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Vice-President.

Read 21st March 1929

Since the purchase of the Morel Collection in 1901 the British Museum
has been able to point to the Somme-Bionne chariot-burial as a notable
example of the earliest definitely Celtic art of Europe; but a still finer group
is now in process of acquisition, and is shown to the Society before passing
into the hands of the Trustees. These four remarkable bronze vessels were
found buried together on 19th February 1928, during excavations for a cellar
on the site of an old abbey at Bouzonville, Lorraine, now in the Département
of Moselle. They had been heaped together pell-mell, one of them inverted,
without any protection from the soil. Nothing else was found on the spot in
spite of careful search, and the bronzes must therefore be regarded as a hoard
or treasure, not as the grave-furniture of a Celtic chieftain. It may be a
hurried deposit of loot from various sources, but there is nothing to suggest
that the four vessels are anything but contemporary. Wine-vessels may be
expected in the interment of a chieftain (Fürstengrab), but a single wine-jar
(stamnos) normally accompanies the flagon in such cases (as Weisskirchen,
Dürkheim, and Klein-Aspergele). That they were intended to contain wine is
inferred from the presence of white pitch or resin (used for flavouring) in the
stamnoi of Weisskirchen and Klein-Aspergele.¹ Attention has been called to
this recently by our Fellow Mr. J. M. de Navarro (Antiquity, Dec. 1928, p. 435),
who quotes Virgil and Pliny in corroboration of the practice, and points out
that the Celtic demand for wine, notorious in the ancient world,² was mainly
satisfied by the Rhône-Saône traffic from the Greek port of Marseilles in
the sixth and fifth centuries before our era.

The large wine-jar (fig. 1) was slightly damaged in excavating, before the
nature of the deposit became manifest, but has been repaired and was, like
the others, complete. It is devoid of ornament, 16½ in. high, with a pair of
projecting handles below the shoulder, attached by leaf-like expansions of the
ends. The metal is thin and beautifully patinated, and the flowing outline
is more Greek than Celtic, well made but not extraordinary.

The other stamnos (fig. 2) is heavier though only 15 in. high, and the orna-

¹ Déchelette, Manuel, ii, 1435.
² Déchelette, La Collection Millon, p. 138.
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mentation elaborate for this type of vessel. On the returned lip is a fine central beading, and round the base a row of ovolo, with beading within engraved lines above. The handles are grooved and beaded longitudinally and in the centre transversely, the attachments having beaded lines suggesting vine-leaves. Almost the entire surface has a deep lustrous patina, the handles being more of a golden colour. Though the details are classical, the high shoulder is not a Greek characteristic, and comparison with figs. 4, 10, 12 suggests that this was a Celtic production, closer than usual to a model imported from some Greek centre: a similar treatment of the ovolo (fig. 3) is seen on a Celtic clasp from Nierstein in Rhenish Hesse.¹

Several stamnoi are illustrated with details by Déchelette (La Collection Millon, pp. 117, 121); and the latter one from Bouzonville has some resemblance to that from Montefortino near Arcevia in N. Italy. The other has parallels in the well-known examples from Weisskirchen and Klein-Aspergle. One from Dürkheim in the Rhenish Palatinate is more angular, but retains its conical cover, and was found with its tripod,² proving the ceremonial use of these vessels. The find is dated well before 500 by Reinecke,³ and about 480 by Karl Schumacher,⁴ the burial being that of a woman, not as usual of a chieftain.

The principal interest of the discovery lies in the pair of bronze flagons (fig. 4) which are certainly in the front rank of Celtic masterpieces, and embody much of archaeological as well as artistic value. Beaked flagons,⁵ which go by the Greek name of oinochoae or more particularly by the German name of Schnabelkannen, are of common occurrence in Celtic burials of La Tène I and

¹ Déchelette, Manuel, ii, 1238, fig. 525, no. 1.
² Déchelette, Manuel, ii, 1666; Lindenschmit, Alterthümer, II, ii, 2; Ebert, Real-Lexikon, ii, pl. 215.
³ Zur Kenntiss der La-Tène-Denkämter der Zone nordwärts der Alpen (Mainzer Festschrift, 902), p. 54.
⁴ Siedlungs- und Kulturgeschichte der Rheinländer, i, 125.
⁵ References for the ordinary type, from sixth-to fifth-century tombs in Italy, are given by Miss G. M. A. Richter (Greek, Etruscan, and Roman Bronzes, Metropolitan Museum of Arts, New York, 1915, p. 187).
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have been listed in Déchelette's *Manuel*, vol. ii, part 3, p. 1599. The present examples, however, are so much richer and more graceful as to constitute a class by themselves, and though coloured reproductions (as in the *Illustrated London News* of 30th March 1929) would be necessary to convey their original appearance, the detailed photographs will give a clue to their artistic descent and open up some problems of transmission.

The vessels are a pair, and their original appearance can be realized by comparing the two. The high angular shoulder has been already referred to as a non-Greek element, and the elongated body gives a peculiar elegance to the outline, perhaps at the expense of stability.

The better preserved (fig. 4) is 15\(\frac{1}{2}\) in. high to the extremity of the spout, the maximum diameter 7\(\frac{1}{2}\) in. and diameter of foot 4\(\frac{1}{2}\) in.: the base is concave, having a central collet enclosed by a raised band, with a pin in the middle for attaching a coral stud 0-6 in. in diameter. The decoration of the foot is enhanced by the severe simplicity of the body from the neck downwards. Here between narrow bands of engraved cable-pattern or running scrolls is an applied openwork bronze plate, enclosing coral in two rows of oblong panels, alternating with engraved ring-and-dot pattern, and in the middle a guilloche or two-strand twist of coral on a ground incised to follow the outlines and fill the spaces. Some of the coral inlay has been lost, but the technique is illustrated in fig. 5, and some of the inlay retains the original pink, most having been bleached to a creamy colour. Above the angular shoulder the neck is cylindrical till it expands into a flat rim and broad flat beak, along the middle of which runs a tube opening at the top end in front of a duck moulded in the round. This is 0-7 in. long, the body being spotted and the eyes originally inlaid with coral. The upper surface of the spout is engraved with an angular guilloche on a dotted ground (fig. 6), and seven circular collets are here visible which were originally filled with bosses of coral, the same material being inlaid in oblong sockets round the mouth, outside the lip, and along the line of the spout. Lying on either side of the mouth is a quadruped (which may be a lion, as a mane is indicated), with spiral lines on the fore-quarters (fig. 7), the eyes originally set with coral and the back with sunk or *champlevé* enamel, red like that on the lid, which is attached to the handle by a chain.

1 *Stamnoi* are also included in this list, which gives the leading references to finds before the date of publication (1914). His description of the Millon collection was published in the preceding year, and contains coloured illustrations of the bronzes and Greek pottery from La Motte St. Valentin, Haute-Marne.

2 As on the Weisskirchen clasp, said to have been filled with enamel (Lindenschmit, *Alterthümer*, II, iv, pl. 2, fig. 7; Déchelette, *Manuel*, ii, 1238, fig. 525, no. 4).

3 Like the lid of a flagon with cylindrical spout from Le Catillon, St. Jean-sur-Tourbe, Marne (Déchelette, *Manuel*, ii, 1451).
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A similar but larger animal forms the handle; it is decorated in the same manner and ends below in a pattern derived from the Greek palmette above a grotesque human face with coral eyes, minus one of the settings (fig. 8). This exemplifies the inability or unwillingness of Celtic craftsmen to portray the human features; and the terminal recalls the head of a satyr or other mythological being often seen in that position on Greek bronze vessels of the classical period.® Celtic masks of about the same date are illustrated by Déchelette (Manuel, ii, 1238, 1335, 1432).

The throat of both flagons, from the spring of the neck almost to the end of the spout, is enriched with coral inlaid in a delicate bronze openwork frame, the pattern consisting of debased palmettes relieved in the centre by a chequer of coral and bronze squares, the latter engraved with the Greek fret or key pattern (fig. 9). On either side can be seen empty collets, once filled with coral bosses. A somewhat similar design, with spirals instead of chequer, is seen near the point of the bronze mount of a chariot-pole from La Bouvandau, Marne.© Bronze openwork® was popular among the Celts, but according to Déchelette was not a native invention, Campania being suggested as the place of origin. Conjoined palmettes, one above the other, are frequently found round the cylindrical necks of black-figure Greek amphorae of the sixth century, and need not be traced farther.

The second flagon (fig. 10) measures 15.9 in. to the top of the spout, and though the enamel on the lid is superficially decayed, the coral on the throat (fig. 9) is in better order than on the first, and many pieces of inlay at the foot are still pinkish. The only point of difference is that the interstices of the coral inlay at the foot are engraved with a curl within pointed ovals (compare figs. 5 and 11). The junction of the two ends of the openwork frame is seen in the latter figure.

Like the mouth of the spout, the opening for filling below the lid is very small (1 in. in diameter) in proportion; and in both flagons there are two opposite notches in the edge of this opening. There are no corresponding projections on the lid, and, as a funnel would be necessary for filling, the notches were no doubt to facilitate filling by letting out air. There is no trace of any locking arrangement, and the lid would be held only by the chain, as there is no rebate on the rim.

A vase with the same graceful and angular profile came with the Morel

1 A. de Ridder, Bronzes antiques du Louvre, ii, pls. 100, 101: some with crouching lions. See also Babelon and Blanchet, Bronzes antiques de la Bibliothèque Nationale, pp. 582-4.
2 Déchelette, Manuel, ii, 1191, fig. 595; 1514, fig. 692.
Fig. 7. Enamelled lion on lip of flagon (fig. 4) (1)

Fig. 4. Bronze flagon, inlaid with coral and enamel, Bouzonville (1)

Fig. 8. Base of handle and lid of flagon (fig. 4) (1)

Fig. 5. Coral inlay on foot of flagon (fig. 4) (1)

Published by the Society of Antiquaries of London, 1929
Fig. 5. Throat of flagon (fig. 10) inlaid with coral ( ).

Fig. 6. Top view of flagon (fig. 10) showing spout ( ).

Published by the Society of Antiquaries of London, 1900.
Fig. 10. Bronze flagon, inlaid with coral and enamel, Benzonville (§)

Fig. 11. Coral inlay on foot of flagon (fig. 10) (§)

Fig. 12. Pottery urn, Le Mesnil-les-Hurhus, Marne (§)

Fig. 13. Lion handle of a flagon, Borsch, Aue, Geisa (§)
Collection to the British Museum in 1901, and is here represented by a diagram (fig. 12), a photograph being included among the Gaulish pottery in the *Early Iron Age Guide, 2nd ed., pl. v, no. 12.* It is 10 in. high, of dark brown to black ware with lustrous surface and freehand grooves on the neck and pedestal-foot, the shoulder being sharp and evidently copied from a bronze model, such as the Bouzonville pair of flagons. It was found in a woman's grave at Le Mesnil-les-Hurlus, Dépt. Marne, with another urn of spheroid form (*Proceedings, xxvi, 132, fig. 5*), a bronze torc and pair of armlets, two La Tène I brooches (one set with coral), and a gold finger-ring (*Morel, Album, pl. 41, nos. 1–8; La Champagne souterraine, p. 180*). Déchelette has a note on the possible significance of the gold ring (*Manuel, ii, p. 1265*), and the torc is a fine example, with pairs of S-scrolls in relief.

