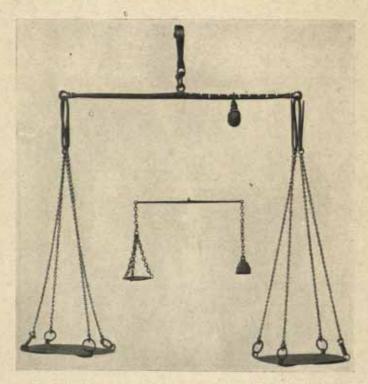


Fig. 198.—Roman Bronze Balances (Nos. 477, 480). Ca. 1:4.

The steelyard principle was also applied by the Romans to balances, with a view to avoiding the use of numerous small weights. An example is No. 477 (fig. 198), where one half of the bronze arm is graduated with twelve divisions corresponding to scruples (y'4 of an ounce). The sliding weight would thus be used to determine weights of less than half an ounce. The bar of another balance (No. 478) had 24 such divisions for determining any weight below the ounce. A saucepan from Pompeii (No. 479) in the Naples

Museum has the same principle applied to its handle, for weighing the liquid contents. An interesting little balance (No. 480; fig. 198) may be mentioned here. At one end is a fixed weight in the form of a head (of the Sun-god?). This balance was adapted to test the weight of an object weighing about 69 grains, perhaps a Roman coin such as the denarius or solidus.

In the lower part of Cases 43, 44 it will be noted that the arm of a steelyard and one of the arms of a balance are shown, with a bronze fitting (No. 481; fig. 199) designed to check the amplitude of the oscillations. A corresponding piece may be seen on a railway



Fig. 199.—Check for Sterlyand (No. 481).



Fig. 200,—A STEELYARD IN USE.

platform weighing machine. This piece was long misinterpreted as a standard, etc., but its real intention is made certain by reliefs at Treves (fig. 200) and Capua.

(457, 458) Amelung, Sculpt. d. Vat., pl. 30, p. 275 ff.; (459) Arch. Anzeiger, IV., p. 102; (460) Excavations in Cyprus, pl. xi., 368, etc. On Greek and Roman weights see Daremberg and Saglio, s.v. Pondus; Cambridge Companion to Greek and to Latin Studies; (466) Cf. Olympia, V. (Inschriften), p. 801 ff.; (467) Newton, Disc. at Halicarnassus, II., pp. 387 and 804; (469) Mon. dell' Inst., 1855, pl. 1; (472) C.I.L., XIII., 10030 (10); (474) Cat. of Lamps, 595; (481) Cat. of Bronzes, 2909. For Treves relief (fig. 200) cf. Hettner, Illustr. Führer, p. 6; for Capua relief, cf. Jahreshefte d. Oesterr. Arch. Inst., XVI., Beibl., p. 10; for the standing balance, see also Stuart and Revett, IV., p. 15.

XV-TOOLS, BUILDING, AND SCULPTURE.

(Wall-Cases 45-48.)

Tools.—These are exhibited in Cases 45–46. The objects for the most part speak for themselves, but attention may be called to one or two of the most interesting. Such is the Roman bronze set-square (No. 482; dig. 201), furnished with a base to enable it to stand. Its outer edges would be used by masons or carpenters to determine angles of 90° and 45° respectively. The inner angle of 90° would be useful for testing the true position of objects set at right angles to one another, such as the sides of a box, etc. The simplest type of set-square, that formed by two edges at right



Fig. 201.—ROMAN SET-SQUARE AND PLUMMET (Nos. 482, 484). 1:4.

angles to one another, is seen in No. 483. Notice the set of bronze plummets (No. 484), which were suspended from strings. The one illustrated (fig. 201) has Bassi, "belonging to Bassus," inscribed on it in punctured letters. Two other inscribed tools are of interest. The one is the sickle-like iron blade from, perhaps, a gardener's knife, with the inscription, "Durra made me" (No. 485), the other a finely made Greek bronze chisel, bearing the name of Apollodoros (No. 486).

Building materials and Sculptures.—Cases 45-48 contain objects illustrating the materials and methods of Greek and Roman builders and sculptors. There are several Greek tiles dated by the impression of a magistrate's name, e.g., "Under Aeschyliskos," "Under Apollodoros," the latter (No. 487) bearing traces of the feet of a dog which has run across the tile before it was dry.

The characteristic stamps on the Roman bricks of the Empire were impressed by wooden blocks in which the legend was engraved direct with a broad lettering, tending to exaggeration in the 3rd century and later. The beginning of the inscription is marked by a small raised circle, and the information given includes the name of the estate (often imperial) from which the clay comes, the name of the potter and his kiln, and sometimes the date by the consulship, though all these pieces of information do not necessarily occur on the same tile. As typical examples may be given: No. 488, here illustrated (fig. 202), bearing the device of a pine-cone between two branches, and the inscription ex fig(linis) M. Herenni Pollionis

dol(iare) L. Sessi Successi,
"From the pottery of M.
Herennius Pollio; baked
by L. Sessus Successus";
and No. 489, with the
device of Victory, and
the inscription: "Brick
from the Publinian pottery (made with clay
from) the estate of
Aemilia Severa." A large
number of the estates
from which the clay came
were, it should be noted,
owned by women.

No. 490 is an example of a dated brick

—Imp. Antonino II (=



Fig. 202.—Roman Stamped Tilb (No. 488). Ca. 1:3.

iterum) et Br(u)ttio Co(n)s(ulibus) i.e., 139 a.D. The stamp was first engraved by error with the name of Balbinus, consul of 137 a.D., and afterwards corrected by re-engraving RTTIO on ALBIN. No. 491 refers to the portus, i.e., the depot of Licinius.

Many of the bronze accessories of building are shown here, such as two pairs of bronze door-knockers from Syria (No. 492).

The bronze dowels (No. 493) were employed for fastening together, stone sections, such as the drums of columns. They are often in the form of truncated cones placed base to base, the thickest part being thus in the position where the strain was greatest (fig. 203a). Other dowels from the Mausoleum at Halikarnassos are in the form of bronze cylinders in collars of bronze, rigidly fixed by three keypieces. The cylinders were set in the great stone which closed the

entrance of the Mausoleum, and were intended to drop half their length into the corresponding sockets in the lower sill of the entrance (Nos. 494-495).

A series of bronze coverings (No. 496) for the pivots of doors reminds us of the fact that in ancient times most of the doors worked on a different principle from our own. The bronze-covered pivots (fig. 203b), rigidly fixed to the door by a key-piece, turned in bronze sockets(c) fitted into the lintel or threshold. This arrangement explains the allusions to the grating of doors met with in ancient writers. Hinges of the modern type were, however, well known. Examples are to be seen in Cases 47, 48, among them a hinge with



Fig. 203.—Bronze Dowel and Door-Pivot (Nos. 493, 496). 1:2.

the fragments of the wood, to which it was originally attached, still adhering (No. 497).

Towards the end of the Republic and under the Empire the Romans devoted much attention to the adornment of their buildings, public and private. For this purpose marbles of every variety were imported from all parts of the world, while an elaborate system of wall - painting was also developed. Mamurra, an officer of Julius Caesar,

is said to have been the first to veneer the walls of his house with marble. A few selected examples from the Tolley collection of polished specimens of the materials used in ancient Rome are here exhibited (No. 498). The whole collection comprises some 700 specimens, so that we cannot be surprised that Pliny declines to enumerate the varieties known in his day, on account of the vastness of their number. The simpler building materials used at Rome were, besides the tiles or bricks already mentioned, the hard limestone rock known as travertine and the volcanic tufa and peperino. A specimen of the last is shown here.

¹ Virgil, Ciris, 222 :

Marmoreo aeratus stridens in límine cardo.

² H.N. xxxvi. 54.

The place of hanging pictures in ancient houses was largely taken by fresco wall-paintings, several fragments of which are here shown. The floors of the houses were not covered with carpets, but were frequently decorated with mosaics, which might range from simple geometric patterns in black and white (as in many of the specimens here seen) to elaborate pictorial designs. The construction of these pavements, out of small stone cubes (tesserae) set in cement, is clearly seen in the examples exhibited. Genuine mosaic was sometimes imitated in painted plaster. One or two such fragments can be seen in the Case.

As examples of the processes of sculpture, note a half-finished figure of a seated Sphinx (No. 499); and a cast (No. 500) of a half-finished figure of Hermes, from a private collection. The sculptor has made free use of the drill for the roughing out of the figure, and at the same time has brought the exposed parts to a high degree of finish. A piece of bead and reel moulding (No. 501) is also

unfinished.

(484) Cf. Daremberg and Saglio, s.v., Perpendiculum.

(488) For the stamped Roman bricks see, Cat. of Terracottas, E 148–153.
For C.I.L. reff., see ibid. (but E 151 = C.I.L. xv. 214).

(494, 495) Newton, Disc. at Halicarnassus, II (1) p. 97; Cat. of Sculpture, II, 990, 991.

(498) Cf. Pullen, Handbook of Ancient Roman Marbles.

XVI.-HORSES AND CHARIOTS.

(Wall-Cases 49-51.)

Chariots and Carts.—The war-chariot plays a conspicuous part in the Homeric poems, and the horse and chariot are there so closely identified that we find the phrase "he leapt from his horses" used as equivalent to "he leapt from his chariot." After the Homeric age, however, the use of the chariot in war died out in Greece and it thenceforward appears most conspicuously in the great Greek games, where it was used for racing purposes. A very early example of this racing chariot may be seen on a Boeotian bowl of the eighth century (on the top of Case D, First Vase Room). Here are depicted two chariots with a high open framework at front and back, each drawn (apparently) by a single horse, and

See Journal of Hell. Stild., XIX., pl. 8.

driven by a man clothed in a long robe distinctive of the Greek chariotexr. There is little doubt that in reality the chariots are meant to be drawn by two horses, and that the deceptive appearance is due to the limitations of the artist. On Greek monuments of a later date than this vase, the light racing chariot is constantly represented. Some primitive chariots in terracotta and stone from Cyprus are also shown in Case 50.

Roman chariots are represented by a good bronze model (No. 502; fig. 204) found in the Tiber. This is a racing car,



Fig. 204.—Roman Racing Charlot (No. 502). L. 101 in.

drawn at full speed by two horses, one of which is now lost. It corresponds closely to the ears used for racing in the circus, such as may be seen in Case 110. At the end of the pole (appearing just behind the horse's mane) is a decoration in the form of a ram's head, an ornament of the same character as the four bronze objects placed with the horse-muzzles in the upper part of Case 51 (No. 503). These have decorations in the form of the bust of a Satyr blowing a horn, and busts of a boy, an Amazon, and a Cupid respectively. In the lowest parts of Cases 50 and 51 are various bronze decorations, which have no doubt belonged to axle-boxes

and other parts of a chariot, but their exact arrangement is not clear.

Another form of Roman car is illustrated by the fine hanging bronze lamp representing the Moon-goddess (Luna), drawn in her chariot by a pair of bulls (No. 504). The lamp was for three wicks, two on the outer sides of the bulls, and one at the back of Luna's head. The goddess is represented on coins of the second and third century after Christ in a similar bull-car.\(^1\) A terracotta (No. 505) is in the form of a four-wheeled hooded waggon, probably a travelling car of the type called \(^2\text{hip}\eta\), by the Greeks and raeda

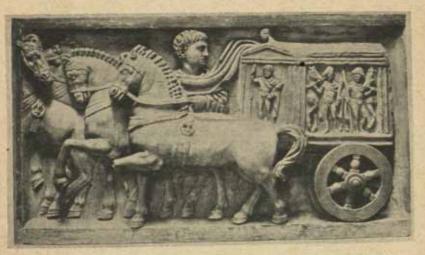


Fig. 205.—Roman Car for Carrying Images to the Circus (No. 506). L. 2 ft. 104 in.

by the Romans. In the top of Case 49 is a marble relief (No. 506; fig. 205) representing a covered two-wheeled cart drawn by four horses. The sides of the cart are decorated with reliefs, depicting Jupiter and the two Dioscuri, Castor and Pollux. Probably the car is a tensa, used to convey images of the gods to and from the circus on the occasion of the games, and for other religious purposes. The relief formed part of a sarcophagus of about the third century after Christ.