The duck modelled in the round just above the outlet of the spout of both flagons is evidently significant, and can be traced back for centuries as a religious symbol. As an aquatic bird it may have been regarded as the incarnation of a water-spirit, and is here seen presiding over the circulation of a more precious liquid. A similar casting was found with (but not attached to) a beaked flagon bearing a stiff palmette of early form somewhere on the middle Rhine; and Messrs. J. N. L. Myres and Hawkes found another in excavating the *Early Iron Age* earthwork on St. Catherine's Hill outside Winchester.

It is more than likely that the coral came from the Hyères islands (Stoechades) off Toulon, which would suggest manufacture in or under the influence of the Phocaean colony of Massilia (founded about 600 B.C.); but it is important to remember that this material was freely used for ornamental purposes during the last phase of the Hallstatt period in central Europe. The trade in coral has been described by M. Salomon Reinach, whose views are summarized in our *Proceedings, xxii, 139.* Its vogue in Gaul lasted from the fifth to the third century B.C., and the best known examples are from the Marne area, especially the chariot-burials of Gorge Meillet and Somme-Bionne. Pliny states that the Indians were extremely fond of coral on account of its prophylactic virtues, and adds that before the Indian demand arose the Gauls used to ornament their swords, bucklers, and helmets with coral; but in his own day exportation had rendered this material so rare that it was seldom seen in the countries that produced it. The Gorge Meillet, Cuperly, and

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1 Other forms are sketched in Ebert's *Real-Lexikon, iv, pl. 69.*
3 Lindenschmit, *Alterthümer, 3, 3, 2, 7, figs. 5 a and b.*
4 *Revue Celtique, xx (1899), 13, 117; Revue Archéologique, 1905,* vol. vi, 309.
Berru helmets have coral at the top, and the Witham shield has well-preserved studs of the same material, but the same limitations of date do not seem to apply to Britain. The following examples are all probably later than 250 B.C. and show that there was a considerable stock of coral on this side of the Channel when Gaul was obliged to find a substitute: studs from the warrior's grave at Grimthorpe, E. R. Yorks. (Brit. Mus. Early Iron Age Guide, 2nd ed., p. 114); a bronze bowl with stud from Colchester (Proceedings, xx, 214-15); brooch from Harborough Cave, Derbyshire (Proceedings, xxii, 142); pins from the Thames at Hammersmith (Archaeologia, lx, 271, fig. 18) and from Danes Graves, Kilham, E. R., Yorks. (Archaeologia, lx, 269, fig. 17). Two coral necklaces of the Roman period have been found in Britain, at Rushmore (Pitt-Rivers, vol. i, pl. xliv, no. 19) and Padstow (Arch. Journ., xvii, 313); and an engraved branch of coral is published from Cold Kitchen Hill (Wiltshire Arch. Mag., xxvii, 287). The continental distribution of this material is discussed in L'Anthropologique, x (1899), 677.

The beaked flagon is evidently derived from the Greek jug with trefoil lip, a well-known type found in the late Hallstatt period, for instance, at Vilsingen (Hohenzollern) and Pertuis (Vaucluse). In Celtic hands the form was distorted, and the stage reached about 480 B.C. is shown by the Weiskirchen grave-finds near Merzig (Rhenish province), the flagon having an ovoid body, a plain handle with its lower attachment in the form of a palmette with broad scrolls flanked by two hinds, and the limbs round the rim terminating in lions or other animals moulded in the round. This, again, was a classical feature, and in the national collection are loose handles ending in most realistic lions on the rim; some with nude human figures bent backwards for the grip (as on the Schwarzenbach flagon), and masks below, flanked by smaller animals. A debased example from Italy is figured by Lindenschmit (Alterthümer, I, ii, pl. 3, no. 2).

There are several beaked flagons with the orthodox stiff palmette for attaching the handle, of the Somme-Bionne type, some with terminals in the form of animal heads no larger than the arms embracing the rim. An interesting example of such terminals is illustrated (fig. 13) from the Borscher Aue near Geisa in Saxe-Weimar, where the lions on the rim are represented by grotesque pointed heads, evidently some way from the original, but the grip is in the form of a quadruped resembling those in the same position on the Lorraine flagons. It is briefly described by Paul Reinecke, and in the

1 Lindenschmit, Alterthümer, v, pl. 56, no. 1035 (seventh cent. B.C.).
2 Déchelette, Manuel, ii, 787.
3 Mainzer Festschrift, 1902 (La Tène Denkmäler, &c., p. 72). The illustration is from his pl. vi, fig. 11; but another, with the beaked flagon restored, appears in Jacobsthal and Langsdorff's Die Bronzeschinkelnkannen (published since this paper was written).
photograph can be discerned the spiral on the hind- (if not also on the fore-) quarters, and a chequer pattern in place of the mane. The grasping fore-paws are here separate, though the hind-paws coalesce as on our specimens; and the thin extended body is strangely like the handles of Bouzonville, forming with them a group that has to be explained. Reinecke states that the hollow

![Fig. 14. Top and side views of enamelled lid of flagon (fig. 4).](image)

casting found near Geisa was associated with the remains of a beaked flagon in a barrow (Grabhügel); and holds that the prototype was a Greek flagon with a lion as handle. The Celtic craftsman suppressed some details, misunderstood others, and introduced ‘barbarian’ elements, which show a good deal of refinement and originality.

That the three quadrupeds on the flagons are lions is suggested by a pattern of red enamel in the position of the mane, the long one forming the handle having also enamel in the middle of the back and again below, surmounting the mask. The middle pattern is a simplification of the twin palmette motive seen also on the throat of the flagon, and the animals are covered with short engraved lines representing the pelt. The enamel is of the sunk variety (champlevé), broad lines having been cut in the metal and filled with a red vitreous paste fixed by the application of considerable heat. A wet sponge at once restores the original colour, which has been affected by decay and contact with the bronze, and much of the filling has now disappeared. It is, however, intact, though slightly discoloured, on the chained lid of one flagon (fig. 14), which, like the enamel on the animals, is bordered throughout by rows of dots in the bronze. The enamel on the lid of the second flagon has perished, and revealed a clay button or core to which a thin layer of enamel was applied, as on the studs of the Battersea shield in the British Museum. A more extravagant method was to treat the enamel like coral, and fix
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hemispheres or buttons of it to bronze by means of a pin through the centre (as on the Bugthorpe discs, Brit. Mus. *Early Iron Age Guide*, 2nd ed., fig. 125).

The openwork frame on the first flagon, which must be of the same thickness as the enamel layer, may therefore be regarded as the forerunner of the swastika-like frame on the bosses of the Battersea shield (*Early Iron Age Guide*, pl. i).

Enamel was not a classical invention, but derived from inlaid work with precious stones of various colours, the variegated effect being particularly attractive to oriental peoples. The earliest examples of true enamel in Europe are those from Koban, near Vladikavkaz, on the north side of the Caucasus, dated by at least one authority as early as 1300–900 B.C.,¹ and the patterns include grotesque animals in oblong panels, the spiral, swastika, lozenge, and fret patterns,² usually on long plates intended for use as breast-ornaments. The method of sinking grooves for the enamel appears to be identical on the Lorraine flagons and some of the Koban specimens.

Of special interest, therefore, is the association of coral and enamel in work of the fifth century B.C. Though M. Reinach's contention may explain the disappearance of one material and the wide adoption of the other, he freely recognizes that both were in use together at a very early date, long before the conquests of Alexander opened up the Indian market and produced a scarcity of coral in the West.³ The late M. Hubert quoted the burials of La Bouvandau (Somme-Tourbe) and Flavigny as producing enamel in early La Tène times;⁴ but few, if any, specimens have proved the contemporary use of coral and enamel as conclusively as the Bouzouville flagons.

The opinion is hazarded by E. Rademacher⁵ that in the fourth century B.C. the method of fusing glass on metal reached Celtic territory from the neighbourhood of the Black Sea, where Iranian and Scythian art developed on European soil. But if the Lorraine flagons are correctly dated, enamelled objects, if not the art of enamelling, had reached western Europe in the previous century, and even penetrated into the Baltic during La Tène II, as objects ornamented by this method were then plentiful in the island of Gotland.⁶

¹ Ebert's *Real-Lexikon*, vi, 266, cf. vii, pls. 6, 7.
⁵ Ebert's *Real-Lexikon*, iii, 92.
⁶ T. J. Arne in *Studier tillägnade Oscar Montelius*, 1903, p. 121.
Isolated finds in the North German plain do not necessarily imply a Scythian element in the population nor even commercial relations; but the Vettersond hoard is not so isolated as it at first appeared, and a connexion between Scythian Russia and the Oder valley is not altogether imaginary. A recent paper by Martin Jahn on migrations before the Migration period in Silesia postulates an invasion of Scythian horsemen from the south-east about 500 b.c.; but apart from the gold of Vettersond most of their relics are weapons, and the main track was between the Oder and the Sudetic mountains. It is less easy to explain any Scythian influences at Geisa (fig. 13), which is about seventy miles north-east of Frankfurt-on-Main and well within the central mountain range of Germany, but the enamelling of the Bouzonville flagons, even apart from the style of the animals so decorated, can hardly be derived from any source in Europe but the Koban district north of the Caucasus. Loot from Silesia, which was invaded by the Celts about 400 b.c., would be later than the Lorraine bronzes.

Another significant detail is the spiral moulded on the fore-quarters and ears of the quadrupeds on the Lorraine flagons. An interesting parallel is the fifth-century brooch from Parsberg, Upper Palatinate (twenty miles west of Ratisbon), which has, besides grotesque human masks, a pair of lions with spirals on the fore- and hind-quarters. This lasted in Irish manuscripts down to the eighth century, but its origin remains somewhat obscure, as Siberia and China seem to provide the only parallels for the spiral ear.* Bruno Bremz on Teutonic animal-ornament mentions its occurrence on fabulous monsters in Crete, but traces it to Asia Minor and the Caucasus; and it seems clear that it is related to (perhaps a development of) the comma pattern seen on animal designs of the Near East, and due originally to the inlay of precious stones in that position. Twenty-seven years ago Mr. Dalton stated that the conventional representation of the musculature was an early method adopted from Assyria and appearing in Achaemenid monumental art, such as the lion frieze at Susa. The whorl, as representing the twist of hair on the body, may

* Déchelette, Manuel, ii, 758 is the reference most accessible. He considered this and the Vogelgesang ring due to commerce with Scythia (p. 1576).
* Festgale für G. Kossina (Mannus, Ergänzungsband vii, p. 271, giving a map of Scythian finds in East Germany (p. 273); see also Schlesiens Vorzeit, neue Folge, ix, 11; and Reinecke in Zeitschrift für Ethnologie, 1896, p. 1; Schlesiens Vorzeit, vii (1898), 339 Vogelgesang ring and map).
* Déchelette, Manuel, ii, 1248, fig. 533, no. 1; Prähistorische Blätter, xiv (1902), pl. 1.
* See Antiquaries Journal, vi, 412, fig. 5; Minns, Scythians and Greeks, 251, fig. 172; G. Borovka, Scythian Art (trans. V. Gordon Childes), pl. 60, 4 and 6; pl. 72, 8 (Chinese jade).
* In J. Strzygowski's Der Norden in der bildenden Kunst Westeuropas—Heidnisches und Christliches um das Jahr 1000, p. 69.
* O. M. Dalton, Archaeologia, lviii, 250, 254; Cat. Oxus Treasure, 2nd ed., nos. 11, 44, 45.
have been the naturalistic origin of similar marks placed on the quarters of lions and other beasts in Assyrian and Persian art.

The traditional view that the culture of La Tène reached eastern France from Marseilles along the Rhône valley was contested by Déchelette, but has been lately championed by J. M. de Navarro. On the other hand, Dr. Schuchhardt holds that neither Marseilles nor eastern France was the cradle of the La Tène style, and refers it like Hallstatt to the Danube valley. Its classical elements came not from Greece or Italy direct, but by way of south Russia. He traces the swollen volutes and peculiar animal style to Scythian metal products of Russia, Roumania, and Bulgaria, whence also, at a later date, came the coinage in imitation of Macedonian staters. The pottery types of La Tène are in his opinion organically connected with the Danubian Hallstatt series, and the transformed classical motives of the Marne culture can only be derived from the Danube. Scythian remains are plentiful in Hungary, and a remarkable gold figure of a deer, recently found at Zöldhalompusztza, near Miskolc, is published in Hungarian and French by Nándor Fettich (Fettich Nándor), with copious notes and references to similar discoveries.

Bouzonville is on the river Nied, a tributary of the Sarre, about 20 miles north-east of Metz, 10 miles west of Sarrelouis, and 33 miles south of Trèves, near the western end of a district that has produced the majority of similar bronzes and may be regarded for this and other reasons as the head-quarters of the Celtic aristocracy in the fifth century before Christ. The area of the Chieftains' graves lies south-west of the great bend in the Rhine at Bingen, and forms almost a triangle between Metz, Mannheim, and Coblenz, the river Moselle being its western boundary. Within the same latitudes other traces of this culture have been recorded in Haute-Marne, Burgundy, Franche-Comté, south Germany, and south-west Bohemia.

Déchelette distinguished this original Celtic zone, where the Hallstatt practice of burying the great dead unburnt under barrows (Hügelgräber) survived till the fifth century, from the Champagne or Marne area, where barrows are wanting, and the people were not so purely Celtic. North of this zone discoveries of the Marne type have also been found in northern Bohemia; but south of it the last phase of Hallstatt was prolonged, and the earliest phase of La Tène (Reinecke's La Tène A) is barely represented.

A more precise line of division between the La Tène A area and that of

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1 Ebert's Real-Lexikon, iii, 161; and more fully in Vorgeschichte von Deutschland (1928), 211.
2 Archaeologia Hungarica, iii.
4 Map of barrows and flat graves of this period in Ebert's Real-Lexikon, iv, pl. 66, see p. 74.
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a belated Hallstatt culture is drawn by Karl Schumacher through Hagenau, Rastatt, Stuttgart, and Ulm (that is, through the Black Forest and Württemberg), and in the last few years the Celtic problem has lost some of its terrors, at least in its geographical aspect. Reference may be made to Maunus, Ergänzungsband VI, 258 (Bosch-Gimpera and G. Kraft); Antiquity, March 1929 (G. Kraft); Ebert, Real-Lexikon, s. v. Kelten (Rademacher). Under the same heading (p. 298) Pokorny states that the original home of the Celts was between the Rhine, the Alps, and the Elbe.

It should be noticed that the area famous for the Chieftains' graves almost coincides with that of the Mehren group of pottery (Schumacher, Rheinlände, i, pl. vii, see pp. 105, 115; Ebert, Real-Lexikon, viii, 264, pl. 87), which surrounds the Hunsrück and also passes into the Eifel and beyond the Rhine into the Taunus. The pottery comes from skeleton-graves in barrows, in contrast to the cremated burials in urnfields; and the presence of twisted bronze collars (tores, Wendelringe) dating from the seventh and sixth centuries may indeed suggest a German origin for these people, but also explains to some extent the constant use of these ornaments by the Marne population of La Tène I. Schumacher does not emphasize these coincidences, but points out that the Mehren pottery has elegant profiles which, like the contemporary French ware, betray a strong classical influence; and it is easy to imagine that this area was among the first to be affected by Greek trade up the Rhône and Saône in the fifth century B.C. These two factors—a population accessible to foreign influences, and the opening up of western Europe by the Greeks—may be responsible for the sudden change from Hallstatt to La Tène.

Further research on the Continent may furnish a more precise date for the Bouzonville bronzes, and the tendency certainly is to put back the beginnings of the La Tène culture, Reinecke's La Tène A starting before Déchelette's La Tène I. But at present the date that seems to fit all the conditions best is about 450, which corresponds to that of the Oxus treasure published by our Fellow Mr. Dalton. His introduction contains a summary of recent work on the Scythian and cognate questions, and a bibliography is prefixed to Prof. Minns's Scythians and Greeks, the latest work on the Scythians being M. Rostovtzeff's The Animal Style in South Russia and China (Princeton, 1929). It remains to add that these bronzes were being used (if not made) in Lorraine just at the time that Herodotus was recording all that he knew of the Celts and giving one of the first glimpses of European affairs beyond

1 Map in Siedelungs- und Kulturgeschichte der Rheinlände, pl. 8; see also his article in Ebert's Real-Lexikon, viii, 266.
2 Mehren is south of Daun, between the Alf and Lieser.
3 The Treasure of the Oxus, 2nd ed. (British Museum, 1926).
the Greek area. He would hardly have credited the Barbarians with such a degree of luxury or such lively intercourse with his own people at either end of Europe.

Postscript.—The British Museum owes the acquisition of these bronzes mainly to the good offices of our Fellow Mr. Oscar Raphael and the generosity of Lord Melchett, who advanced the purchase money and made a liberal donation. Other subscribers were Mr. F. A. Szarvasy, Sir Percival David, Mr. C. S. Gulbenkian, Mr. John Hugh Smith, Mr. Lycett Green, Lord Cawdor, F.S.A., Mr. Chester Beatty, F.S.A., and Professor Tancred Borenius. In spite of many heavy calls on their resources, the National Art-Collections Fund completed the purchase with a donation of £500.
II.—Some Aspects of the Craft of the Armourer. By
Charles ffoulkes, Esq., O.B.E., B.Litt., F.S.A.

Read 18th October 1928

There are certain details connected with the craft of the armourer, or rather with his productions, which hitherto have not received the attention which they undoubtedly deserve; for they bear very definitely on the whole subject of military equipment and as such require careful consideration if we are to use sculptured or pictorial contemporary records as illustrations of military operations. Writers on arms and armour have, with few if any exceptions, dealt solely with design and form, and have seldom noticed the reasons why certain types of equipment were introduced; nor have they drawn attention to the many obvious drawbacks or advantages of constructional details which force themselves upon one's notice if the subject is studied from the point of view of the man who wore the armour and had to fight in it.

We have but little information available respecting the making of armour in this country; for our English records consist almost entirely of Bills of Payments with no mention of the technical details which governed the craft. In Germany and Italy the records of the armourers and their craft-guilds are far more complete, but even these provide us with no such wealth of technical detail as we find in the notebooks of Leonardo da Vinci, of Cellini, or of Theophilus. I have recently laid before this Society some notes on the Armourers' Company of London¹ and have dealt with the whole subject of the Craft of the Armourer in a somewhat immature volume published some years ago,² which, in common with all writers on technical subjects, I should wish, in the light of later studies, to rewrite entirely, though I should still be forced to draw the same conclusions.

From the Norman Conquest up to the fifteenth century the armourer as a craftsman in metal does not appear frequently in such records as 'Bills of Payments', 'Craft Regulations', etc., except in the case of the helmsmith. The reason for this is that from the eleventh to the thirteenth century defensive armour consisted mainly of padded garments or leather, or in the case of princes and nobles chain mail, which was probably introduced to Europe from the East. In the fifteenth century the armourer as a metal worker takes his place amongst the other craftsmen, and we find extraordinarily ingenious con-

¹ Archaeologia, lxxvi, 41.
² The Craft of the Armourer, 1912.
trivances evolved by which the fighting man is covered with metal plate, so articulated that it conforms as far as possible to his movements. There are but few treatises on the actual working of the metal, and these are all too vague in their details, but from scattered notes it is probable that the best plate armour was forged cold, at any rate in the last stages of the working, and it is needless to say that for a considerable period every piece was made by hand. With the sixteenth century, however, we have certain indications of mass production, for there is a definite statement in Burgmair’s Weiss Kunig that Maximilian I invented a new art for warriors’ armour ‘so that in his workshops 30 front pieces and 30 back pieces were made at once’. Now this certainly suggests some method of stamping, otherwise there is no reason for the statement, which seems to be borne out in an account of the battering mills erected at Erith in the year 1624, for the description of the mills is prefaced by the following sentence: ‘King Henry VIII being resolved to have his armoury always strong and richly furnished with thirty or forty thousand arms to be in readiness to serve all the necessities of the times caused a great battery mill to be built at Deptford.’ Henry VIII was a great personal friend of Maximilian I, and it seems highly probable that the mass-production methods of the Emperor impressed Henry so strongly that he set up mills to work on the same lines in England. Decoration would of course in all the more important armours have been done by skilled craftsmen by etching, engraving, or embossing, but when we find very large numbers of decorated armours still surviving to-day, all the pieces covered with poor designs of precisely the same nature, we are forced to the conclusion that these must have been produced by some system of transfer similar to that used by sword-makers of the present day for embossing their blades. A whole ship-load of this decorated armour (which had its origin in North Italy) was brought from Malta to the Tower in 1626, and is now scattered all over the country. The great number of these pieces which have remained is a sure indication that enormous numbers of these armours must have been produced at the end of the sixteenth century (fig. 27).

Now the function of the armourer was to protect his patron in the best possible manner against all known weapons, and at the same time to allow him to move with as much freedom as was consistent with protection. The death or disablement of a leader might lead to the discomfiture of his army and, with defeat, to the downfall of a kingdom or empire. Therefore we may fairly consider that up to the end of the sixteenth century, at any rate, the armourer was one of the most important factors in the life of the nation. We may remember that at the battle of Hastings a report went through the Norman army that William had been killed, and, to dispel this rumour, he removed his helmet, the broad nasal of which partially hid his face, and rode through the
army to reassure his men (fig. 1). The protection of the fighting man could be arrived at in two ways, either by the thickness of his protective covering or by providing such surfaces as would cause weapons to glance off the wearer, and this, as I shall notice frequently, is the most important quality of defensive armour at its best period.

I do not propose to deal fully with the making of armour, or the methods of construction, or the mills used, for I have dealt with them more or less fully in the work previously referred to, but I shall endeavour to draw attention to certain practical details in military equipment up to the sixteenth century which have not hitherto been seriously noticed by writers on the subject.

All authorities who have dealt with the history of arms and armour, either in published works or in papers read before this Society, have treated only the historical aspect of the subject, and I do not think any of these writers have noticed the extravagances which, either by the design of the armourer or by the whim of his patron, must have frequently nullified the excellent constructive details which are the outstanding features of defensive armour at its best. The simplest and most convenient way of dealing with this aspect of the subject is to note the fundamental laws which govern all craftsmanship, and to show how they are obeyed in the best examples of armour and how they are disregarded by the armourer who has lost his cunning, either wilfully or from force of circumstances.

The craft laws are these:

(1) That the object should be suitable for the purpose for which it is intended.
(2) That it should be convenient in use.
(3) That it should be respectful to the material, and
(4) That all decoration should be subservient to the above rules.

I will take these in order and will give, irrespective of period, examples showing obedience and disobedience to each of the rules.