Horse-trappings.—Case 50 contains two interesting sets of bronze harness of an early date from Italy, probably of the eighth

¹ E.g., on B.M. Coins of Ionia, pl. xx. 7 (Coin of Magnesia : Gordianus Pius).

century B.C. (No. 507). They are mounted, upon leather, and placed on models of horses' heads; the sidepieces of the bits are themselves in the form of horses. Of much later date, perhaps of the fifth or fourth century B.C., is the Greek bit from Achaea (No. 508; fig. 206). It is remarkable for its severe character, but was certainly not out of the ordinary, for a bit of precisely similar character is described by Xenophon in his treatise on horsemanship (early fourth century B.C.). He says there were two varieties of this type of bit, the mild and the severe. In the present example we may probably recognise the severe variety, which had "the

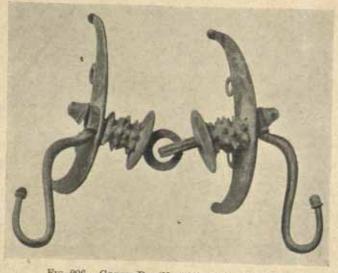


Fig. 206,—Greek Bir (No. 508). Width, ca. 9 in.

"wheels' heavy and small and the 'hedgehogs' sharp, in order that the horse when he got it into his mouth might be distressed by its roughness and give up resisting." The "wheels" are clearly the central discs for pressing on the tongue, while the prickly cylinders at the sides were aptly termed "hedgehogs" by the Greeks. In this same Case there are also examples of the milder Roman bit, one in iron and another in lead, perhaps intended for votive use.

^{&#}x27; Xen., De re eq. x. 6: πρώτον μέν τοίνυν χρή οὐ μεῖον δυοίν χυλινούν κεκτήσθαι ' τούτων δὲ ἔστω ὁ μὲν λεῖος, τοὺς τροχούς εὐμεγέθεις ἔχων, ὁ δὲ ἔτερος τοὺς μὲν τροχούς καὶ βαρεῖς καὶ ταπεινούς, τοὺς δ' ἔχίνους ὁξεῖς, ἴνα ὅποταν μεν τοῦτον λάβη, ἀσχάλλων τῆ τραχύτητι διὰ τοῦτο ἀφίη.

Case 51 contains three examples of muzzles for horses (No. 509), nearly complete, with a fragment of a fourth. These muzzles are in bronze, but we can hardly expect that this was the usual material. Probably the bronze examples were reserved for state occasions or else only used by the very wealthy. The muzzles depicted on vases seem rather to be of some pliant material—leather, for example. It is probable that all the bronze examples in this Case belong to

the Greek period, though the one here illustrated (fig. 207) has been assigned to as late a date as the fourth century after Christ. The muzzle was only used when the horse was being rubbed down or led, not when he was ridden or driven. Xenophon 1 observes that "the groom must understand how to put the muzzle on the horse, when he takes him out to rub him or to roll him. . And, indeed, wherever he takes him without a bridle, he ought to muzzle him." muzzles must have been fastened to the horse's head by straps attached to the rings seen on each side of them.

It has been a subject of controversy whether Greek and Roman horses



Fig. 207.—Bronze Horse-Muzzle (No. 509). Ht. ca. 9 in.

were shod. There is no mention of horse-shoes in Greek literature, and it seems improbable that they were used by the Greeks. Xenophon advises the use of a specially constructed stone floor for hardening the horse's hoofs, but in spite of such precautions, it is not surprising to hear that the Athenian cavalry horses sometimes went lame as a result of continuous work on hard ground. Horse-shoes are occasionally (though rarely) spoken of

1 De re eq. v. 3.

1 Xen., op. cit., iv. 3.

³ Thue., vii. 27, 5.

in Roman literature. Their use seems to have been quite exceptional as when Nero, for instance, had his mules shod with silver. In the lower part of Case 51 will be seen a series of iron shoes of the Roman period (No. 510; fig. 208), for the most part found in the south of France. It is impossible to believe that these were ever used as ordinary horse-shoes. The most plausible theory is that they were "hobbles," put on the feet of horses and other

quadrupeds to prevent them straying. The upper part of this same Case contains sets of spurs (No. 511), most of them probably Roman. The arrangement for attaching the spurs to the heel varies. Two have loops formed by the head and neck of swans, three have discs or knobs, while another has holes for laces.

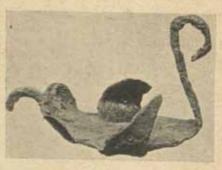


Fig. 208.—IRON HORBLE (No. 510). 1:4.

(502) Cat. of Bronzes, 2695; (503) ibid., 2696 ff.; (504) ibid.,
2520; (505) Cat. of Terracottas, C 612; (506) Cat. of Sculpt., III., 2310;
(507) Cat. of Bronzes, 357; (508) Cf. Pernice, Griech. Pferdegeschirr, pll. ii.
and iii. (56th Winckelmannsfestprogramm); (509) ibid., pl. i. and pp. 6-16;
(510) Cf. Rev. Arch., 1900 (36), p. 296 ff; Smith, Dict. of Ant., s.v. Solca.

XVII.-AGRICULTURE.

(Wall-Case 52.)

Farming, the rearing of live stock, the cultivation of corn, vines and olives were practised by the earliest civilisations of the Aegean, and of Greece.

The use of the plough was also known at that distant period. In this Case are shown three bronze ploughshares (No. 512), which belong to the Mycenaean Age, and were found in Cyprus. A plough in its most primitive form was merely the trunk of a tree which served as the pole, with two branches on opposite sides, one forming the share, the other the handle. This was the

¹ Suet., Ner. 30.

plough in one piece spoken of by Hesiod. The Mycenaean ploughshare belongs to a later development, when the plough is made up of several parts, the "joined plough" of Homer and Hesiod. Such is the plough seen in the very primitive bronze group (No. 513), where it is in the act of being turned at the end of the furrow. To effect the turning the two oxen are pulling the yoke in opposite

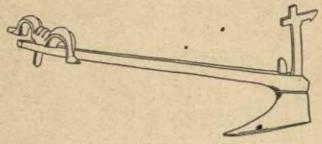


FIG. 209. - BRONZE VOTIVE PLOUGH.

directions. A black-figured vase of the sixth century, here exhibited (No. 514), shows the later plough in a simple form, which has changed but little for many centuries, as may still be observed in the East. The different parts can be seen more clearly from a bronze votive plough of the third century B.c. at Florence (fig. 209). It is made up of (1) a horizontal share-beam, to which is fastened the iron share, (2) a pole, at the end of which is the yoke, (3) the



Fig. 210,-Wine Being Decocred (No. 518). L. 1 ft. 9 in.

vertical handle. This type of plough is exactly described by Virgil in the Georgics.¹

The ploughman was followed by the sower, who is represented on the vase mentioned above (No. 514) with a basket from which he scatters the seed in the furrow. At harvest-time a sickle was used to cut the grain, of which instrument two iron specimens are shown

i. 169 ff.; Cf. Gow, Journ. of Hellenic Studies, xxxiv., p. 249.



F10. 211.-MEN GATHERING OLIVES (No. 521). Ca. 1:9.

in the Case, from Lycia in Asia Minor (No. 515). Winnowing the grain was accomplished either by means of a shovel or a basket of peculiar shape (Aikvor, vannus); on a terracotta relief in the Museum (D 525, Case 75, Terracotta Room Annexe) the infant Dionysos is being rocked in one of these objects instead of a cradle, by a Satyr and a Nymph.

Of fruit crops the vine and the olive were by far the most important in the Greek and Roman world, and great attention was paid to their cultivation. The operations involved in the manufacture of both wine and oil find many illustrations among ancient works of art. The gathering of grapes is illustrated by a Roman terracotta relief (No. 516) exhibited in the Case, where a Satyr is picking grapes from a vine. Another relief of the same class (No. 517) depicts the treading out of the grapes in the winepress, also by Satyrs, two of whom are balancing themselves by holding a ring between them while they tread the grapes in an oblong trough to the tune of flutes. An elderly Satyr brings up fresh supplies in a basket. The massive bronze rings commonly known as "athletes' rings" may have been used at the winepress (No. 517*).

The must or new wine was partly used for drinking as soon as ready, partly decocted into a sort of jelly (defrutum), and partly stowed in cellars in large casks or jars (dolia); in the latter case after being fermented for nine days it was covered up and sealed. The commoner kinds were drunk direct from the dolia, the finer sorts drawn off into amphorae and stored up. On the marble reliefs here given (No. 518; fig. 210) we have a representation of the conversion of the must into defrutum: two men are attending to a caldron placed over a fire, while a third is pouring wine from an amphora into another caldron, and a fourth is waiting to fill a jug from the same. In the lowest part of the Case is exhibited the upper part of an amphora with long neck and two handles (whence the frequent term diota), as an example of those used for the storage of wine. The terracotta figure of a man carrying a wineskin and one of these diotae (No. 519), and a Roman lamp depicting slaves carrying casks of wine, should also be noted (No. 520).

The caltivation of the olive is well illustrated by a blackfigured vase of the sixth century B.C. (No. 521; fig. 211), showing a primitive method of gathering the fruit: a youth has climbed to the top of the tree, and he and two men are beating the branches . with sticks to bring the fruit down, while another youth collects it

in a vessel. This method is expressly condemned by Varro, an early Reman writer on agriculture.1.

In order to extract the oil from the pulp of the fruit, it was necessary to use a press of some kind, such as we see on the terracotta relief here exhibited (No. 522; fig. 212), of the first century s.c. Here the press consists of flat stones between which layers of olives are placed; to the uppermost stone is fastened a long pole, which serves as a lever, and is being worked by two Satyrs;



Fig. 212, -Satyrs at Oil-Press (No. 522), Ht. 7 in.

round the press a rope is wound many times. Compare the large vase in the Hall of Inscriptions (Cat. of Sculpture, 2502).

The remaining objects in this Case are mostly illustrative of men or beasts of burden engaged in agricultural and kindred occupations, such as the goat-herd depicted on a Roman lamp, to whom the name of Titurus is applied, with reference to Virgil's first Eclogue (No. 523; fig. 213). The bronze figure of a doukey (No. 524) with panniers recalls the ornament of Trimalchio's

 $^{^1}$ Varro, $Res\ Rust.$ i. 55: de oliveto oleam . . . legere oportet potius quam quatere,

dinner-table described by Petronius, and may have served a similar purpose. Model panniers, and terracottas of a donkey and a camel with the panniers laden with rural produce, should also be noted. Several model carts from Amathus, in terracotta, are either flat-bottomed, for general use, or in vase-shape, for the transport of wine or other liquids (No. 525).



Fig. 213.—Goatherd with Flock (No. 523). Diam. 37 in.

(512) Excavations in Cyprus, p. 15, 1477; (516, 517) Cat. of Terracottas, D 542, D 544; (518) Cat. of Sculpture, III., 2212; (520) Cat. of Lamps, 1142; (521) Cat. of Vases, II., B 226; (522) Cat. of Terracottas, D 550.
Cf. Daremberg and Saglio, s.v. Torcular; (523) Cat. of Lamps, 661; (524) Cf. Daremberg and Saglio, s.v. Clitellae; (525) Excavations in Cyprus, p. 112.

XVIII.-INDUSTRIAL ARTS.

(Table-Case H.)

In Table Case H we have objects illustrating the craft of the metal worker, the potter, the turner, and the woodworker.

Towards one end of the case are objects illustrating the processes of metal work. A Greek vase of the sixth century B.C. depicts a man in the act of thrusting a mass of metal into a blazing furnace. Anvil, tongs, and hammers are visible (No. 526). Beside it is a reproduction of a vase in the Ashmolean Museum at Oxford, showing





Fig. 214.—Limestone Half-Mould, with Cast from Same (No. 531). Ht. 44 in.

an armourer at work on a helmet (No. 527). Two limestone moulds of a very early period are for casting primitive implements (No. 528). Note also a mould (No. 529) for a metal weight of a type similar to that with the head of Herakles in Case 41. The mould shows a female head with a cornucopia before it, apparently 'a personification of Profit ($K\dot{\phi}\tilde{\rho}\delta\phi_{S}$), whose name appears above the head. Another mould (No. 530) is intended for a series of lead weights of values a to η' , that is, I to 8. (Compare a similar set in Case 42.) It should be observed that the moulds seen here are, for the most part, only half-moulds, or in some cases even less. A corresponding half-mould had to be placed in position before casting could be effected. This is well shown by a limestone half-

mould from Rome (No. 531; fig. 214) for casting lead counters, with designs representing Victory, Fortune, and Athena. Here can be seen the channels by which the molten metal was introduced,

and the holes for the studs joining the two half-moulds together. In one of these a lead stud still remains.

The steatite mould for a ring of the Mycenaean period (No. 532; Fig. 215) required a counterpart piece, and a third piece at the bottom to complete it. Some of the steatite moulds which have no channels for the molten metal, were probably used for the pro-

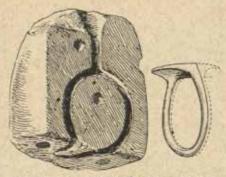


Fig. 215.—Part of Mould for a Ring of the shape indicated (No. 532).

duction of ornaments by pressing and rubbing thin foil into the forms.

The Potter.—At the end of the case are exhibits connected with potters and pottery. Here is seen the limestone figure of a Greek potter from Cyprus (No. 533; fig. 216), seated and modelling clay on the wheel. He reminds us of Homer's description of the



FIG. 216. — GREEK POTTER AT WORK (No.588), Ht.41in.

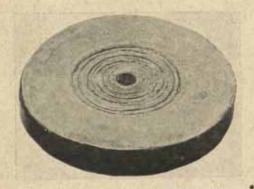


Fig. 217.—Potten's Wheel in Terracotta (No. 534). Diam. 97 in.

potter's action when he compares the whirling motion of dancers to the revolving of a potter's wheel—" a motion exceeding light, as when a potter sits and makes trial of a wheel fitted to his hands, to see whether it will run." Immediately behind is a potter's wheel in terracotta (No. 534; fig. 217), which has in the centre a depression for the insertion of the pivot on which it turned. It



Fig. 218.—Greek Potter attaching Handle to Vase (No. 535).

was found on a primitive site at Gournia in Crete. As the clay spun round on the wheel the potter moulded it into shape inside and outside with his hands. The foot, the handles, and the neck of the vase were moulded separately as a rule and attached afterwards to the body. A design on a sixth century Greek vase here exhibited (No. 535: fig. 218), depicts a Greek potter in the act of attaching a handle to a cup which rests upon a wheel. When the vase or

other object had been modelled in clay, it then had to be fired. For this purpose a kiln was required, such as one (probably Roman)

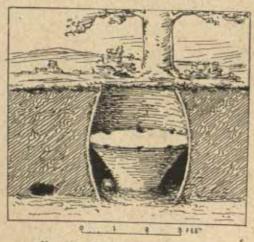


Fig. 219.—POTTER'S KILN (No. 536).

excavated at Shoeburyness, a model of which is here exhibited (No. 536). It consists of a barrel-shaped chamber, at about half

the height of which is a horizontal table on a conical support, with eight round openings pierced in its circumference to allow the heat to penetrate above. Fuel was introduced below through a

small fire-chamber constructed at the side (fig. 219). The packing of the objects to be fired required considerable care. For this purpose the so-called "cockspurs" (No. 537) were used for the larger pieces. But sometimes there were failures, such as the two batches of Roman lamps seen in this Case, which have become fused together in the baking (No. 538; fig. 220). If it survived the risks of manufacture, the pot often needed repair when in use, and several examples are shown of rivets, large and small, employed for this



Fig. 220.—Clay Liamps Spoiled in Baring (No. 538). Ca. 1:2.

purpose (No. 539). The cover of a toilet-box (No. 540) shows the method of painting employed in the Greek red-figured vases; here the grotesque head has been outlined in black, but the back-



Fig. 221.—Stamps for Making Moulds for Vases in Belief (No. 545).

ground has not been filled in with black in the usual way. Two terracotta heads with projecting stumps (No. 541) show the manner in which the terracotta figurines were built up of several

parts. The heads were inserted into holes in the trunks, and were then fastened in position with clay. An unfinished clay relief (No. 542) of a man with his dog, shows the first process in the production of modelled relief, such as those in the Room of Terracottas, Case 8.

A mould (No. 543) for making a bowl of the ware called Arretine from its place of manufacture, Arretium in Central Italy, is shown, with a cast from the mould beside it. An impression is also shown of the mark of M. Perennius, the most noted of the Arretine potters, in combination with his slave Bargates (No. 544). Near the mould are stamps, one with a design of a slave heating some fluid in a caldron, and others of a hear and lion (No. 545; fig. 221). These stamps were used for producing the designs in



Fig. 222.—Mould for Lower Part of Clay Lamp (No. 546), L. 41 in.

the moulds, being impressed in the clay while it was soft. Several specimens of these moulds and bowls, which are of about the first century B.C., will be seen in Cases 39–40 of the Fourth Vase Room.

The moulds for parts of Roman lamps, show the way in which these objects were produced. The clay was pressed into the lower mould (such as No. 546; fig. 222) and also into a corresponding upper mould (compare No. 547), and then the two halves were joined together and ready for baking.

(526) Cat. of Vases, II., B 507; (528) Excavations in Cyprus, p. 26, fig. 50; (531) Cf. Bull. della Comm. Arch. xxxiii. (1905), p. 146 ff; (532) Cat. of Jewellery, No. 609; (533) Excavations in Cyprus, p. 93, fig. 145; (535) Cat. of Vases II., B 432; (536) Proc. of Soc. of Ant., Ser. II., xvi., p. 40; (542) Cat. of Terracottas, B 376. pl. 20; (545) Cat. of Roman Pottery. M 82, 83; (546) Cat. of Lamps, 1401.

Gems and Pastes.—In the next division of Case H are objects illustrating the processes of producing Gems and Pastes. These include a series of scarabs, scarabaeoids, and other beads at various stages of manufacture (No. 548); a series of clay moulds for Graeco-Egyptian porcelain scarabs from Naukratis (No. 549) and a fine specimen of a paste cameo head of Silenos (No. 550). Here also are examples of stone socket-handles for a bow drill (No. 551). In this and the next compartment several pieces of work are incised with designs intended to be filled in with inlay (No. 552). See

also a series of fragments of an acanthus pattern in ivory, evidently intended to be inlaid. A piece of rock crystal is carved with ears of corn in intaglio, gilded (No. 553). See also examples of enamel work, of the period of the Roman empire, on studs, seal boxes, etc. (cf. p. 135, 155).

Woodworking, etc.—An interesting wooden box of Roman date is derived from Panticapaeum, in the Crimea (No. 554). This has two sliding lids, above and below respectively, each furnished with two catches. The interior was divided by a horizontal partition, and was again subdivided into numerous small divisions. An inlaid pattern decorates the border of the box. Another box of simpler construction (No. 555) was found in a grave in Bulgaria. Various specimens of fretwork in jet and ivory are shown, and two pieces of an egg and tongue moulding, carved in wood, and coloured with scarlet and gilding, from a sarcophagus, also found at Panticapaeum (No. 555*).

The Lathe.—In the next division are examples of work finished on the lathe, in a variety of materials, as marble, alabaster, coloured stones, crystal, bronze, ivory, bone, and wood; also a rough piece of alabaster from Cyprus, derived from a lathe mandrel.

XIX. MEDICINE AND SURGERY.

(Table-Case H.)

Greek Medicine.—From the earliest times, as indicated by passages in the Homeric poems, the Greeks practised simple forms of surgery in such matters as the treatment of the wounded.¹ In the historic age of Greece we find temple or wonder-working medicine, practised in temples of Asklepios, especially at Epidaurus; and at the same time a school of medicine, of the Asklepindae, seated in the island of Kos.

A lively account of temple-healing is given in the *Plutus* of Aristophanes, where the slave Karion relates the experiences of his master and himself when passing the night in the temple.² Examples of the votive offerings deposited in the temples by those who had been made whole have been mentioned in the section on Religion and Superstition, p. 47 ff., and are to be seen in Cases 103–106.

¹ Cf. II, iv. 218; xi, 844. ² Ar. Plut, 653 ff. The more serious side of Greek medicine is inseparably connected with the name of Hippokrates (born 460 s.c.), though the Koan school had existed some time before his birth. The Asklepiadae were originally members of a single clan, but the admission of persons from outside soon made the clan into a medical school. The famous Hippokratean oath, imposed upon members of the Koan school, shows the standard set up before the medical profession: "I will conduct the treatment of the sick for their advantage, to the best of my ability and judgment, and I will abstain from all evil and all injustice. I will administer poison to none, if asked to do so, nor will I ever make such a suggestion. I will pass my life and exercise my art in innocence and purity." In Greece there were both public and private physicians. There were further dispensaries, or perhaps more accurately surgeries.



Fig. 223.—Greek Surgeon at Work (No. 556).

called larpaa. These were furnished with the necessary surgical and medical appliances. The scene from a fifth century vase-painting (No. 556; fig. 223) depicts a young surgeon at work in an larpaar. He is operating on a patient's arm (perhaps bleeding him), while another man, also wounded in the arm, sits before him. A dwarf slave is ushering other patients into the surgery, where bleeding-cups are seen hanging on the wall. Patients also went to the larpaar to get draughts of medicine. Before the Alexandrian age it is probable that medicine was in advance of surgery, for up to that time no scientific study of anatomy had been attempted. Aristotle observes that the internal organs of the human body were

¹ See Mon. Piot, XIII. (1906), pl. xiii., p. 149 ff. From a vase in a private collection in Paris.

² Plat., Leg. i. 646: τούς είς τὰ Ιατρεία αὐτούς βαδίζοντας επί φαρμακοποσίαν.

in his time very little known, and what dissection there was must have been practised on animals. The terracotta model (No. 122; fig. 36, above) of the heart, liver, lungs and kidneys shows how vague the ancient idea as to the position of these organs sometimes was.

Roman Medicine. Medical science for a long time made but little progress in Rome. The Greek physician Archagathos, who began to practise there in 219 s.c., became extremely unpopular owing to his bold methods of surgery. The Roman doctors were chiefly of Greek nationality, and not infrequently were slaves or freedmen. Julius Caesar encouraged foreign physicians to settle in Rome by granting them citizenship, and under the early Empire Rome was overcrowded with medical men, if we may believe Pliny and Martial.

The objects illustrating Greek and Roman Medicine and Surgery are exhibited in part of Table-Case H. First in importance are the surgical instruments, a selection of which is shown in fig. 224. With rare exceptions these instruments are of bronze. The principal varieties are here represented. There are several knives or bistouries, an excellent example being the one from Myndos in Asia Minor, with the upper part of the handle inlaid with silver (No. 557; fig. 224g). The lower part of the handle was in iron, and has fallen away. The heavier bronze blades must have been used for various purposes in connection with dissecting. The forceps is fairly common. The interesting variety seen on the right of the illustration (k) with its fine toothed ends (No. 558) is probably an uvula forceps, used for crushing the part intended to be amputated. An instrument frequently found is the spatula or "spathomele" (No. 559; fig. 224 a-c, e, f), so called from its flat broad end. This was principally employed for mixing and spreading ointments, while the olive-shaped ends were used as probes. Other instruments which call for notice are the fine-toothed surgical saw (No. 560; fig. 224h), the sharp hook (No. 561; fig. 224d), used for "seizing and raising small pieces of tissue for excision, and for fixing and retracting the edges of wounds." The bifurcated probes (No. 562) were perhaps used for the extraction of arrows and other yeapons. A curious instrument (No. 563), the use of

¹ Hist. An. i. 16.

¹ Plin , H.N. xxix. 12 f.