Purpose. Obviously the purpose of defensive armour is to protect the man, and the object of offensive weapons is to penetrate that defence. With the helmet of the Norman period we have a very practical protection for the head; being conical it provides that essential glancing surface which would deflect the blow of sword or axe, and it is further provided with a broad nasal which protects the nose and to a certain extent the eyes (fig. 1). For some unexplained reason in the thirteenth century this very sensible helmet gave place to what we know as the 'barrel top' helm (fig. 2). As the name implies, this is flat at the top, and there is no attachment to the body, so that it has several drawbacks. First, the full force of a blow received on the top would be felt by the wearer, in spite of the thick padding or lining which was always
worn with these defences. Secondly, a lance blow in front would crush the helm on to the wearer’s face, or would turn it round on his head, leaving him at the mercy of his antagonist. The grave difficulties of this helm must have been very soon noticed, although for a time from sculptured and pictorial records it

![Fig. 3. Mounted Archer, thirteenth century. Roy. MS. 20, D. 1, fol. 127.](image)

would appear to have been the most popular headpiece all over Europe. Towards the end of the thirteenth century we find the ‘sugar loaf’ helm, which is far more practical with its conical top (fig. 3). Apparently it rested on the shoulders of the wearer, but whether it was attached or not to his body armour is somewhat uncertain, as the majority of pictorial records show no attachment whatever. This helm was succeeded by the bascinet, a lighter helmet of the same shape but often provided with a large beak-shaped visor, which had the disadvantage of being a projection on which a cutting blow would lodge (fig. 6). In the fifteenth century we have the light but very fairly satisfactory armet (fig. 8), which enclosed the head and had an adequate visor, and a short chain valance at its lower margin to protect the neck. In the same century we find the close-fitting sallade, very similar to the bascinet, heavily lined or padded and in all respects a most practical defence for the head, except, of course, for the face. The tournament helm, it is needless to say, was constructed on entirely different lines. It was only worn for very short periods, and as it was essential that the wearer should be perfectly protected from injury, it was often of great weight and thickness. It was bolted securely to the cuirass, and there was little chance of it ever being dislodged (fig. 16). The body armour as illustrating fulfilment of the purpose for which armour was produced is particularly interesting at all periods. At the Norman period it consisted of padded fabrics, leather and mail, all of these well calculated to protect the wearer from
Fig. 1. Duke William—Bayeux Tapestry

Fig. 2. Saul defeating the Ammonites. Thirteenth-century MS. in the possession of Mr. Pierpont Morgan

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the weapons then in use, but none of them providing a glancing surface of any description. As I have stated above, the only worker in metal of the earlier periods was the helmsmith, but with the thirteenth century, as skill of metal working was developed, we find small additions of plate attached to the mail or quilted defences, generally by laces (fig. 4). These, beginning at the knees, appear subsequently on the elbows, arms, shins, and shoulders; and eventually by the fifteenth century the fighting man is completely encased in articulated plates of metal (fig. 5). Here we see the glancing surface utilized in the best possible manner. There are few projections in which the weapon would lodge; there are no extravagances, and the metal is of sufficient thickness to make it
rigid and not sufficient to make it unwieldy, as was the case in the seventeenth century when armour was proved by pistol or musket shot. This mention of proof reminds us of the fact that armour always was proved against the weapons of the period, and it was only because the efficacy of these weapons increased,

Fig. 6. Bascinet, early fifteenth century. Wallace Collection.

Fig. 7. Sallade, fifteenth century. Tower of London.

Fig. 8. Armet, early sixteenth century. Tower of London.

Fig. 9. Close Helmet, early sixteenth century. Tower of London.

Fig. 10. Thos. Quatremares, circa 1460. Thame, Oxon.

and the proof against them was always made by increasing the thickness of the metal, that defensive armour was gradually discarded as quite unbearable and insupportable. With the fifteenth century we find an attempt to increase that essential ‘glancing surface’ in the armours made by members of the Missaglia family, a notable example of this being the effigy of Richard Beauchamp, earl of Warwick, which shows shallow flutings. These, like the
modern corrugated iron, increase the rigidity without adding to the weight of the metal and at the same time present a channel which guides the weapon-point away from the vital parts of the wearer (fig. 22). This was developed to the full in the so-called 'Maximilian' armour of the early sixteenth century (figs. 20, 23). For lighter equipment the Jack (figs. 11, 12) and the brigandine were largely employed, both being constructed of small plates of metal either sewn between layers of canvas in the case of the Jack or riveted between layers of canvas and velvet in the case of the brigandine (fig. 13). Both were useful against lighter weapons, but of course neither could withstand the attack of the mounted spearmen or of the heavily armed men with battle-axe or mace.

Splinted armour, composed of horizontal lames of plate, constructed with sliding rivets, has also a protective value, and is not so cumbersome as the rigid suit (fig. 14).

The horse armour of the earlier periods consisted of mail or of long padded trappers or housings, and from the very nature of these defences, reaching almost to the hocks and falling in heavy folds, they were obviously of protective value (figs. 2, 3). From the late fifteenth century onwards the horse is armed like his rider in a full suit of plate, but as this does not reach below the body the charger is open to attack in his vital parts, and it would be obviously easy for the foot soldier to place him and his rider out of action by attack on his legs (fig. 20). There appears to have been some attempt to get over this difficulty by arming the horse's legs with articulated defences, but it does not seem to have progressed beyond one experiment made by Harnisch-Meister Albrecht, who produced a complete cap-à-pie defence for the horse (fig. 19).
SOME ASPECTS OF THE CRAFT OF THE ARMOURER

The weapons of all sorts were fairly practical, except perhaps the sword, which, in spite of its universal use in warfare from the earliest times, never seems to have been designed as a practical weapon until recent years. The spear and partizan for thrusting are excellent, and weapons such as the Bill,

![Fig. 13. Brigandine. Vienna.](image)

![Fig. 14. St. George of Prague, 1375.](image)

the Pole-axe, and the Mace are all fairly effective. Perhaps the best of all offensive weapons is the long-bow for distance fighting. It is cheap to produce, light to carry, easily brought into action, and can be discharged with great rapidity. The arrows of the English bowmen had not only great penetrative force but produced noticeable moral effect, especially when discharged against cavalry in close formation.

We now come to the second rule, *Convenience in Use*. One of the puzzling problems in the history of military equipment from the earliest periods up to the middle of the nineteenth century is the extraordinarily inconvenient armour and uniform which must obviously have been designed by practical soldiers. I propose to consider only armour and weapons in this paper, but it is not without interest to note the plumed helmets, gigantic bearskins, tight leather stocks, belts, sashes, and other impedimenta with which the War Departments of all countries and all ages have hampered the fighting man.

The sword itself as a convenient weapon would merit a whole chapter in order to particularize the various forms which have been adopted with no consideration for the purpose for which they are intended, and it is only at the beginning of the twentieth century that we have the British cavalry sword
which shows that here at any rate, after over a thousand years of experiment, a practical fighting weapon has been designed.

Under the heading of Convenience in Use we find that many of the devices of the armourer are quite inexplicable, for, although they may be defensive to a certain point, they hamper the wearer so seriously that they are more dangerous than safe. The chief of these is the so-called chain mail which persisted from the twelfth to the fifteenth century. It will be easily understood that such a fabric could only be worn over thickly padded under-garments, for the force of a blow would tend to drive the metal into the wearer's body, but there is no glancing surface whatever to deflect the weapon (fig. 2). The whole weight of the hauberk was borne on the shoulders, and in the thirteenth century at any rate the sleeves were continued to the wrists and ended in mitten gloves, the head being protected by a coif, also of mail. I have made practical experiments with a shirt of mail weighing about 20 lb. worn over a thick fisherman's jersey, and I found that the weight of mail from the armpit down to the skirt dragged so much that it was wellnigh impossible to raise the arm to its fullest extent. I found also that in bending the arm to deliver a stroke with axe, mace, or sword the mail collected in such thick folds in the bight of the arm that but little movement was possible in this direction. Further, I found that, with what was a light under-garment compared to the thick gambeson which must have been worn on active service, it was a matter of the very greatest difficulty to put on or put off the hauberk with ease or rapidity. It is almost incredible, therefore, that the Crusaders should have worn this defensive armour with a long surcoat over it through their arduous campaigns under an eastern sun, for when on the march and in expectation of hourly attack the mail hauberk must have been worn night and day. This inconvenience must have been still further increased in the fourteenth century, for, if we take the monumental brasses as a guide, we find on such examples as the Creke and D'Abernon brasses that the knight wears a gambeson, a hauberk, what appears to be a quilted or pourpointed garment, and a surcoat over all.

I have noticed before the small additions of plate which appear on these and other brasses attached by laces and straps, which must have added still further to their inconvenience (fig. 4).

Another unpractical device is the mail nasal, which from its frequency on sculptured monuments, particularly in Germany, must have been a favoured device. Here there is a flap of mail, sometimes with a small plate nasal attached to the upper edge of the camail, and when in use it was brought upwards over the nose and held by a turning-pin under the helmet (fig. 15). This can only have been protective to a very small degree and must have caused a certain amount of inconvenience in rapid movement of the head.
In the period of full plate armour there are two or three details which require some explanation. First, in the Golden Age of the fifteenth century we find the same attachment of additional pieces by laces that I have noticed in the fourteenth-century brasses. The magnificent suit of Sigismund of Tirol exemplifies this to the fullest extent, for both elbow cops and pallets are so attached (fig. 24). The long solleret, following the fashion in civilian wear, is no improvement whatever on the smaller foot-covering, for it is absolutely impossible for a man to walk with long metal toe-pieces, often put on after the
Some Aspects of the Craft of the Armourer

The rider is mounted, and sometimes reaching to the extravagant length of 14 or 15 in. Under this heading also should be noticed the neglect of constructional methods in the late sixteenth and seventeenth centuries. The normal solleret when properly made gives considerable ease to the foot in walking.

![Diagram of Pauldrons](image1)

**Fig. 17.** Pauldrons. A. Statue of Colleoni, Venice. B. Missaglia armour, Vienna.

![Diagram of Sollerets](image2)

**Fig. 18.** Solleret. Practical. Unpractical.

For the upper plates overlap downwards, then comes a broad tread and the lower plates overlap upwards. But in the period of decadence in some examples the plates overlap downwards with no tread, and therefore it is practically impossible to bend the foot (fig. 18).

In addition to the extravagant sollerets we have the great elbow cops shown on the Quatremaigns brass at Thame (fig. 10), and the pauldrons on the figure of St. George by Pisanello in the National Gallery, whereon we find the great overlapping pauldrons which appear in a lighter form on the statue of Colleoni and on the armour of Sanseverino by Missaglia (fig. 17). The large elbow cops must have prevented any quick movement of the arm, and the fact that the pauldrons overlap at the back must have made it impossible to deliver a swinging cut without locking the pauldrons.

Plate armour at its best was certainly made to measure and therefore all the articulated joints coincided with those of the wearer. I have made personal experiments with this and have found that with the properly fitting suit, weigh-
SOME ASPECTS OF THE CRAFT OF THE ARMOURER

ing anything up to 50 lb., there is little inconvenience. A still more practical defence was the suit of 'splints', which was composed of smaller lamèes and gave the wearer much greater ease of movement. This is particularly noticeable in the magnificent statue of St. George at Prague, which shows that as early as the fourteenth century the armourer had evolved great improvements in his defensive productions (fig. 14). Perhaps the most perfect example of armour which follows closely all the craft rules is the suit made for Henry VIII for fighting in the lists (fig. 25). The wearer is completely covered back and front with articulated plates moving with the greatest ease. All the different pieces are joined together so ingeniously that there is no possibility of a weapon penetrating, and it is only the extreme weight (90 lb.) which makes it unwieldy for rapid movement. That the full suit of plate was often inconvenient we judge from records of all periods from the earliest times. Froissart, describing the battle of Poictiers, states that the mounted man was at a great disadvantage when dismounted owing to the weight of his armour. In 1383 Sir Hugh Calverly at the battle of Mount Auray ordered his men to take off their leg armour in order to move more easily. In 1590 Sir John Smith alludes frequently to the soldier's dislike of too many 'pieces of yron', and he notes that pauldrons, vambraces, and other pieces are frequently discarded. This is borne out by Edmund Davis, writing in 1610, who states that after an arquebusier has marched for 12 miles in a heavy shirt of mail and a burgonet he is more apt to rest than ready to fight. All this evidence goes far to show the difficulties of the armourer; for he had to protect his patron and at the same time allow him comparative ease of movement, a combination of conditions under which it is practically impossible to evolve a perfect defence.

The cumbersome shield of the Norman period had by degrees given way to the small 'heater'-shape shield, but in spite of its more convenient size this must have been an additional inconvenience to the mounted man in close combat. With the advent of full plate the shield was discarded and the fighting man relied solely on the defences of his arms and body.

The helmets from the fifteenth century onwards show various types—good, bad, and indifferent. The closely fitting bascinet as a practical defence is not particularly improved when what is known as the 'pig-faced' visor is added. Perhaps the best helmets in point of convenience and adequate defence are the close-fitting sallade and the early armet, the latter protecting the whole head and yet allowing certain freedom of movement, the neck being protected by a chain-mail valance. The long-tailed sallade would appear to have many drawbacks (fig. 7). While protecting the upper part of the face and head it was necessary to have a chin-piece in addition, and this combination of two distinct pieces provided another opening for the opposing weapon. A thick
cap was worn under the sallade, but the helmet itself had to be attached to the head with laces or straps. Its long tail projecting at the back must have offered a very attractive surface to the enemy, for a blow on the tail would most certainly put the wearer out of action. With the sixteenth century we find the armet improved from a defensive point of view, for it has an embossed rim on the gorget, thereby completely protecting the head and neck; but from the fact that the upper rim of the gorget is in a sloping position it is quite impossible to turn the head when the helmet has been locked into place. In fact in some examples there is a locking-pin at the back to prevent any movement of the head. These helmets were for war and not for the tournament, and therefore a man must have been in this strained condition with the head completely locked in one position all through an action (fig. 8). Another type of helmet which needs some explanation is the morion of the late sixteenth and seventeenth centuries. From the number of these that survive at the present day it is clear that every army in Europe must have used these defences in very large numbers. Although the high comb is certainly protective, the upturned peaks at the back and front not only do not protect the eyes and nape of the neck in any way, but, like the tail of the sallade, they offer lodgement to cutting blows. A grave inconvenience to the fighting man is the weight of armour of later periods. This, as I have noticed before, was due to the increased employment of firearms, for each piece was, or should have been, proved by pistol or musket shot, and this could only be achieved by thickening the metal as the firearm increased in efficiency; and, as the writers to whom I have alluded before have stated with unanimity, the weight became so great that eventually the defence had to be given up.

I have alluded to the armour for the horse, of mail, fabric, and plate, as being adequate protection, but under the heading of convenience in use there must have been very serious drawbacks, for the long trapper of mail or fabric must have hampered the horse considerably. The plate defences with their padded lining, apart from the dead weight on the horse, were practical, and but little inconvenience was caused to the horse beyond the obvious liability to attack on the legs, to which I have alluded before (fig. 20).

The sword from the twelfth up to the fifteenth century was just about as inconvenient a weapon as could be devised. Long, broad bladed, and badly balanced, and often poor in temper, it had a small grip with merely a cross guard, and when once a cut had been delivered was quite useless for rapid parry or guard. The fact that it was pointed suggests that it was intended for thrusting, but this was practically an impossibility owing to its weight (fig. 2). It is curious to note that in some of the Temple effigies the sword is found on the right side, and as it occurs more than once this cannot have been merely a
peculiarity of a left-handed man or artistic licence in the composition of the monument. In some British cavalry regiments at the present day the sword is worn on the off side, but with the modern weapon the withdrawal from the scabbard is comparatively an easy matter. With the fourteenth-century sword,

however, such an action must have been wellnigh impossible, and one can only imagine that the sword was drawn long before going into action and was thrown away when the need came for using another weapon.

I will now come to the third of our craft laws, that all examples of craftsmanship should be Respectful of Material.

Up to the sixteenth century the armourer respected this law to the fullest extent and we find no attempt to imitate any other fabric or material, but as his expert craftsmanship progressed he evidently desired to show his skill in the treatment of metal. This he achieved by fashioning helmets in the form of the human face (fig. 23), sometimes with long moustaches of heavy metal or with wings growing out of the ears. These examples, from the thickness of the metal, must have been intended for practical use, and there is no excuse whatever for departing from the simple forms of the visor, which could not be improved upon. In parade armour, such as the well-known mask helmet of Henry VIII, there is some excuse, except that it is an outrage on steel and iron to model them in grotesque form, even when this is done with the amazing skill which
characterizes this helmet. But there is worse to come, for the armourer also essayed to imitate fabrics, and this must have been by no means uncommon, for most European armouries possess examples of what is known as puffed and slashed armour which faithfully imitates civilian dress even to the reproduction of stitches and seams (fig. 21). This imitation is all the more absurd as the puffed and slashed civilian dress was meant to signify that the wearer was a swashbuckler and had had his garments cut in street brawl or duel.

My last craft axiom is That all Decoration should be Subservient to the Foregoing Rules. With the exception of the grotesque helmets and puffed and slashed armour alluded to above, the armourer carried on the finest traditions up to the middle of the sixteenth century. Any decoration which he was called upon to provide always took the form of etching or engraving which in no way destroyed the utility of the defence, as witness the magnificent armour made for Henry VIII by Conrad Seusenhofer; and this restraint in craftsmanship was practised by our great English armourers Jacob Halder and William Pickering up to the end of the century, for their splendid 'Greenwich' suits are decorated with fine engraving or with shallow recessed work, which in no way destroys the glancing surface of the metal (fig. 26). In Germany, France, and Italy, however, the armourer ran riot. Whether we are indebted for this splendid incoherence to the arch-sinner Benvenuto Cellini, or whether he himself was carried away by the wave of elaborate ornamentation which overswept Europe, is not for me to say, but the same love of display without any reference to the object decorated is to be noticed in all works of craftsmanship of the late sixteenth and early seventeenth century. The Louvre School in France, and the masters Pefenhauser and Knopf in Germany and Picinino in Italy, evidently considered that their function was not to provide defensive equipment for their patrons but to cover every inch of metal with amazing examples of their skill as metal workers pure and simple (fig. 28). To paraphrase a well-known but apocryphal saying: 'C'est magnifique, mais ce n'est pas le fer.' It may be urged by champions of these craftsmen that the armour was purely for parade purposes; but even here there were serious disadvantages, for separate lames or plates were embossed in such a way that
they would not slide easily one over the other, and the surface of each plate was bound to be scored and rubbed at the slightest movement.

It would be possible and certainly interesting to continue these investigations still farther and still more minutely, but the foregoing notes do, I think, put forward certain problems of which no practical explanation seems to be forthcoming. The only suggestion I can make is that the military artist, military painter, or sculptor of all ages has represented the fighting man, either on a memorial effigy or in illuminated manuscripts, as he ought to have been equipped according to the fashion of the period. We find every battle-piece showing the combatants in full cumbersome equipment, with swords cutting easily through helmets which must have been of extremely tough material. We find horses charging at full gallop encumbered by yards of decorated trappers. When we come to later years we find Napoleon's troops in the paintings at Versailles in full review order, and, to take a later example, in Philipoteau's painting of the battle of Fontenoy both the English and French appear to be in brand-new uniforms, and that after a long and strenuous campaign. Up to recent years our leading soldiers and sailors are painted in full dress uniform, blazing with decorations and gilded sword-hilts, and encumbered with that extraordinary appendage known as the sabretache.

If it were not for the modern war artist and photographer it is possible that future students of military matters would be led to suppose that our generals and admirals went into action equipped as they are painted, in full dress, just as we have been led to believe that the fighting man from the fourteenth to the sixteenth century always wore complete armour. I would venture to suggest that possibly the complete panoply was worn on occasion just as modern British uniform is worn for parade and ceremonial, but when it came to long exhausting campaigns in all weathers the soldier discarded the unessential part of his equipment and retained only those portions which he could wear with comfort and convenience, just as in the war of 1914–18 we find from actual photographs taken in the war areas that the fighting forces, in their fur coats, trench waders, woollen headgear, and gloves, could hardly be recognized as the spick-and-span guardsmen of Wellington Barracks or Aldershot.

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Fig. 25. Jousting Armour of Henry VIII
Tower of London

Published by the Society of Antiquaries of London, 1929
Fig. 26. Armour of Robert Dudley, earl of Leicester
Greenwich School, late sixteenth century
Tower of London

Fig. 27. North Italian armour, late sixteenth century
Tower of London

Fig. 28. Helmet of Prince Charles
c. 1611. Tower of London

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The materials for a study of the iconography of St. Thomas Becket still exist in great abundance. On the canonization of the saint in 1173, his cult evidently spread all over Europe with lightning speed, and the consequences of this were very soon to be seen in all the arts. Much of the artistic production of different countries and centuries relating to the personality and life of St. Thomas has, of course, perished: and in England, after the de-canonization of ‘Bishop Becket’, decreed by Henry VIII, a veritable war was, in 1538, declared on the innumerable representations of the saint then existing in this country, the proclamation enacting expressly that ‘his images and pictures throughout the whole realm shall be put down and avoided out of all churches and chapels and other places’. Where the destruction was not complete, defacement of varying extent was resorted to, as is clear, for instance, from the many illuminations of manuscripts in which the rendering of St. Thomas Becket has been disfigured or partly obliterated. But even so, as already mentioned, there still exists plenty of documentation on which to base a study of the iconography of St. Thomas Becket; and I have now for some time been gathering material with that end in view. In doing so my endeavour has been to work as systematically as possible, though, as all students of iconography can aver, chance often gives valuable help in the pursuit of our quest. I had an experience of the working of chance only recently when a visit to Salamanca, entirely unconnected with my interest in St. Thomas Becket, suddenly brought me up against an extremely interesting Romanesque church of San Tomás Cantuariense, from which, however, all traces of the representation of the saint had vanished, except a very commonplace figure of a mitred bishop in carved and painted wood of quite recent date. Even though I have kept photographers busy over a wider area of Europe than I could anticipate when first embarking on this task, I dare not hope that I have as yet surveyed my material with anything approaching completeness; but the data I have brought together are, nevertheless, perhaps sufficient to allow certain deductions to be made and certain lines of evolution to be laid down.  