Plin., H.N. xxix. 11: hine illae circa aegros miserae sententiarum concertationes, hine illa infelix monimenti inscriptio: turba se medicorum periisse. Cf. Martial, v. 9.

which was for long a puzzle, appears to be a folding drill-bow and has been completed accordingly.

More elaborate than any of these are the examples of surgical appliances which have been found in the excavations at Pompeii, and are now at Naples. These are represented here by a group of



Fig. 224.—Bronze Surgical Instruments (No. 557, etc.). 1:2.

electrotype reproductions, including anal and vaginal specula, and other objects (No. 564).

The bronze cupping-vessel (No. 565) should be noticed. Similar vessels are seen suspended on the walls of the surgery depicted in the vase-scene figured above (fig. 223). Burning lint or some other lighted substance was placed in the vessel to rarify the air, and its mouth was then applied to the part from which blood was to be

extracted. One such cupping vessel appears on the marble relief in the Phigaleian Room, representing a physician named Jason treating a boy with a swollen stomach (Fig. 225). Compare a similar consultation on an engraved gem, under the immediate superintendence of Asklepios. The bronze box (No. 566), probably from the Cyrenaica, was almost certainly used by a Roman physician for his drugs. It is divided into several compartments,



Fig. 225,—Marble Relief. Physician Treating Patient. Ht. 2 ft. 7 in.

each furnished with a separate cover, and has a sliding lid. Boxes of a precisely similar character have been found with surgical instruments. Compare also the cast from Athens of a votive relief with a fitted case of instruments (No. 567).

A very interesting class of antiquities is furnished by the stamps of oculists (No. 569). These take the form of square or oblong plates, generally of steatite or slate. On the edges are engraved inscriptions, giving the name of the oculist, the name of his specific, and its purpose. These salves were pounded on the stone into a a paste. They generally bear a Greek name, such as Diasmyrnes, Crocodes, etc., indicating their composition. They appear to have been made up into the form of sticks impressed with the engraved edge of the stone, and put into cylindrical bronze boxes, which have from time to time been found with Roman surgical instruments. One or two examples of the stamps may be given: "Saffron ointment for scars and discharges prepared by Junius Taurus after the prescription of Paccius" (fig. 226, bottom). "The anodyne of Q. Junius Taurus for every kind of defective eyesight." Puff names for the drugs, such as "Invincible," "Inimitable," also occur.

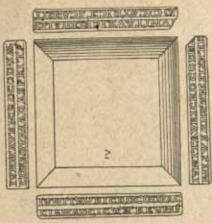


Fig. 296.—Stamp of the Oculast Junius Taurus (No. 569). 4:5.

An engraved gem, from a drug-compounder's ring has a seated Athena and the legend HEROPHILI OPO-BALSAMUM - " Balsam of Herophilus" (No. 570). Whether the balsam was named in honour of the founder of scientific anatomy, or of a more obscure. oculist of the first century B.C., or of an unknown drugseller cannot be determined. A set of Roman lead weights, probably used for the weighing of drugs, is here exhibited. They are marked 1 to 10, the unit

probably being the scripulum of 18 grains (No. 571). Two small lead pots placed near the weights were used for holding eye-salves. One from Corfu bears the letters A T; the other, from Athens, has the tripod of Apollo, the god of healing, and is inscribed "The Lykian salve from Musaeos" (No. 572). Near these pots are spoons with channels for melting and pouring the salves into wounds (No. 573). A piece of stone with corrugated surfaces is thought to be for rolling pills (No. 574). The ivory figure of a dwarf afflicted with a peculiar form of spinal curvature causing pigeon-breastedness is a work of considerable spirit, probably of the third century A.D. (No. 574*).

¹ Juni Tauri crocod(es) Paccian(um) ad cicat (rices) et reum(a).

Q. Jun(i) Tauri anodynum ad omn(em) lippit(udinem).

(563) Cat. of Bronzes, 2674; Journ. of Hellenic Stud. 34, p. 116; (567) Svoronos, Athen. Nationalmus. xivii, 1378; (568) Cf. Espérandieu, Signacula Medicorum Oculariorum; (574*) Papers of the Brit. School at Rome, iv, pp. 279-282.

See on ancient medicine and surgery generally, Daremberg and Saglio, s.v. Chirurgia, Medicus; Milne, Surgical Instruments in Greek and Roman Times; Deneffe, Étude sur la trousse d'un chirurgien gallo-romain du III siècle (found near Paris, 1880).

XX. MEASURES AND INSTRUMENTS.

Measures.—In Case H are a few examples of ancient measures and geometrical instruments. A Greek clay cup (No. 575), inscribed ἡμικοτύλιον, contains exactly half a pint. The Greek kotyle, therefore, according to this standard, measured exactly a pint.



Fig. 227.—Roman Bronzh Foot-Rule (No. 578). L. 292 mm.

A copy of a well-known Roman standard gallon, the so-called Farnese Congius, is in Case 44 (No. 576). Nos. 577 and 578 are two Roman bronze foot-rules, measuring respectively 294 mm. (11.6 in.) and 292 mm. (11.5 in.). The normal Roman foot



Fig. 298,—Bronze Proportional Compasses (No. 579). L. 74 in.

measured 296 mm., and was adopted under Greek influence, whereas the early Italic foot had only measured 278 mm. (slightly under 11 in.) • Fig. 227 (No. 578) shows the subdivisions of these foot rules. One side is marked by dots into sixteenths (digiti); another into twelfths (unciae); another into fourths (palmi). The foot-rule illustrated has the remains of a catch (indicated in the fig.) for keeping it rigid, when opened. There are several pairs of ordinary

compasses and dividers, and also two pairs of proportional (2:1) compasses (No. 579). One of these is figured here (fig. 228). Notice the method of tightening by means of a wedge, with the object of keeping the compasses fixed in any particular position.

Measures.—(575) Cat. of Vases, IV, F 595; (577) Cf. Daremberg and Saglio, s.v. Pes; Hermes, XXII., p. 17 ff. and p. 79 ff.; Ath. Mitt., IX. (1884), p. 198 ff.

Bronze Stamps.—The large bronze stamps shown in Case H are somewhat akin to seals in their intention. But while the engraved ring was usually employed for purely personal purposes, such as the sealing of a letter or document, and the device of the seal was more or less ornamental, the bronze tablets were used for



+ ANEZANAPO'V

FIG. 229.—ROLLING STAMP, WITH THE NAME OF ALEXANDER (No. 584).

commercial or domestic purposes and seldom bear anything but the name of the person using them.

These tablets are of various forms, but the majority are rectangular, and bear the owner's name, like the one in this Case from Arles (No. 580), with the name of Q. Julius Renatus; others have merely initials. Some are made in the form of a shoe or the sole of a foot, and this is a shape frequently employed by the potters of the Roman period in Italy for stamping their names on vases. Other forms to be here observed are a leaf (No. 581), a ship (No. 582), and a fish (No. 583). The letters in most cases are in relief, producing an impression in intaglio on a soft substance such as unbaked clay. They were probably used for the most part for stamping the plaster stoppers of wine jars, loaves of bread and such like objects.

An example of a rare form is the rolling stamp with the name of Alexander (Nos. 584; fig. 229). The remainder of the guide is devoted to the personal life of the individual from the cradle to the grave. Successive sections are devoted to Infancy and its Amusements; to Education and School Life—to which sections on Writing and Painting are annexed; to games, marriages, music, dancing, pet animals; and, finally, to objects bearing on death and burial.

XXI.-INFANCY. TOYS.

At the end of Case J are four terracotta models of cradles (No. 585) with young children in them. One is a winged Eros, and one is swaddled. Beside the cradles are three cups (No. 586),

with spouts shaped as mouthpieces, which may be supposed to be for milk or pap. Here also are two clay rattles (No. 587), and a child's wooden clapper (No. 588).

A set of small trefoil-lipped jugs (No. 589) is painted with designs closely connected with child life. Children are shown playing with jugs of this type, with animals and toy carts, or other objects. It is probable that these jugs were given to Athenian children on the festival day of the wine god Dionysos, which went by the name of Xões ("Jugs"). Note No. 590 (fig. 230), with a child confined in a turret-shaped high chair, and No. 591 (fig. 231),



Fig. 230.—Child in High Chain] (No. 500).

with two children with draw-carts, each holding a jug.

Toys.—Children of all ages and nations bear a greateresemblance to one another; consequently, it is not surprising, though it is always interesting, to find that Greek and Roman toys are often very similar to those of modern times. At the corner of Case J is a series of small reproductions of furniture, implements and the like in lead, bronze, pottery and terracotta (No. 592). Often no doubt, they are simply toys, like the furniture of a doll's house.

Sometimes, however, they must be supposed to have had a more serious votive character in a temple. In some cases, perhaps, they were of both kinds. Among the treasures of Hera at Olympia, the





Fig. 231.—Greek Toy Jug (No. 591). 1:1 and 1:2.

traveller Pausanias saw a small couch said to have been a plaything of Hippodameia, and it was not uncommon for children on

growing up to dedicate their toys in a temple.

The dolls that survive from Greek times were chiefly of terracotta, and frequently furnished with movable arms and legs. It will be noticed



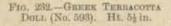




Fig. 233.—Old Woman'on Mule (No. 596). 1:1.

that most of these dolls have holes pierced in the top of their heads for the passage of strings connected with the arms and sometimes

1 Paus. V. 20, 1. with the legs. These would produce a movement of the arms and legs, and explain the term *vepóoraaora ("drawn by strings") applied to these dolls. In Xenophon's Symposium a travelling showman speaks of being kept by the profits drawn from such puppets.\(^1\) One, holding castanets, is illustrated here (fig. 232; No. 593). We get allusions in literature to these dolls and other small terracotta figures, which show that one of their chief uses was the amusement of children. One writer 2 speaks of "those who make little figures of



Fig. 234.—Seated Doll., with Marriage-Bowl, Epinetron and Shoes (No. 599). Ca. 1:2.

clay in the form of all kinds of animals destined for the beguiling of little children." Such a figure is that of the donkey with a sea-perch tied on its back (No. 594) or the fascinating group of the little boy on the goose (No. 595), and the old woman on the mule (No. 596; fig. 233). Many of these toys bring vividly to mind country scenes in Greece at the present day. Though they were doubtless intended chiefly for little children, women did not altogether disdain these terracotta toys. A Greek tombstone of the fifth century B.C. has a relief showing a girl, quite grown up, standing with a terracotta

¹ Xen., Symp. 55.

doll, exactly like those in this Case; in her hands, while a young slave-girl holds the figure of a duck before her. Humbler but less breakable toys of Roman date are the wooden horse (No. 597) and rag doll (No. 598) from Egypt. For the most part these toys have been found in the tombs of children. The seated figure of a girl (No. 599; fig. 234), holding an ivory dove in her hand, and surrounded by her spinning instrument for the knee (see p. 145), her shoes, and marriage-bowl, was found in a tomb near Athens, probably of the fourth century B.C. The bowl is almost certainly the λέβης γαμικός, used by the bridal pair immediately after marriage. It is therefore not unreasonable to conclude that the tomb was that of a newly wedded bride. Another plaything in vogue among the Greeks was the whipping top, an ancient model of which in terracotta (No. 600) is seen in the Case and is illustrated on the



Fig. 285.—Tehracotta Model Tops and Design from Vase-Painting. (No. 600). Ht, of Model on right, 41 in.

right of fig. 235. On the left of the figure is another form of Greek whipping top (of terracotta, found in the sanctuary of the Kabeiri at Thebes), and in the centre a design from a vase, in which a woman is represented whipping such a top. In a Greek epigram² the top is mentioned as a boy's plaything, together with a ball, a rattle, and the favourite knucklebones, and an inscription from the sanctuary

Conze, Att. Grabreliefs, No. 880, pl. clxx.

² Anth. Pal. vi. 309.

εδφημών τοι σφαίρων, εξικρόταλών τε Φιλοκλής Ερμείη ταύτην πυξινέην πλατάγην, ἀστραγάλας δ΄ αἰς πόλλ' ἐπεμέριατο, καὶ τὸν ἐλικτὸν ῥόμβον, κουροσίωης παίγνι', ἀνεκρέμασεν.

of the Kabeiriat Thebes speaks of four knucklebones, a top (στρόβιλος), a whip, and a torch dedicated by a woman named Okythoa.

(591) Cat. of Vases, III., E 533 ff.; Benndorf, Griech. u. Sicil. Vasenbilder, p 64; (599) For the λέβης γαμικός, see Ath. Mitt., XXXII. (1907), p. 111 f.; (600) See Ath. Mitt., XIII., p. 426 f., and Van Branteghem Coll., No. 167.

XXII.—EDUCATION, WITH WRITING AND PAINTING.

(Table-Case J.)

Education.—Case J contains several objects illustrating that part of the Greek child's education which was connected with the



FIG. 236.—TEBRACOTTA GROUPS. READING AND WRITING LESSONS (No. 602). Ht. 41 in. and 47 in.

arts of reading, arithmetic and writing. A Greek terracotta of the fourth century B.C. with Silenus holding the child Dionysos by the hand (No. 601), may be supposed to represent the old pedagogue, the slave whose duty it was to take the child to school. (Scenes in a music school are shown on the vases E 171, E 172, in cases 55-56.)

¹ Athen. Mitt., XIII., p. 427 : 'Ωκυθόα ἀστρωγάλως πέτταρας, στρόβιλου, μάστιγα, δαίδα,

Reading.—Another terracotta group of about the third century s.c. (No. 602, fig. 236, right) shows a kindly old schoolmaster seated and teaching a boy who stands by his side to read from a roll. The ancient book differed from our own in taking the form of a roll. The reader would first unroll the beginning, and then, as he went on, roll up the part he had finished, making thus a double roll, as it were, of the part read and the part unread. See the tablet in Case 56 of the child Avita, reading her scrolls, with her dog in attendance (No. 603).

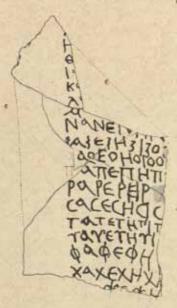


Fig. 237.—Spelling Exercise (No. 605).

A simple Greek alphabet is inscribed on marble (No. 604) . . . &c .. θικλμινξοπρατυφχψ. A fragment of a syllabic reading or spelling exercise is shown on a piece of pottery (No. 605; fig. 237). Each letter of the alphabet is combined with each vowel in turn, as pa pe py pli po pu pw] on or on or of o ov ow and so on. In the case of on the syllable was miswritten ρε and corrected. A school-boy's wax tablet (No. 606; fig. 238) shows on its right half how syllables constitute words as $\theta \epsilon$ or for θεών. A large wooden board with an iron handle (No. 607) is inscribed with lines of Homer (Iliad i., 468 ff.), no doubt for use in school. A fragment of an 'Iliac table,' (No. 608) with a scene from the Iliad (Achilles dragging the body of Hector round Troy, and Achilles conversing with Athena) was prob-

ably also intended for teaching purposes.

Arithmetic.—The left side of the tablet (No. 606; fig. 238) gives a multiplication table, from α' α' α' , once one is one, to γ' ι' λ' , thrice ten is thirty. The Greek numerals follow the alphabet to $\iota' = 10$, followed by $\kappa' = 20$, $\lambda' = 30$, and so on. Six is represented by the sign ς' , which occupies the place of F in the Latin alphabet, and stands for the old digamma or vau.

Writing.—The wax-coated tablet which contains the foregoing table was the usual appliance for writing. A writing lesson is shown in the terracotta group (No. 602, fig. 236, left). The instrument

employed was a pointed implement, called by the Romans a stilus. An example in ivory, here figured (No. 609; fig. 239), was found in a tomb of the fifth century B.C. at Eretria in Euboea. The broad flat end was used for erasures, so that we find the Romans using the phrase vertere stilum, "to turn the pen" in the sense of "to erase." Numerous stili in bronze are shown in the Case, and some are

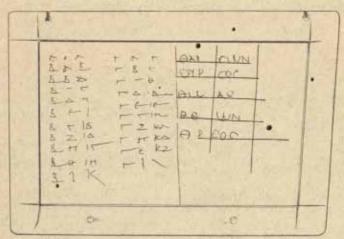


Fig. 239 Tablet with Multiplication Table and Reading Exencise (No. 606).

illustrated in fig. 240. The fifth example from the top in the illustration is in silver bound with gold wire, probably from France and of late Roman date. These tablets were not as a rule used singly, but strung together, so that the waxen surface was protected when the two or more leaves were closed. The present tablet was composed of two leaves, one of which is in the Department of



Manuscripts with a writing exercise upon it. The arrangement of several tablets in a fashion anticipating the form of the modern book is well shown in the relief of the pork butcher (Case 41).

For documents of a more permanent character paper was made from the papyrus plant, whence it takes its name. It was manufactured chiefly at Alexandria from the time of the foundation of that town in the fourth century n.c., and pen and ink were used to write on it. A specimen of Greek writing on papyrus is seen in the Case (No. 610). It is a letter of the first century after Christ, asking that a supply of drugs of good quality—" none of your rotten stuff that won't pass muster in Alexandria "—should be sent to the writer, Prokleios. Later on, parchment, prepared from the skins of animals, and made principally at Pergamon, in Asia Minor, began to rival papyrus as writing-material. Specimens of ancient reed and bronze pens (No. 611) are given in the illustration above (fig. 240), and a series of ancient inkpots is here figured (No. 612; fig. 241). The pens, whose split nibs have a curiously modern

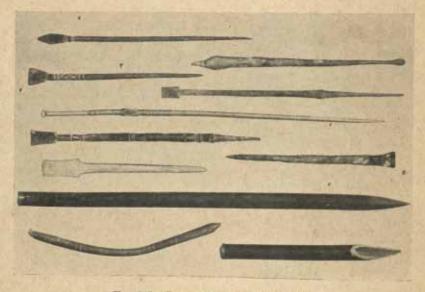


FIG. 240.—ROMAN PERS AND Still, 1:2.

appearance, are all of Roman date. The reed pens come from Behnesa, in Egypt, and one of the bronze pens was found in the Tiber at Rome. The inkpots are also of Roman date. The middle one of the lower row has its hinged cover still remaining, with the inlaid vine-spray in silver round the rim. The one to the right of it is in blue faïence, and was found in Egypt.

Writing was sometimes put directly upon wood. Such is the case with the fragment of board from Egypt mentioned above. The lawyer's tablet (No. 612*), of about the fifth century A.D., which deals with loans, etc., has the surface specially whitened for the writing and a space for keeping the pen. Parts of the

two outer leaves, which contained between them eight inner leaves, are shown in the Case.

(604) B. M. Inser., 323; (605) Journ. Hell. Stud., XXVIII. (1908), p. 123; cf. Dumont, Inscriptions ceramiques, p. 405 (5); (608) Cat. of

Sculpt., III., 2192: (610) B. M. Papyri, ccelvi.

On Greek education generally, see Freeman, Schools of Hellas, and the select bibliography there given. For ancient books, cf. E. M. Thompson. Handbook of Greek and Latin Palaeography For relics of Graeco-Egyptian school-life, see Journ, Hell. Stud. loc., cit.

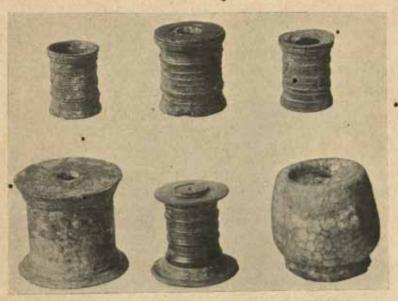


Fig. 241,-Roman Inkrots (No. 612), Ca. 1: 2.

Painting.—Adjoining the objects connected with writing, are illustrations of the art of painting in Roman times. They include a series of ancient colours, pestles and mortars, some paintings on wood, one, painted by the encaustic process, enclosed in its ancient wooden frame. The colours, as may be seen, were kept in a dry condition, and had to be pounded with pestle and mortar before they were mixed for the use of the artist. A good number of ancient colours are shown here, the blue (silicate of copper) being particularly prominent. The six saucers (No. 613), found together in a tomb of the Roman period at Hawara, Egypt, contain water-colour paints. These are dark red (oxide of iron), yellow (ochre,

oxide of iron), white (sulphate of lime), pink (organic colour, probably madder, in sulphate of lime), blue, (glass coloured by copper), red (oxide of lead). The saucers were found piled by the side of the owner's body. Pestles and mortars for pounding the colours are shown in the Case. A favourite form of pestle is that which resembles a bent leg or thumb, such as the one from Rhodes (No. 614), inscribed with what is probably the owner's name. Near it is the terracotta figure of a dwarf (No. 615), seated (apparently in a violent passion) before a pestle and mortar. We may imagine that he is a slave set to mix his master's colours.

The methods of painting illustrated here are two, viz., painting on a dry ground in water-colours, and what is known as "encaustic" painting. For the first, water-colours were used, and the ground material was generally a thin piece of wood, whitened to receive the colours. Egypt has furnished many examples of this kind of painting. Among them is the portrait of a woman from the · Fayum, wearing a fillet (No. 616). This no doubt comes from a mummy of the Roman period, such as the one exhibited in Case 72 next the entrance to the Gold Room Corridor, which has a similar painted portrait (in encaustic, however) placed over the face. Other water-colour paintings of Roman date from Egypt are shown in Case J, such as the figures of Fortune and Venus painted in several colours on a red ground (No. 617), and the fragmentary figure (No. 618), wearing a jewel of gold and pearls, and inscribed with the name of Sarapis (CAPAIII). The encaustic process was that employed in the case of the framed portrait (No. 619), found at Hawara in Egypt. The frame is carefully made, the sides being joined by tenons and mortises. There is a groove for a glass covering, and the cord by which it was suspended still remains. The portrait was painted in wax, by a process which can hardly have been other than that called "encaustic" by Pliny. The nature of this process has been much disputed, but probably the colours were ground in with the wax, which was fused by the heat of the sun or artificial means, and then laid on by the brush. A stump (cestrum) was also sometimes employed. Probably a box divided into compartments was used for holding these wax-colours in their fluid state. Such a receptacle may perhaps be recognised in the logg terracottas vessel, which has a groove in the middle for a brush (No. 620).

(613) Petrie, Hawara, p. 11; (619) ibid., p. 10.

1 Plin. H.N. xxxv. 122, 149.

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XXIII. GAMES.

(Table-Case J.)

Herodorus has a curious story to the effect that the Lydians invented dice, knucklebones, balls, and other playthings to help them to pass a time of famine, by playing and eating on alternate days. Draughts (πεσσσί) are expressly excepted from his list, and were ascribed to the fertile invention of Palamedes at the time of the Trojan war. Games played with knucklebones (small bones forming part of the ankle-joint in cloven-footed animals) may be described first, since they were, as may be judged from the number



Fig. 242.—Two Women Playing at Knucklebones.

of ancient knucklebones found (No. 621 in this Case), extremely common. We are told in the Anthology of a boy who gained eighty knucklebones as a writing-prize. Among women too they were a favourite plaything. The illustration (fig. 242), from a painting on marble found at Resina (the ancient Herculaneum), shows two women engaged at knucklebones. (See also the terracotta group D 161 in the Room of Terracottas, Case 32) This game was called "five-stones" (πατέλιθα), a name still given by children to a very similar game. The lexicographer Pollux describes

Νικήσας τοὺς παίδας, ἐπεὶ καλά γράμματ' ἔγραψεν, Κώνναρος ἀγδώκοντ' ἀστραγάλους ἔλαβεν.

Herodot., i. 94.

^{*} Anth. Pal. vi. 308 :

the game thus: "The knucklebones are thrown up into the air, and an attempt is made to catch them on the back of the hand. If you are only partially successful, you have to pick up the knucklebones which have fallen to the ground, without letting fall those already on the hand... It is, above all, a woman's game." This description makes the illustration clear. Each woman has five knucklebones, and the one whose turn it is to play has caught three on the back of her hand; the two which are falling to the ground she would have to pick up without shaking off those already on the hand."