1 Of previous attempts at surveying the iconographical material relating to St. Thomas Becket, perhaps the most complete is that contained in Notes and Queries, 10 ser., 1, June 4, 1904, pp. 450-2, being a symposium in response to an inquiry by Mr. H. Snowden Ward.
By way of introduction, the question whether there exist any representations of St. Thomas Becket dating from his lifetime must first be considered. The only category of examples that deserves serious attention in this connexion is that formed by such seals as are either definitely known to have been used by the archbishop himself or else are reputed to have been so used. Their number is not large—four in all; and the one which is undeniably authentic is unfortunately quite irrelevant to our inquiry, as the figured portion of it is simply a classical intaglio of the god Mercury. The three others all contain a conventional figure of an archbishop, in pontificals, with mitre and crozier, imparting the benediction. One of these seals must, however, undoubtedly be regarded as a forgery; and another is probably nothing but the seal of St. Thomas's predecessor Theobald, with the inscription slightly re-cut so as to fit its new owner. Of both the seals casts exist in the collection of the Society of Antiquaries. Of a third, only a woodcut is known, published in the Gentleman's Magazine for 1848: from this, no definite inference can be drawn as to the authenticity or otherwise of the seal.¹

The very earliest posthumous representation of St. Thomas Becket known to us is a single figure: it is the one which occurs among the Byzantine mosaics of the cathedral at Monreale in Sicily (pl. ix, fig. I), and as the whole building, mosaics and all, is understood to have been completed in an almost inexplicably brief period, between 1174 and 1182, this mosaic would at most be separated by twelve years from the date of the martyrdom. As to the reason which prompted the inclusion of this recently canonized saint among those represented in these mosaics who were of so much more ancient standing in the Catalogue of Saints, it is really not far to seek: for the builder of Monreale Cathedral, William the Good of Sicily, was in 1177 married to Princess Joan, daughter of Henry II of England. Whether, all circumstances considered, it could be regarded as 'a compliment to his English bride', as it has been called, is another matter. The rendering of St. Thomas is a very simple one: he is shown in his archiepiscopal robes, without any indication of a mitre, holding a book in his left hand and imparting the benediction with his right. Of any emblem of his martyrdom there is no trace.

Of renderings of St. Thomas of this type, showing him just as the archbishop, there exists quite a number, covering a long stretch of time: it is, of

Fig. 1. Mosaic, Monreale
Late twelfth century

Fig. 2. Fresco, Sacro Speco, Subiaco
c. 1260

Fig. 3. High Relief, Sens Cathedral. Late twelfth century

Fig. 4. Statue on the front of Wells Cathedral. Thirteenth century

Fig. 5. Statue in carved wood, Historical Museum, Stockholm
North German. c. 1475

Fig. 6. Stained glass fragment, Fairford
Fourteenth century

Fig. 7. (a) Anonymous etching, seventeenth century; (b) Etching by W. Hollar

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course, iconographically much the least interesting category, though many of the examples which it comprises are far from unimportant artistically. Among wall-paintings a notable early instance is seen in a fresco of about 1260, in the Sacro Speco at Subiaco (pl. ix, fig. 2), in which St. Thomas, decidedly youthful in appearance, is depicted seated between St. Stephen and St. Nicholas. Still keeping to Italy, but advancing far across the centuries, we note the presence of St. Thomas, as a youthful archbishop holding a long cross with rock-crystal shaft, in a picture of 1504, by Timoteo Viti, in the sacristy of the Duomo at Urbino (pl. x, fig. 1); and in 1520 we find him enthroned as the principal figure of a picture of very Bellinesque character by Girolamo da Santa Croce in the church of San Silvestro at Venice (pl. x, fig. 2). It is interesting to note in this connexion that at Venice St. Thomas Becket was venerated as the patron of the wine cooper's; just as in London he was the patron saint of the Company of Brewers. One wonders what the reason for this can have been: all I can say on this point is that there are quite a number of facts in the life of Becket which associate him somewhat pointedly, at any rate, with the partaking of wine. Such is the circumstance reported by William FitzStephen, that although his general drink was water in which hay had been boiled, he always would insist on taking the first taste of the wine and then gave it to those who were at the table with him. Also, there is the story that before he went to meet his fate he had drunk more wine than usual, and when this was pointed out to him he replied, 'He who must lose much blood, must needs drink much wine.' And one or two further incidents pointing in the same direction might be quoted.

Of English medieval wall-paintings of St. Thomas as the archbishop, that in Hauxton church, Cambridgeshire, dating from the thirteenth century, may be singled out for special mention both on account of its high artistic quality and because of its excellent state of preservation. Originally no doubt also a fine work, but now unfortunately very much faded, is the large figure of St. Thomas on the southern face of one of the four western Norman piers in St. Albans Cathedral, dating from the late fourteenth century.

Turning now to representations other than paintings of St. Thomas as merely the archbishop, we may at first single out for mention one or two pieces

2 I am indebted to Mr. A. W. Clapham, F.S.A., for pointing this out to me. In this connexion it may be noted that the Worshipful Company of Brewers possesses an embroidered pall of the early sixteenth century, containing as part of its scheme of decoration two half-length figures of St. Thomas Becket.
of sculpture of more than average interest. One is the fine late twelfth-century statue, or rather high relief, which has been let into the wall of the ambulatory of Sens Cathedral, and which comes from the house inhabited by St. Thomas during his stay at Sens (pl. ix, fig. 3); and the other, a very striking presentment, in carved wood, of the enthroned archbishop, formerly in the church of Skepptuna in the province of Upland, Sweden, and now in the Historical Museum at Stockholm (pl. ix, fig. 5). The inscription on the halo discloses the identity of the saint, and the whole is a fine example of late Gothic realism, of about 1475, not improbably by the same artist, Bernt Notke of Lubeck, as the celebrated group of St. George and the Dragon in the Storkyrka in Stockholm.¹

St. Thomas as just the archbishop, without any further emblems, also occurs with great frequency among the Canterbury pilgrims' signs (see figs. 1–9), so plentifully represented in the British Museum, the London Museum, the Guildhall Museum, and the Royal Museum at Canterbury.² A favourite mode of presentment is that of his mitred bust: another is that of the saint on horseback—a motive which probably is not only connected with the fact that the Saint was a great traveller, but also reflects his fame as a horseman—there are the accounts of how he fought in Henry II's campaign in Southern France and Normandy in 1159, unhorsing, as Guernes of Pont St. Maxence saw him doing, many a French knight; and Herbert of Bosham tells us how, after his elevation to the archbishopric, St. Thomas continued to take frequent exercise riding, as he saw no ascetic reason for giving up that practice.

On monumental brasses, figures of St. Thomas as the archbishop are of repeated, if not of very abundant occurrence, the most notable examples being

¹ Mr. Eric MacLagan has kindly drawn my attention to the fact that on the keystone of one of the arches of the south doorway of the church of Barfreston, Kent (reproduced in E. S. Prior and A. Gardner, An Account of Medieval Figure Sculpture in England, Cambridge, 1912, fig. 175), there occurs a half-length figure of a bishop which has often been interpreted as representing St. Thomas Becket. As the doorway has been dated as early as about 1170, this identification, if correct, would of course be extremely interesting; but certainty on this point is scarcely attainable.

² Compare on these pilgrims' signs e.g. C. Roach Smith in Collectanea Antiqua, vol. i (1848), pp. 81–91, vol. ii (1852), pp. 43–50; T. Hugo in Archaeologia, vol. xxxvii (1866), pp. 128–34; H. Syer Cuming in Journal of the British Archaeological Association, vol. xxxiv (1865), pp. 192–6, 219–30. The selection of examples illustrating the present paper has been drawn by Mr. H. C. Whaites, those in the Guildhall Museum being reproduced by kind permission of the Museum authorities. Of individual examples in other collections we may here notice an exceptionally finely modelled bust of St. Thomas between two angels swinging censers, found in the Steelyard, Thames Street, and now in the University Museum of Archaeology and Ethnography in Cambridge, and an ampulla in the York Museum (reproduced by C. Roach Smith, op. cit., vol. ii, pl. xviii).
ST. THOMAS OF CANTERBURY

MEDIEVAL PILGRIMS' SIGNS AND BADGES, IN PEWTER OR LEAD

Figs. 1, 2. Reliquaries in form of a shrine, found in the City of London, Steelyard. Guildhall Museum.
Fig. 3. Found in the City of London, Dowgate. Guildhall Museum.
Fig. 4. Cast of Stone Mould. British Museum.
Fig. 5. British Museum.
Fig. 6. British Museum.
Figs. 7-9. Ampullae, British Museum (fig. 9 somewhat reconstructed).

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perhaps those on the Nelond brass, at Cowfold, Sussex (1453), and at Edenham, Lincs. (c. 1500). In stained glass, such figures are, on the other hand, far from rare.

Next in order of our inquiry come those single figures of St. Thomas in which he is shown with an emblem of his martyrdom. From the circumstances of his death, it is obvious that the sword should be the most natural emblem in that connexion. One type—perhaps what might be called the standard type of the martyred St. Thomas—is the one which shows him with his skull cleft by a sword, the latter still adhering to the wound it has inflicted. Reproductions are here given of two etchings which bring before us late, but typical, examples of this category (pl. ix, fig. 7); that on the right being by W. Hollar, and according to its inscription, reproducing a picture in the Arundel collection, attributed to no less a master than Jan van Eyck. The attribution strikes one as far from impossible; but even if the picture were by some less famous master of the early Netherlandish school, it would be of extreme interest to be able to trace it. We may also note that one of the fragmentary panels of fourteenth-century stained glass in Window no. XIV in Fairford church shows, placed on an altar, a reliquaire-chef of St. Thomas with the end of the assassin's sword piercing his head (pl. ix, fig. 6). Only one example, associable with England, of this type of the reliquaire-chef, so well known to us, for instance, from the work of the Limoges enamellers, has survived to our day, namely, the fifteenth-century male bust (possibly of Christ), in latten or brass, with traces of silver plating, found near the London Docks at Wapping, and now in the Guildhall Museum. The principal instance of the type, so far as St. Thomas Becket was concerned, was, of course, the one which for many centuries received the veneration of the pilgrim in the Corona in Canterbury Cathedral, and the aspect of which is perhaps reflected in some of the Canterbury pilgrims' signs. To the representation of the type, showing St. Thomas with the sword remaining in his head, there exists an analogy, popularized by many well-known Italian pictures: the rendering of St. Peter Martyr, the Dominican, who was murdered on the road between Como and Milan on 28th April 1252, and canonized the next year. In his case the weapon is usually a knife or an axe, not a sword.

2 Compare Mill Stephenson, A List of Monumental Brasses in the British Isles, 1925, p. 284, and passim, noting additional examples in Hereford Cathedral, at Knebworth (doubtful), and Tattershall (two).
Other subsidiary types have to be noted. One is that of the saint with a dagger plunged into his heart—as he appears in the picture of the Virgin and Child with angels and saints, painted by Felice Brusasorzi (1542–1605) in 1579 for the high altar of the church dedicated to St. Thomas Becket in Verona; then there is the type of St. Thomas holding in one hand the archiepiscopal cross, and in the other an inverted sword (see a wall-painting in Stoke Charity church, Hampshire). Yet another type associated with the sword as an emblem is that in which it is either placed on the ground close to the saint, or held by an attendant angel. An instance of the former variant is seen in a picture in the church of San Salvatore at Bologna—a city in which it will be remembered that St. Thomas studied, and in which the kneeling figure of the saint is, somewhat incongruously, introduced into the foreground of a Presentation of the Virgin in the Temple (pl. xi, fig. 1): the picture is by Girolamo da Treviso, the artist who eventually entered the service of Henry VIII and was killed by a cannon ball at the siege of Boulogne in 1544. The other variant is seen in the figure kneeling in the foreground on the left, in the picture of the Adoration of the Trinity, by Durante Alberti (1548–1613) in the church of the Venerable English College at Rome (pl. xi, fig. 2). Readers of the delightfully vivid first chapter of Cardinal Wiseman’s Recollections of the Last Four Popes will remember the reference to this ‘noble altarpiece’ as he calls it—it was that reference which put me on the track of this work—and it is also notable through including a rendering of another English saint, who is much more seldom met with in continental pictures than St. Thomas—namely St. Edmund, king and martyr, killed by the Danes by being shot with arrows—hence the sheaf of arrows held by the angel behind him, while the sceptre on the ground in front of him indicates his kingly rank.

A very interesting variant of the type of the martyred St. Thomas is the one which shows him holding in his hand the severed crown of his head. This variant can be exemplified at least twice in England—among the statues on the front of Wells Cathedral1 (pl. ix, fig. 4); and in the stained glass of the north rose window at Lincoln. In continental iconography, the renderings of St. Denis and St. Nicaise and some other martyred bishops are somewhat analogous to this variant; only, of course, they hold their entire heads in their hands, not the crowns only. Yet another variant of the type of the martyred St. Thomas Becket is seen in a wall-painting which formerly adorned the church of Stoke d’Abernon, Surrey (fig. 10). Here the saint was in his archiepiscopal robes,

1 Reproduced in the Journal of the British Archaeological Association, vol. x (1855), pl. 6, facing p. 74.
with cross staff, and on the right, below, one of his murderers was depicted in an attitude of supplication.¹

From these non-narrative representations of the figure of St. Thomas we may now turn to the large and important category of renderings of events from his life. Perhaps the fullest series of these now extant is the one to be found in that noble work of English illumination of the early fourteenth century, Queen Mary's Psalter, in the British Museum. No fewer than twenty-two scenes are here represented, the story beginning with the charming and, of course, entirely fanciful story of how the mother of the saint, Mathilde, a Saracen princess, followed Gilbert Becket, the father of St. Thomas, to England, knowing only the words 'Gilbert' and 'London.'² Even more interesting must have been the series of earlier illuminations of about 1230-50 (possibly of the school of Matthew Paris), illustrating a life of St. Thomas in French verse, of which unfortunately only four pages have survived (pl. xii, figs. 1–8): they were in 1883 in the possession of Madame Goethals-Danneel of Courtrai, and in 1885 were published by Monsieur Paul Meyer for the Société des anciens textes français.³ Elaborate picture chronicles in stained glass

¹ Through the kindness of Mr. P. M. Johnston, F.S.A., I am enabled to reproduce this very interesting painting from a pen and ink drawing made about 1866 by an amateur artist, Miss MacGregor. There exists an erroneous statement (repeated in Keyser's List of Buildings having Mural Decorations, 1883, p. 239) that the church of Stoke d'Abernon contains a painting of the Murder of Becket. This is the painting alluded to. As a curiosity we may here note the representation of St. Thomas as a Bishop with a Lion in a French Book of Hours, 1490-1500, in the Fitzwilliam Museum at Cambridge (see M. R. James, A Descriptive Catalogue of the Manuscripts in the Fitzwilliam Museum, 1895, 119-53).

² All the illuminations of this MS. have been published by Sir George Warner (Queen Mary's Psalter, London, 1912); the scenes from the life of St. Thomas Becket, which occur on folios 288v-98v of the manuscript, are given on pls. 282-94 of the volume of reproductions (cf. also pp. 50 sqq. of the letterpress). The series of incidents is as follows: (1) the Saracen princess arrives in London, jeered at by the crowd and recognized by Richard, the servant of Gilbert Becket; (2) baptism of the princess; (3) marriage of the princess and Gilbert Becket; (4) birth of St. Thomas Becket; (5) Henry II Hands St. Thomas his letters of appointment as archbishop; (6) St. Thomas consecrated archbishop; (7) St. Thomas and Henry II disputing (the council at Northampton); (8) St. Thomas crossing the Channel; (9) Henry II pronounces sentence of exile on St. Thomas's relations; (10) St. Thomas's kindred crossing the Channel; (11) St. Thomas's kindred travelling on foot; (12) St. Thomas welcoming his kindred; (13) St. Thomas handing to Pope Alexander III his ring and cross; (14) St. Thomas at table with the pope; (15) St. Thomas welcomed by the abbot of Pontigny; (16) St. Thomas has a vision of Christ when praying at an altar; (17) the reconciliation of St. Thomas and Henry II; (18) St. Thomas recrosses the Channel to England; (19) St. Thomas at table, when a messenger announces the arrival of the four knights; (20) the martyrdom of St. Thomas; (21) the burial of St. Thomas; (22) St. Thomas brought kneeling before Christ in heaven.

³ The scenes depicted in these illuminations are as follows, in chronological sequence: (1) fol. 1r. (A) Henry II expelling the friends and relations of St. Thomas; (2) St. Thomas lying ill from too much starvation at Pontigny; (g) iv. The parting of St. Thomas and Pope Alexander III;
Fig. 1. Picture by Girolamo da Treviso (1499-1544), San Salvatore, Bologna

Fig. 2. Picture by Durante Alberti (1548-1613), Venerable English College, Rome

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ILLUMINATIONS ILLUSTRATING 'A LIFE OF ST. THOMAS BECKET'
POSSIBLY SCHOOL OF MATTHEW PARIS, c. 1230-59

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Fig. 1. Stained glass window, Chartres Cathedral. c. 1206

Fig. 2. The Martyrdom of St. Thomas Becket. Detail of Chartres stained glass window. c. 1206

Fig. 3. Wall paintings, St. Mary's Church, Stow, Lincolnshire

Fig. 4. Wall paintings, Brunswick Cathedral. First half of thirteenth century

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Fig. 1. Engraving, dating from 1735, of the 'Thomasaltar' by Meister Francke (1434)

Fig. 2. The Mob insulting St. Thomas Becket
By Meister Francke. Kunsthalle, Hamburg

Fig. 3. The Martyrdom of St. Thomas Becket
By Meister Francke. Kunsthalle, Hamburg

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of the life of St. Thomas are also extant: in Canterbury it is, of course, now mainly a matter of posthumous scenes, of miracles worked by the saint after his death. But quite apart from the fragmentary series of scenes from his life and of miracles in the north window of the Chapter house of York minster,

(4) II r. (A) St. Thomas pronouncing sentence of excommunication; (5) (B) St. Thomas addressing Henry II and Louis VII of France; (6) II v. The parting of St. Thomas and the two kings; (7) III r. (A) Roger of York crowning Henry, the king's son; (8) (B) The Coronation Banquet, Henry II serving his son; (9) III v. The news of the coronation reaches St. Thomas and Pope Alexander; (10) IV r. St. Thomas embarking for England at Wissant though warned by Milon, Count of Boulogne; (11) IV v. St. Thomas landing at Sandwich. The story of the priest who would only chant the Mass of the Virgin and was suspended by St. Thomas, but afterwards, through the intervention of the Virgin, reinstated, is illustrated in the Braille's Horae in Mr. Dyson Perrins's collection, in a Bible in the British Museum (1. D. i), and in Queen Mary's Psalter.

1 Compare on this window F. Harrison, The Painted Glass of York, 1927, pp. 52 and 206. For individual panels of stained glass in York Minster relating to St. Thomas Becket, see ibid., pp. 86 sq., 89, 209, 217.
and of two panels, fragments of a larger series in the Bodleian Library, the life of St. Thomas figures very prominently to this day among the subjects of some of the finest French stained glass of about 1200. The cathedrals of Sens and Chartres both contain glorious windows of this period, setting forth at great length the varied and dramatic episodes of St. Thomas Becket's life; while to the fourteenth century belong the remnants of a series in the church of Saint Ouen at Rouen. Reproductions are here given of the top portion of the great Chartres window and of the scene of the murder (pl. xiii, figs. 1-2) which is in this instance combined with a symmetrically arranged scene at the saint's tomb above it, cripples having gathered round the body of the dead martyr; and this is of particular interest, in connexion with a certain scheme of decoration which we can observe on Limoges châsses, and of which I shall have more to say anon.

1 On these, compare John A. Knowles in The Bodleian Quarterly Record, vol. v, no. 32, 4th Quarter, 1926, pp. 100-4.

2 The sequence of subjects in the Sens window (the first in the north ambulatory, date c. 1190) is as follows (proceeding from below to the top, and from left to right): (1) reconciliation effected by King Louis VII of France between St. Thomas and Henry II; (2) St. Thomas landing in England; (3) entry of St. Thomas into Canterbury; (4) St. Thomas received by the clergy; (5) St. Thomas preaching; (6) St. Thomas saying mass; (7) St. Thomas receiving a letter from Henry II; (8) St. Thomas receiving the king's envoy; (9) St. Thomas consecrating a church; (10) St. Thomas confirming; (11) martyrdom of St. Thomas; (12) burial of St. Thomas; (13) Christ receiving the soul of St. Thomas. It will be noticed that the story begins with the departure of St. Thomas from Sens. It has been suggested (see E. Chartraine, La Cathédrale de Sens, Paris, 1928, p. 85, n. 1) that another window originally dealt with the earlier part of St. Thomas's life.

3 The Chartres window dates from about 1265; it was founded by the Corporation of Tanners, and is the fifth window in the Chapelle des Confesseurs on the right-hand side of the north transept. The sequence of episodes is as follows: (1) expulsion of St. Thomas; (2) expulsion of St. Thomas's kindred; (3) St. Thomas before a king; (4) St. Thomas on horseback, accompanied by another person, arriving at a city gate (there now follow three 'signature' panels relating to the Corporation of Tanners); (5) St. Thomas receiving Henry II, into whose ear a little devil speaks; (6) St. Thomas embarks, leaving England; (11) St. Thomas and Pope Alexander III conversing seated side by side; (12-13) St. Thomas leaves Pontigny; (14) St. Thomas converses with King Louis VII of France; (15) the pope, a king, and St. Thomas (a scene difficult of explanation on strictly historical data); (16) St. Thomas recrosses the channel and arrives at Canterbury; (17) Henry II talking to one of the bishops inimical to St. Thomas; (18) refusal of the young King Henry to receive St. Thomas; (19) St. Thomas conversing with the four knights; (20) St. Thomas entering the cathedral; (21) the four knights waiting for St. Thomas; (22-3) the martyrdom of St. Thomas; (24-5) scenes round the tomb of St. Thomas. In the interpretation of the scenes I have followed the Abbé Y. Delaporte in his volume of text to M. Houvet's photographs of the stained glass at Chartres.

4 The subjects occurring in this window, which is the second of the ambulatory (counting from the north transept) are: St. Thomas before King Henry II; the break between the archbishop and the king; martyrdom of St. Thomas. Cf. André Masson, L'Église Saint Ouen de Rouen, 1927, p. 78.

5 I have to thank M. Étienne Houvet of Chartres for permission to reproduce these illustrations and plate xvii, fig. 5 from his admirable photographs.
As to the wall-paintings of a series of successive incidents from the life of St. Thomas, there is a suggestion as to the existence of one such series in England which has been assigned to the thirteenth century.\(^1\) The paintings in question surround the former altar of St. Thomas Becket in the south transept of the church of the Hospital of St. Cross in Winchester, but all that now can be deciphered of these paintings is a fragment of the scene of the murder, and reasons of space preclude the possibility of the series ever having been an extensive one. Then we can point to the existence of wall-paintings of two scenes of Becket's life—the murder and the supper which preceded it—flanking a figure of the saint (pl. xiii, fig. 3), in St. Mary's Church, Stow, Lincolnshire,\(^2\) but that is, as far as I am aware, all. One would have imagined that there must have existed many series in this country, but none survives. There does exist, however, in Germany a most remarkable series of early wall-paintings, illustrating the life of St. Thomas Becket (pl. xiii, fig. 4). This picture-chronicle forms part of the extensive scheme of wall-decoration, carried out in the first half of the thirteenth century, in the cathedral of Brunswick—a church which stood in a particularly close relationship to the veneration of St. Thomas Becket. It was consecrated in 1226, on December 29, the day of St. Thomas, who had been made one of the patron saints of the cathedral by Heinrich of Brunswick, called 'der Pfalzgraf', whose mother, Matilda, was a daughter of Henry II of England; so there was an association with St. Thomas Becket on two counts—the tie of relationship with Henry II on the one hand, and the Guelph tendencies of the House of Brunswick on the other. In consequence, representations of St. Thomas Becket are of frequent occurrence in Brunswick.\(^3\)

The paintings in Brunswick Cathedral were, unfortunately, very drastically repainted in the last century; but even so they remain of the utmost interest and importance. The scenes from the life of St. Thomas occupy a long frieze-

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\(^1\) The suggestion referred to is the following statement in Mr. Keyser's *List of Buildings having Mural Decorations*, 1883, p. 282, under 'Chapel of the Hospital of St. Cross': 'S. transept ... E. Wall: within an arched recess, the Crucifixion; and above, under a series of trefoil-headed arches, events in the life, and the martyrdom of St. Thomas à Becket. 13th cent.'