Besides being used in various kinds of games, knucklebones



Fig. 249.—Knucklebones and Dice (Nos. 621-3). 1:1.

were also employed as dice. The four long faces of the knuckle-bone differed from one another in form, one being convex, another concave, another nearly flat, and the fourth sinuous and irregular. The values assigned to these sides were: (a) to the flat side $(\chi \hat{v}\alpha r)$, 1; (b) the sinuous side $(\kappa \hat{\psi}\alpha r)$, 6; (c) the concave $(\tilde{v}\pi\tau r\alpha r)$, 3; (d) the convex $(\pi \rho \eta r \hat{\epsilon}s)$, 4. This is the order in which they are shown in fig. 243, from left to right. Astragali thus required no marks of value upon them, since their sides were naturally distinguished. The ordinary cube-shaped dice, marked 1–6 (No. 622) were also widely used by the Greeks and Romans (fig. 243). The usual arrangement of numbers was, as now, 1 opposite 6, 2 opposite

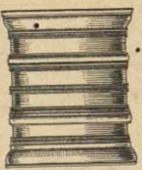
Pollux, ix. 126 (reading éplorarai and omitting i).

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5, and 3 opposite 4. but other arrangements occur. Some dice are interesting on account of their peculiar form, e.g., the squatting silver figures (No. 623, fig. 204), which are marked with the values 1–6 on different parts of the body. A Roman bronze dice-box is shown in fig. 244 (No. 624). The ordinary materials of dice were ivory, bone, or wood. Of the multifarious ways of playing with dice known to the Greeks and Romans, the one most in vogue may be mentioned. In this three dice were used, and the object was to throw the highest number (πλειστοβολάτδα). The best throw, three sixes, became proverbial. In Aeschylos' Agamemnon the watchman, when he saw the beacon-fire blaze forth which told of Agamemnon's victorious return, exclaimed:——" I'll count my master's fortunes fallen fair, now that my beacon watch has thrown

a triple six." 2 With astragali, on the other hand, the best throw was 1, 3, 4, 6, and was called "the throw of Venus." For this each bone had to present a different face. 3 The worst throw was the "Dogs," when four aces turned up.

Dice of exceptional form are the twenty-sided one, inscribed with the Greek letters A to Y (No. 625), a fourteen-sided one inscribed with Roman numerals (No. 626), and an uninscribed fourteen-sided crystal die from Naukratis. With these may be mentioned the triple teetotum (No 627) and the four-sided



Fro. 244.—BRONZE DICE-Box (No. 624), 4;5.

triple die, one side of which has been left plain (No. 628).

Of the rules governing other games, represented here by several pieces, we are entirely ignorant. The plaster pawns (No. 629) found at Panticapaeum (Kertch) in the Crimea, probably belonged to some game analogous to our draughts. An interesting set of

Cf. Anth. Pal. xiv. 8:

έξ, έν, πέντε, δύο, τρία, τέσσαρα κύβος έλαύνει.

³ Aesch., Agam. 32:

τὰ δεσποτών γὰρ εὖ πεσώντα θήσομαι, τρις εξ βαλούσης τῆστδε μοι φρυκτωρίας.

¹ Mart., xiv. 14:

Cum steterit nullus vultu tibi talus eodem, Munera me dices magna dedisse tibi.

⁺ Prop., iv. 8, 45 f.:

Me quoque per talos Venerem quaerente secundos, Semper damnosi subsiluere canes.

pieces is that of the ivory discs (No. 630; fig. 245), which bear on their obverse a design in relief e.g., two Muses and the head of the Sun-god, and on their reverse a number, from 1 to 15, in both Greek and Latin figures, as well as a word descriptive of the design on the

obverse. Thus the two illustrated have on their reverse MOYCAI and HAJOC (i.e., VI.—Nine (6') Muses—6, and II.—Helios—2)

respectively. It seems pretty clearly established that these discs were used as pieces in a game, which probably resembled draughts or backgammon. Fifteen of these pieces have been found together



Fig. 245.—Ivory Pieces from Games (Nos. 630-631). 2:3.

in a child's tomb at Panticapaeum. The game appears to have been popular in the first and second centuries after Christ, and probably had its origin in Alexandria. It seems likely that it bore a resemblance to the Roman game called duodecim scripta ("twelve lines"), played with fifteen pieces on either side. The moves were determined by the throw of the dice, as in our backgammon. Another set of pieces belonging to a game are the label-shaped ivories (No. 631; fig. 245), inscribed on one side with words, often of an abusive character, such as male (e)st ("bad luck"), fur ("thief"), nugator ("trifler"), stumacose ("ill-tempered felfow"), etc., and on the other with numbers. The pieces mentioned have the numbers XXIII, A, II, I, and II A respectively on their reverse sides (see fig. 245). The whole series of numbers on these ivories runs

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from 1 to 25, and includes in addition 30 and 60; it is noteworthy that the highest numbers have inscriptions of a complimentary character, e.g., felix and benigne. The pieces may have been used in the Roman game called "the game of soldiers" (ludus latrunculorum).

At the top of Cases 57-58 is an oblong marble board (No. 632), inscribed with six words of six letters each. It was found in a tomb

near the Porta Portese, Rome. The words are-

CIRCVS PLENVS CLAMOR INCENS IANVAE TE | ? te(nsae)

"Circus full," "Great shouting," "Doors bursting (3)."

Each word is separated from that opposite it by a flower within a circle. Many such stones are known, always with six words of six letters, so that it seems clear that they were used as boards for a game, possibly the duodecim scripta already mentioned. The pieces used were probably the so-called "contorniates," bronze discs of coin form, with designs in relief on either side within a raised rim and a circular depression. Two examples of these contorniates (in electrotype) are exhibited below the stone board (No. 633). The pieces are of late Imperial date, of about the time of Constantine. Many have subjects closely connected with the circus, a fact which harmonizes well with the inscription on the board described. One of the two exhibited has a head of Alexander and a representation of a chariot race, the other a head of Nero and a water organ (see below, p. 216).

(630) Cf. Röm. Mitt., 1896, p. 238 ff.; Rev. Arch., 4th Series V. (1905).
p. 110 ff.; (631) Röm. Mitt., 1896, p. 227 ff.; (632) Cf. Num. Chron.
(4th Series), V1., p. 232 ff.; Notizie degli Scavi, 1887, p. 118.

On ancient toys and games generally, see Beeq de Fouquières, Les

jeux des anciens ; Daremberg and Saglio, s.v. Ludus.

XXIV.—MARRIAGE.

(Wall-Case 53.)

Greek Marriage. Though neither Greek nor Roman marriage was definitely associated with the religion of the state, it was, however, among both peoples closely associated with religious rites of a domestic character. Plato in his Laws makes it the distinguishing mark of the legally wedded wife that "she had

Latro originally meant " a mercenary soldier."



come into the house with gods and sacred 'marriage rites." These rites are sometimes represented upon Greek vases, as may be seen from the objects and illustrations placed in this Case. The ceremonies may be conveniently divided into those concerning (a) the preparation of the bride; (b) the removal of the bride from the house of her father to that of her husband; (c) the reception at that house; and (d) the presents given on the dayfollowing the marriage (ἐπαιλια).

(a) On the day before her wedding the bride not infrequently made an offering of the playthings of her childhood to some deity, presenting her toys to Artemis in particular. On the day before marriage, too, water for the bridal bath was brought in procession in the special form of tall vase called a λουτροφόρος; a small model is seen in Case 59 (No. 634). The vase is also seen standing on the chest in the room of the bride here depicted (No. 635; fig. 246). The scene is taken from the design on a toilet box of the fifth century B.C. (E 774), which shows the bride being adorned for her marriage. Besides the tall amphora already mentioned, two vases called " marriage bowls " (λέβητες γαμικοί) are seen standing on tall stems before the door, on the further side of which one of the bride's friends is turning the magic wheel intended to inspire the bridegroom with a greater longing of love. So Theocritus sings :

"Draw to my home, O mystic wheel, the man that I long for."

¹ Theoer. ii. 17: τυγξ, έλκε τὐ τῆνον ἐμόν ποτὶ δῶμα τὸν ἄνδρα.

FIG. 246, - DECKING OF A GREEK BRIDE (No. 635).

(b) The arrival of the husband, who comes to fetch the bride to his home, may probably be recognised in the design on the fifth-century vase No. 636. It is, however, a special and sacred occasion which is here represented. The bride, who is seated and holds a sceptre, is probably the Basilinna, wife of the Basileus, the magistrate at Athens who was charged with the supervision of the state-religion. She turns back to look at the bridegroom, who is none other than the wine-god Dionysos, holding his thyrsos or staff crowned with the pine-cone. Two love-gods fly towards the pair with wedding gifts, while on the right approaches a Victory holding lighted torches, which served to light the night-procession to the bridegroom's house. The subject is explained by a ceremony which



Fig. 247.—The Wedded Pair Driving to the Buidegroom's Home (No. 687).

took place at the Attic wine-festival of the Anthesteria, celebrated annually in February and March. On the second day of the festival there was a mystic marriage between the wine-god Dionysos and the wife of the Basileus, and it can hardly be doubted that the present design refers to this.

(e) The actual progress of the bride to her husband's home is depicted on the black-figured vase No. 637, of sixth-century date (fig. 247). The departure took place at nightfall by torch-light, and the bride and bridegroom usually (as in the present instance) made the journey in a mule-car, attended by a friend called the parochos.

^{&#}x27;Cf. Aristot. 'Ad. Пол. 3, 5; Dem c. Neaer., c. 76; Mommsen, Feste d. Stadt Athen, p. 393 ff.

On the vase (fig. 247) the bride and bridegroom are seen in front of the mule-car, and the parochos is seated behind. When the pair reached their home, they were welcomed by the father and mother of the bridegroom, and a procession was formed to the hearth-altar. This is a scene depicted on No. 638, a reproduction of a painting on a toilet-box in the Third Vase Room (D 11, on Case F). The bridegroom leads the bride by the hand towards the hearth-altar, by the side of which stands the hearth-goddess Hestia, holding a sceptre and what is probably a fig, an allusion to the figs, dates and other fruits showered over



Fig. 248.—Tollet-Box with Wedding Procession.

the wedded pair as they reached the hearth, and thence called καταχύσματα (down-pourings). Before the pair go a boy playing on the double-flutes and two women holding torches, who probably move round the altar, as well as another woman, who perhaps leads the way to the bridal chamber (figs. 248 and 249).

(d) Upon the day following the marriage the relations and friends brought presents to the house (ἐπαὶλία).¹ The presents consisted chiefly in objects likely to be useful to the bride, such

¹ See Jahrb. d. arch. Inst., 1900, p. 144 ff.



16. 249.—BRIDEGROOM LEADING BRIDE TO HEARTH-ALTAR. Design on the follet-box (No. 638)

as vases, articles of toilet, spinning implements, etc. The subject was a favourite one with the Greek vase-painters, probable examples being the designs on E 188 in Case 47 and the toilet-box E 773 in Case H in the Third Vase Room. A still better instance occurs on the restored "marriage vase" E 810 in Case H in the same room.

Roman Marriage.—Roman practice recognised various methods of lawful marriage. The illustrations and objects shown in this Case deal only with certain ceremonius which were common to all of them. They concern (a) the betrothal; (b) the actual wedding rites; and (c) the escorting (deductio) of the bride to the house of the bridegroom.



Fig. 250.—ROMAN WEDDING CEREMONY (No. 641).

(a) The betrothal took the form of a solemn contract between the fathers and guardians on either side. In all Roman contracts it was customary that a pledge should be given, and this pledge often consisted in a ring. It was fitting, therefore, that a ring given to the woman by her betrothed should come to be a sign of the betrothal contract. It is natural to identify these rings with a series of Roman rings which have for their design two clasped right hands. An example in gold of about the third century A.D. (No. 639) is shown in this Case.

(b) The actual ceremony of marriage consisted in the solemn clasping of hands (dextrarum iunctio), an action seen on the relief on the sepulchral chest (No. 640) placed in this Case. The inscription shows that the chest was dedicated by a freedman

and imperial scribe named Vitalis to the memory of his wife Vernasia Cyclas. The ceremony is only shown in an abbreviated form on this chest, but it appears in more detail on a relief from a sarcophagus (No. 641; fig. 250). The husband and wife clasp hands, and between them stands the pronuba or matron-friend of the bride, placing a hand on the shoulder of each. On the left of the group stands a man, perhaps the bride's father. To left and right of this scene of everyday Roman life we have the mythological personages whose attendance at the wedding may be supposed to be of good augury—Mars, Victory and Fortune. The clasping of hands was followed by a sacrifice to Jupiter, and this closed the actual wedding ceremonies. The sacrifice is represented in the illustration (fig. 251) taken from a Roman sarcophagus. The bride and bridegroom stand by the burning altar, upon which the



Fig. 251.—ROMAN WEDDING SACRIFICE.

latter pours a libation. Behind the pair stands Juno pronuba, the presiding goddess of the wedding rites. On the right a bull is being led up to sacrifice, and on the left stand Venus, Hymenaeus and the Graces.

(c) When night had fallen there followed the procession, in which the bride was escorted from her father's house to that of the bridegroom, a procession described in one of the most splendid of the poems of Catullus. Torch-bearers and flute-players led the way, and the wedding train was accompanied by a crowd, the boys in which chanted rude jesting verses and petitioned the bridegroom for nuts. When the doorway of the house was reached, the bridegroom carefully lifted the bride over the threshold, that there might be no ill-omened stumbling. "Carry the gilded feet across the threshold," sings Catullus, "that the

¹ Mon. dell' Inst. iv., pl. 9. ² No. 1xi. ³ Ibid., 1. 131 f.

omen may be favourable." This moment is illustrated by a scene from a Roman comedy (No. 54), taken from a lamp exhibited on Table-Case K (see above, p. 28, fig. 17). The bride is being carried on the back of a man, while a Cupid waits at the door to receive her. Within the house she received a gift of fire and water, elements so necessary to the performance of the house-wife's duties, and on the day following the wedding she did sacrifice at her husband's altar.

(635) Cat. of Vases, III., E 774; Furtwangler and Reichhold, Griech. Vasenmalerei, I., pl. 57 (3); (637) Cat. of Vases, II., B 485; (638) Cat. of Vases, III., D 11; Ath. Mitt., XXXII., 1907, p. 80 ff.; (639) Cat. of Rings, 276; (640) Cat. of Sculpt. 2379; (641) Journ. of Hellenic Studies, XXXVI., p. 85.

See also Daremberg and Saglio, s.v. Matrimonium.

XXV.-MUSIC AND DANCING.

(Wall-Cases 54-56.)

Music.—The Greek term μουσική (music) included much more than we mean by music. It was applied to the education of the mind as opposed to γυμναστική (gymnastics), the education of the body. In the narrower sense, however, it corresponded to the modern term, and to this the Greeks from early times attached a high importance. It was the effect of music upon the character which appealed to them above all things, and it was this which caused Plato to banish from his ideal state certain modes of music which would, he thought, be injurious to its well-being. These modes or "harmonies" were named after race-divisions. We find the Dorian, the Aeolic, the Ionic, the Lydian, and the Phrygian. The Dorian was universally approved for its manly qualities, but Plato rejected the Lydian as useless and effeminate.

Of the stringed instruments used among the Greeks, the lyre was the most prominent. There were two varieties of this, the kithara and the lyre proper. The kithara, an instrument with a large wooden sounding board and upright arms, was played chiefly by professional musicians, such as the kitharist represented on a fine vase in the Third Vase Room, who has won a victory at one of the great musical contests (E 460; Pedestal 7). The illustration (fig. 252), taken from an amphora of the fifth century (E 256,

Plat., Rep. iii. 398-9.

Case H, Third Vase Room), shows Apollo playing on the kithara, which is supported by a band passing round his left wrist, but leaving the fingers of the left hand free to play on the strings. In his right hand he holds the plectrum, which is attached by a cord to the instrument. The plectrum was of various forms, but its most essential part was the tooth for catching and sounding the wires. The lyre proper (fig. 253) is distinguished by its curving arms and sounding board of tortoiseshell (hence called chelys). The wooden framework and parts of the shell of a Greek lyre found in a tomb near Athens are shown in Case 56 (No. 642). As the



FIG. 252. APOLLO PLAYING ON A KITHARA.

popular instrument, the lyre was naturally taught in schools. Two interesting Greek vases (Nos. 643 and 644), exhibited in these Cases, give pictures of boys receiving music lessons at a school. In one instance a boy is learning the lyre, in another the boy is playing the flutes, while the master, who holds a plectrum, is playing on a lyre. Domestic animals are freely admitted, and the discipline seems far from severe.

As the school scene shows, flute-playing, though condemned by Plato and Aristotle, was commonly taught at Athens. Ancient flutes are distinguished from the modern instruments by the vibrating reed which formed the mouthpiece, and by the fact that they were always played in pairs. Hence the frequency with which



Fig. 253. Lynn.

pairs of ancient flutes are found. Two of sycamore wood (No. 645; Case 56) were discovered in the same tomb (near Athens) as the lyre described above (No. 642). Another pair of flutes (in bronze) from Italy (No. 646; fig. 254) have their mouthpieces in the form of busts of Maenads. A terracotta shows a pair of female musicians (No. 647) playing with a drum and double flutes. To assist the playing of the two flutes together a mouth-band was often worn, as may be seen from designs on vases, e.g., on a cup of Epiktetos (E 38; Third Vase Room), and on some of the Cypriote sculptures in the Gold Ornament Room passage.

¹ Plato, Rep. iii. 399 D; Arist., Pol. viii. 6, 5 ff.

A framed impression from a Greek hymn to Apollo inscribed on stone is here exhibited (No. 648). Musical notes, indicated by letters of the Greek alphabet in various positions, are placed at intervals over the letters to guide the singer. The inscription was found at Delphi, where other inscriptions of a similar character have come to light.

Flute-playing was very popular with the Romans, among whom it was considered the proper accompaniment of every kind of ceremony. For military purposes they used several other wind instruments. Two bronze mouthpieces (No. 649) in Case 55 may perhaps come from long straight trumpets (tubae).

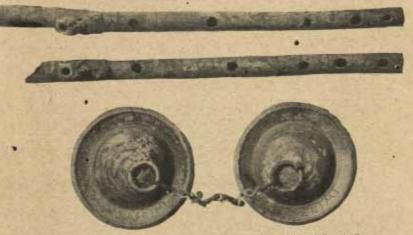


Fig. 254.—Beonze Flutes and Cymbals (Nos. 646, 654). 1:3.

The Roman curved horn (cornu) is represented by two large specimens in bronze (No. 650) placed at the top of Cases 55, 56. The terracotta bugle in Case 55 is probably a model of the Roman bucina (No. 651).

The simplest of all ancient wind instruments is the rustic Pan's pipe (syrinx), usually formed of seven or eight hollow reeds fastened together with wax. The Greek Pan's pipe has the reeds of equal length, the different notes being produced by the different positions of the natural joints of the reed. An example may be seen among the Cypriote sculptures in the Gold Ornament Room

Ovid, Fasti, vi. 659 f.: cantabat fanis, cantabat tibia ludis, cantabat maestis tibia funccibus. passage. The Roman syrinx had its lower edge sloping, the result of cutting off the reeds immediately below the natural joints. A terracotta statuette in Case 55 (No. 652) represents a shepherd boy playing on a Pan's pipe of the Roman kind, and a marble relief from Ephesus at the top of Case 54 (No. 653) shows a beardless man seated with a large syrinx in his hands. The Greek inscription tells us that the relief was dedicated by Ebenos, a "first flute," to Hierokles his piper.

It was the Pan's pipe which gave Ktesibios of Alexandria (third century B.C.; cf. p. 120) the model on which he constructed his water-organ, an instrument which became popular with the Romans. A Roman "contorniate" shown in Case 58 has one of these water-organs represented upon it. The air was supplied by water pressure and the notes were played by means of a key-board.

Cymbals were largely used by the Greeks and Romans in religious ceremonies of an ecstatic character, such as the mysteries of Demeter and Kore and the worship of Kybele. Among the cymbals in Case 56 is an interesting pair (No. 654; fig. 254) inscribed in Greek with the name of Oata their owners (Ωairas είμι). They were originally joined together by a chain, part of which still remains. In the lower part of Cases 55–56 is a considerable variety of bells in bronze (No. 655).

(643) and (644) Cat. of Vases, III., E 171, 172; (645) For the structure of the ancient flute, cf. especially Baumeister, Denkmäler, s.v. Flöten; (648) Bull. de Corr. Hell., XVIII., pl. 21; (652) For the syrinx, cf. Tillyard in Journ. Hell. Stud., XXVII. (1907), p. 167 ff.; (653) Cat. of Sculpt., II., 1271.

See in general, Camb. Comp. to Gk, Stud., pp. 370-374; Daremberg and Saglio, s.v. Musica.

Dancing.—Dancing among the Greeks and Romans differed in many ways from our own. In the first place dances (which were generally accompanied by the flutes) were largely associated with religion. Plato in his Laws gave it as his opinion that, in imitation of the Egyptian example, all dancing should be made to take a religious character.\(^1\) This ceremonial side of Greek dancing is illustrated by a primitive stone vessel from Cyprus (No. 655), which represents three draped women dancing in a ring. Among the Romans the processions of the Salii or dancing priests of Mars are among the best-known examples of religious dancing.

In private life dancing was regarded by the Greeks rather as an entertainment to be provided by hired performers than as a recreation in which guests could take their part. Hence with them men and women did not dance together as in the modern fashion. The demand for dancing girls to entertain the guests at banquets led to the training of large numbers of this class. A vase (No. 656), placed in the lower part of Case 54, shows dancing girls being instructed in their art. They repeatedly appear on Greek vases dancing before the feasting guests (e.g. on E 68 in Case E in the Third Vase Room, the interior of a cup in the style of Brygos). These girls often carried castanets when dancing, as may



FIG. 255.—GREEK WOMEN DANCING. Ca. 2:7.

be seen on the lekythos (No. 657) and in the relief from Melos (No. 658).

Greek women sometimes danced in private among themselves, especially on the occasion of some domestic festival.² It is with this kind of dancing that we should probably associate the terracotta figurines (fig. 255). They illustrate the important part played by the arms and the drapery in ancient dancing, which was largely

Aristoph., Lys. 408; Athen., xv. 668 D.

¹ Cf. the famous story of Hippokleides (Herodot., vi. 129), whose dancing lost him a bride.

mimetic. Ovid notes that supple arms are one of the principal qualifications for a good dancer.¹ This tradition was undoubtedly inherited from Greek dancing, for (religious rites apart) the Romans regarded the art as an unseemly one, so much so that Cicero remarked "that practically no one except a madman danced when sober" ²

(656) Cat. of Vases, III., E 185; (657) Ibid., E 642; (658) Cat. of Terracottas, B 370. For Greek dancing in general, cf. Emmanuel, La danse greeque.

XXVI.-DOMESTIC AND PET ANIMALS; FLOWERS.

(Wall-Cases 57-58.)

The upper part of Wall-Cases 57, 58 contains a number of representations of domesticated and pet animals. The series includes cattle, goats, pigs, dogs, cats, pigeons and poultry. Often, but not always, the animal is associated with some human actor, as when the child rides on a dog, pig, or goat, or when the large cock tries to peck at the bunch of grapes in a child's hand (No. 659).

More than one of the pigeons wears a bulla round its neck (No. 660) to avert the evil eye (see p. 136), and a cock is decked with 'a wreath of ivy leaves (No. 661). On a vase (No. 662) a girl has tied a string to the hind leg of a tortoise, and dangles it before her dog; on another (No. 663) two children are making a dog jump through a hoop. In a relief already mentioned (p. 198, No. 603) the dog seeks the notice of its studious mistress, little Avita. the scene of the music school (No. 643 in Case 55) the boy plays with the cat behind the master's chair. Another form of amusement is illustrated by the kylix, No. 664. A boy is seated, and holds on his knee a cage containing a bird, probably a quail. Quail-fighting was a very popular amusement at Athens, where odds were freely betted on the result of the encounter. The wooden instrument, seen above the boy, would be used to provoke the quails to fight with one another. The game of quail-striking (δρτυγοκοπία) was another variety of sport with quails. In this the object was to prove the endurance of the quail by striking it with the fingers or pulling out its feathers. A Roman lamp (No. 665; fig. 256) gives an interesting view of an itinerant with his troop of

Ars. Amat, i. 595 :

si vox est, canta; si mollia bracchia, salta.

* Pro Mur. 6; cf. Nepos, Epam. 1.

performing animals. On his right is an ape, on his left a cat climbing a ladder. Above are two hoops for the animals to jump through.

Flowers.—In Cases 57-58 will be seen a set of funeral wreaths (No. 666; cf. p. 226), found at Hawara, in Egypt. Among the flowers which can be identified, in those wreaths are the rose, narcissus, sweet marjoram, and immortelle. We know, from an epigram of Martial, that Egypt cultivated roses with such success that she exported them from Alexandria to Rome during the winter, though at the time when the poet wrote (latter part of first



Fig. 256.—ITINERANT WITH PERFORMING ANIMALS (No. 665). 2:3.

century A.D.), Italy was, according to him, in a position to export roses to Egypt. In their gardens the Romans devoted most of their attention to their trees, which they cut into fantastic shapes by the agency of the landscape gardener (topiarius). The species of flowers known to them were decidedly limited in number, but we find gardens of singular beauty depicted on their wall-paintings notably on one found at Prima Porta near Rome.²

(659) Cat. of Terracottas, C 539; (662) Cat. of Vases, IV., F 101; (665) Cat. of Lamps, 679; (666) Petrie, Hawara, p.47.

1 vi. 80. Ant. Denkmäler, I., pl. 11.

XXVII.—METHODS, OF BURIAL.

(Wall-Cases 58-64.)

Greece.—In the prehistoric period known as Mycenaean,
the inhabitants of Greek lands probably buried their dead and did
not cremate them. It is possible, however, that a partial burning
was in vogue in this and the succeeding periods in Greece. In
the case of the more wealthy Mycenaean dead, the bodies were
elaborately decked with gold ornaments. Oval plates of gold



Fig. 257. Funkhal Lekythos. Ht. 15‡ in.

were tied over the forehead and mouth of the corpse, in the latter case (where the impression of the lips can be seen) perhaps with the idea of keeping out evil spirits. The window-cases in the Gold Ornament Room contain many examples of these funeral diadems and mouth-pieces from Cyprus. In the Homeric poems we find the bodies of the dead burnt upon a pyre and the ashes buried beneath a mound.

Scenes representing the preparation of the body for cremation or burial are frequently depicted on Greek vases. They occur on the large "Dipylon" vases, made specially for standing outside the tomb (see examples in the First Vase Room), and on black-figure vases, where the body is seen lying on the bier surrounded by mourners. It is, however, upon the white lekythi of the fifth century (No. 668; fig. 257), one of which is here illustrated, that funeral scenes are most commonly found. We know from Greek

literature that these vases were expressly made for putting in tombs. A speaker in the *Ekklesiazusae* of Aristophanes talks of "the man who paints the lekythi for the dead." On the vase here figured a woman is making offerings at the tombstone. These offerings were made by the relatives from time to time, and consisted mainly of sashes, wreaths, and vases, as may be seen from the vases placed in the Case. The Greek funeral monuments of the best period are characterised by their restrained beauty. Examples of the different types will be found in the Phigaleian Room downstairs and in the Gallery of Casts. In the Cases 59-60, the only tombstones

Aristoph., Ekkl. 996:

ος τοις νεκροίσι ζωγραφεί τας ληκύθους.

are the archaic one of Idagygos of Halikarnassos (No. 669; fig. 258) found in Cyprus, inscribed with an elegiac couplet in which he is called "the squire of Ares," and a round stone (No. 670) with a late inscription showing that the tomb was that of Menestratos, a Corinthian buried in Attic soil. The Greek tombs were generally ranged on either side of the main roads leading from the city gates.

A terracotta urn of about . the third century B.C. (No. 671) in Case 60 serves as an example of the vases used to contain the calcined remains of the dead. It holds a number of burnt bones, among them part of a jaw-bone, with a silver obol adhering to it. The coin was placed in the mouth of the corpse as the fee of the ferryman Charon for piloting the dead across Acheron. The gilded figure of a Siren found in this vase is emblematic of the spirit world.

Two later monuments with Greek inscriptions are the marble chests in Cases 61-62. Each has a lock-plate (cf. those in Case G), carved in front in low relief. No. 672 is the cinerary chest of Metras Tryphon, who had been

ENO. A DE X NH A LON LA SELVAN EN A SELVAN EN A SELVAN EN A LON EN

Fig. 258.—Inscribed Tombstone of Idagygos (No. 669). Ht. 5 ft. 6 in.

publicly crowned by the people of Ephesus, and has this crown represented on his urn. The second chest (No. 673), from the temple of Kybele at Sardes, is inscribed with the name of Metrodoros, who is called a "sprinkler" (περιράντης) no doubt with reference to an office held by him in the temple service. Below this chest is a marble cup from Rhodes (No. 674), bearing the inscription: "The burying-place of those who have lost their ancestral tomb." This cup, which is ornamented above with flying birds and has holes for a metal attachment, seems to have been set on a column as a boundary mark.

¹ ἐνθάδε μαϊραν ἔχων 'Αλικαρνησσεὺε 'Ιδάγυγος κείται, 'Αριστοκλέος παϊς, 'Αρεος θεράπων. Italy.—In the earliest period inhumation was the custom in Italy, but cremation gradually became more and more common. The Twelve Tables (450 B.c.) show both practices prevailing side by side. The hut-urns (Nos. 675 and 676; fig. 259) found at Monte Albano, near Rome, are evidence of cremation having been practised at a very early date in Italy (eighth to seventh century B.c.). They served as receptacles for the ashes of the dead, and are an instance of the custom of making the last resting-place of the deceased as like as possible to his habitation during life. They represent rude wattled huts, in which the roof-beams of rough branches can be clearly distinguished. The Etruscan tomb-chambers, one of which is shown in a picture in Case 59,



Fig. 259.—Italian Hut-Urn (No. 675). Ca. 1:4.

furnish a later instance (seventh to sixth century B.C.) of sepulchres built in imitation of living-rooms. A small model (in Case 59) of an Etruscan built tomb shows the skeleton in armour, with painted vases placed about it (No. 677). The Etruscan cinerary urns are distinguished, by the frequent introduction of the portrait. The "Canopic" urns, which take the shape of jars roughly in the form of a human body and head, are especially noteworthy. The example illustrated (No. 678, fig. 260), probably of the

seventh century B.C., has the face pierced with numerous holes, most likely for the attachment of a mask. Two Etruscan sepulchral masks (No. 679) in terracotta, of about the end of the sixth century B.C., are exhibited near the Canopic urn and are shown in fig. 261. These remarkable masks are covered with incised designs, most likely of magic significance, intended to avert evil from the dead. A separate half-mask (No. 680) of this type is exhibited here, and another will be found with the objects illustrating superstition in Case 106. In these masks we can see the innate Italian tendency to preserve the features of the dead, and we may perhaps recognise in them the origin of the waxen portrait masks of his ancestors which the Roman noble set up in his hall. The

portrait is again found on the lid of the sixth-century Etruscan funeral urn (No. 681; fig. 262) in Case 59. Here a draped woman

lies on a couch of elaborate •
form, decorated below with a
relief of two lions devouring a
bull. A kindred type of •
Etruscan funeral monument will
be seen in the two large terracotta sarcophagi in the Terracotta Room.

With rare exceptions (conspicuously in the case of members of the noble families of the Cornelian house and all infants) the Romans, during the period of the Republic, burned their dead. This system continued under the early Empire, but gradually gave way to burial under the influence of Christianity. Several examples of Roman cinerary urns and sepulchral relief are here shown. These urns are of various shapes, but the altar-form (No. 682;



Fig. 260.—Canopic Urs (No. 678). • Ht. 1 ft. 11 in.

fig. 263) was specially favoured. The inscription gives the names of L. Dexius Clymenus and C. Sergius Alcimus. The latter, a child of three and a quarter, is stated to have received his portion of





Fig. 261.—Ethuscan Funeral Masks (No. 679). Ca. 1:6.

corn on the tenth day at the office of distribution numbered XXXIX, a curious side-light on the practice of free distribution



F10, 262, ETRUSCAN FUNERAL URN (No. 681). L. 1 ft. 111 in.

of corn under the Roman Empire, already noticed above (p. 11). Other Roman funeral urns which may be mentioned are the vase (No. 683) with the remains of L. Laelius Victor, a soldier of the



FIG. 263.—ROMAN FUNERAL URN (No. 682). Ht. 1 ft. 51 in.

fourteenth city cohort, and the alabaster caskets numbered 684 and 685. These urns of the wealthier classes were generally

deposited in a vault underneath a monument placed at the side of one of the great roads leading from the city gates. Those, however, who could not afford such expensive monuments subscribed for a joint tomb (columbarium), a large chamber containing in



FIG. 264.—Townstore of Aurelius Hermia and His Wift (No. 687). Width 34t, 5 in.

its walls numerous niches for the urns. An interesting tablet (No. 686) in Case 62 throws light on the arrangements adopted in the case of these joint tombs. It is inscribed with the name of P. Sontius Philostorgus and marked the niche in which the urn

containing his ashes was placed. The inscription reads: "Lot I in block III." From other inscriptions of the same character it appears that the niches were arranged in five horizontal rows of thirty-six, and that each of the members of the burial club was allotted one place in each of the five rows.

Another noteworthy monument is (No. 687) an inscribed relief of the first century B.C., belonging to Aurelius Hermia, a butcher from the Viminal hill, and his wife Aurelia Philematio(n), who are seen clasping hands (fig. 264). The husband praises the virtues of his wife, and the wife those of her husband, her fellow-freedman, who had been more than a father to her. Other interesting inscriptions from tombstones are No. 688, on a hunting dog named Margarita, a great favourite with her master and mistress, who died in giving birth to puppies, and No. 689, which sheds light on the memorial ceremonies after burial. A testator here leaves seven twenty-fourths of the rent accruing from a block of flats to his freedmen and freedwomen, on condition that they celebrate his memory four times in a year-on his birthday, the Day of Roses, the Day of Violets, and the feast of the Parentalia, the last the Roman All Souls' Day, held publicly in February, but privately on the anniversary of the day of death. A lighted lamp, with incense, was to be placed on the tomb on the Kalends, Nones, and Ides, the three dividing days of each month.

The funeral wreaths from Hawara (Cases 57, 58; No. 666, see p. 219) are an instance of offerings at tombs belonging to the Roman period. They have been so thoroughly preserved in the dry climate of Egypt that the different varieties of flowers can still be distinguished.

(668) Cf. Murray and Smith, White Athenian Vases in the B.M.; (669) B. M. Inser. 971; (670) ibid, 102; (671) Cat. of Terracottus, C 12 and 13; (672) Cat. of Sculpt., IL., 1277; (674) ibid. III., 2400; (675) Cf. Walters, Hist. of Anc. Pottery, II., p 288; (678) ibid. II., p. 304 ff; (679) Benndorf, Ant. Gesichtshelme, p. 42, pl. xi; (681) Cat. of Terracottas, B 629; (682) Cat. of Sculpt., III., 2350; (683) ibid., 2402; (684) and (685) ibid., 2420 and 2425; (686) Dessau, Insert. Lat. Sclectae, 7892 a; (687) Cat. of Sculpt., III., 2274; (688) C.I.L. VI., 29,896; (689) C.I.L. VI., 10,248.

On Greek tombstones, see Conze, Attische Grabreliefs: P. Gardner, Sculptured tombs of Hellas. On Roman monuments, Altmann, Röm. Grabaltäre.

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