\(^2\) An account of these wall-paintings, which were uncovered in 1866, and now, as Mr. P. M. Johnston tells me, are very greatly faded, is given in the *Associated Architectural Societies Reports and Papers*, 1866, vol. viii, pt. ii, p. 249 sq., together with a woodcut, from which our reproduction is taken.

\(^3\) Compare in addition to the wall-paintings in the cathedral, the engraved back of a fourteenth-century reliquary in the Welfenschatz, containing three patron saints of the cathedral, namely, St. John the Baptist, St. Blaise, and St. Thomas Becket (reproduced in W. A. Neumann, *Der Reliquien-schatz des Hauses Braunschweig-Lüneburg*, Vienna, 1891, p. 17); a silver book-cover of 1326 decorated with bas-reliefs, also in the Welfenschatz, on which St. Thomas Becket is one of five saints surrounding the Virgin and Child (reproduced *ibid.*, p. 241); two statues on the Egidienkirche; the altarpiece in the chancel of the Mindenkirche (S. Ulrich); and the seal of the diocese of St. Blasien, of about 1338 (cf. W. A. Neumann, *loc. cit.*).
like space on the south wall of the quire, underneath two similar friezes containing scenes from the lives of St. John the Baptist and St. Blaise. Seven scenes are represented, namely, from left to right: St. Thomas crowned as archbishop; St. Thomas disputing with Henry II, the scene being probably intended for the Council of Northampton (October 1164) seeing that the next scene shows him escaping on horseback. The next scene is not quite easy of explanation: it shows a king, no doubt Henry II, addressing a group of people—possibly we have here a rendering of the sentence of exile pronounced upon the relatives of St. Thomas, after his flight to France—such a scene does occur among the illuminations of the Goethals-Daenele manuscript and Queen Mary's Psalter.1 There follows the interview between St. Thomas and Pope Alexander III at Sens (November 1164); then the Reconciliation of Henry II and St. Thomas at Frêteval in Normandy (July 1170); and finally the Martyrdom—St. Thomas kneeling at an altar, while a man behind him brandishes a sword, three others being partly visible. Though, as I have already remarked, unfortunately much restored, these wall-paintings at Brunswick must rank among the most important documents for the iconography of St. Thomas. The wonder is that there should exist no parallel to this series anywhere; and we can scarcely imagine that it does not reflect an iconographical tradition which by that time had obtained a wide diffusion.2

Coming now to series of several panel pictures relating to the life of St. Thomas Becket, I know of but three instances, all again associated with Germany, though of considerably later date than the Brunswick wall-paintings. The earliest of these series forms part of one of the most notable productions of German fifteenth-century painting—the altarpiece dedicated to St. Thomas Becket, which Meister Francke of Hamburg in 1424 undertook to paint for the

1 In this connexion it may be noted that the early biographers of St. Thomas give an account of the hospitality extended to these exiles, thanks to the intercession of St. Thomas Becket, in various parts of Europe, but notably in Sicily; and indeed all over Italy there exist families claiming descent from St. Thomas Becket's relatives. The inscription on the tomb of a member of the Bechetti family, in the church of S. Tommaso Cantuariense at Verona, is worth quoting in the present context:

Tuo hoc in templo | cantuariensis antiquis, | thoma sancte | agnosce, et accipe, | tuum | certum genus | Io baptistam bechetum fabrianum, | honoratiss. hominem | hieronymus albertus
f. Martyr | moerentes filii moerentes | fecere | moerenti patri moerenti | sibique, suisque |

Sec G. B. Cola, Vita di S. Tomaso Arcivescovo di Cantuaria e Martire, Luca, 1696, p. 179.

2 It may be noted that a series of thirteenth-century frescoes in the chapel known as the 'grotta di San Tommaso' in the cathedral of Anagni may have illustrated the life of St. Thomas Becket. At least this is the reference to them in Signor Toesca's paper in Le Gallerie Nazionali Italiane, vol. v (1902), p. 182: 'Sul muro di fronte sono affrescate alcune storie ora troppo deperse perché se ne possa facilmente riconoscere il soggetto: forse esse si riferiscono a San Tommaso, chè nell'ultima scena appaiono soldati irrompenti con le spade sguainate in un tempio mentre la turbà del popolo fa gesti d'orrori.'
Hamburg Confraternity of the 'Engländsfarer'. From a very inaccurate engraving (pl. xiv, fig. 1), dating from 1731, we know that the wings of this altarpiece, the Thomas altar as it is called, when closed displayed eight pictures, viz. four from the life of the Virgin and four from the life of St. Thomas Becket. These latter scenes were: (1) the enthronement of St. Thomas; (2) the mob insulting St. Thomas; (3) the murder of St. Thomas; and (4) a scene concerning which something must have gone wrong in the engraving; for it represents the saint kneeling, in a harbour city, before a royal crown placed on a cushion. The order must, I think, for one thing be wrong, inasmuch as the scene follows after the murder; and further I can trace no incident corresponding to this scene in the life of the saint, who did, of course, frequently enough cross the Channel. But this engraving was evidently far from accurate, as we can see by comparing it with the two panels of the series which have survived, and which are now in the Hamburg Museum. The one (pl. xiv, fig. 2) which chronologically comes first, Dr. Lichtward, the learned author of the standard monograph on Meister Francke, interprets as the Flight of St. Thomas, saying that it has been impossible to make the subject tally with any incident of the saint's legend. What we see is St. Thomas, with two companions on horseback, jereed at by a mob, one man of which has cut off the tail of St. Thomas's horse. It is really not quite accurate to describe the scene as the Flight of St. Thomas; what the artist has depicted is an incident, connected by popular tradition with the town of Strood, near Rochester, where the people insulted Becket as he rode through the town, by cutting off the tails of his horses. For this, tradition has it that the descendants of the people who did it were punished by being ever after born with horse's tails; indeed there is a tradition traceable in Spain that all Englishmen, but especially the inhabitants of Kent, are born with tails for curtailing Becket's mule. Concurrent with this story, and rather better authenticated, is the account handed down by William FitzStephen, that right at the end of St. Thomas's life, after his return to England—on Christmas Eve, 1170, to be quite accurate—Robert de Broc of Saltwood sent out his nephew John to waylay and cut off the tail of a sumpter mule and a horse belonging to St. Thomas. It may be noted that this particular insult weighed heavily on St. Thomas's mind; indeed he referred to it in his last interview with his murderers, shortly before the tragedy: 'They have attacked my servants, they have cut off my sumpter-mule's tail, they have carried off the casks of wine that were the King's own gift.' The presence of this scene in the Hamburg altarpiece is another proof of the fitfulness of the material for the iconography of St. Thomas Becket

1 Nicolaus Staphorst, Historia Ecclesiae Hamburgensis, pt. i, vol. iv (Hamburg 1731), plate facing p. 64.
2 Alfred Lichtward, Meister Francke (Hamburg 1899).
as now existing; we cannot trace it anywhere else, and it is an episode concerning which the *Golden Legend* is silent.

The other picture of this series by Meister Francke, which has come down to us (pl. xiv, fig. 3), is of a much more familiar subject—the martyrdom of St. Thomas: and I think it cannot be gainsaid that it is the finest pictorial interpretation which has been inspired by this oft-represented scene. Iconographically the composition is of considerable interest, inasmuch as it shows three of the archbishop's friends present—a number which, as we shall see, is quite accurate in the sense that three of his friends actually witnessed the beginning of the tragedy. This rare feature, taken together with the inclusion of the scene of the mob insulting St. Thomas, points to very accurate information concerning the life of the archbishop having been possessed by the person who set the subjects for the *Thomassaltar*.

Next in date to this series follow a couple of scenes painted by the great Tyrolean master Michael Pacher (first recorded in 1497, died in 1498) on the outer sides of two panels (nos. 24, 25) in the Museum at Graz. The subjects depicted are the Murder of St. Thomas and the Funeral of the Saint. In the former scene, three knights and several witnesses of the event are introduced; the funeral takes place in the Cathedral, with several people present and some angels descending from Heaven. As the inner faces of the panels each contain the symbol of an evangelist, it is possible that Pacher had painted four scenes from the life of St. Thomas, though only these two remain.¹

The only other instance known to me of a series of panel pictures of the life of St. Thomas Becket is of much less importance artistically: it occurs on the wings of an altarpiece of the late fifteenth century, dedicated to the three St. Thomas—St. Thomas the Apostle, St. Thomas Becket, and St. Thomas Aquinas—in the church of St. Jürgen at Wismar in Mecklenburg. When opened (pl. xv, fig. 1) the altarpiece contains in the centre three figures in carved wood of the three saints—St. Thomas Aquinas in the centre, on the left of him the Apostle, and on the right St. Thomas Becket, in bishop's robes, mitred, holding the crozier and a model of a church; the bas-reliefs on the wings represent scenes from the life of St. Thomas Aquinas. When the outer wings are opened, and the inner wings closed, each wing contains four scenes from the life of a saint, that on the left St. Thomas the Apostle, that on the right St. Thomas Becket (pl. xv, fig. 2). The compositions are, in certain cases, full of minute incidents not altogether easy to interpret, but as far as I can

¹ I have to thank Dr. Buchner of Cologne for drawing my attention to these very notable pictures; they will be found reproduced in W. Suida, *Die Landesbildegalerie . . . in Graz*, Vienna, 1923.
Fig. 1. The three St. Thomases and scenes from the Life of St. Thomas Aquinas

Fig. 2. Scenes from the Lives of St. Thomas the Apostle and St. Thomas Becket

ALTAR-PIECE, CHURCH OF ST. JÜRGEN, WISMAR, MECKLENBURG
LATE FIFTEENTH CENTURY

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Fig. 1. Counter-seal of Hubert Walter, archbishop of Canterbury 1163-1205. Fig. 2. Counter-seal of Stephen Langton, archbishop of Canterbury 1207-38. Fig. 3. Counter-seal of Richard Grant, archbishop of Canterbury 1229-31. Fig. 4. Counter-seal of Edmund Rich, archbishop of Canterbury 1293-1304. Fig. 5. Seal of Thomas Arundel, archbishop of Canterbury 1397-1414. Fig. 6. Seal of the Prerogative Court of Archbishop Warham, 1504-32. Fig. 7. Seal of the Prerogative Court of Cardinal Pole, 1555-8. Fig. 8. Seal of the Prerogative Court of Archbishop Cranmer, sede vacante during his imprisonment (1553-5). Fig. 9. Seal of Arbroath Abbey, Angus (13th century). Fig. 10. Reverse of the third seal of the Cathedral Priory of Canterbury, 1233.

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make out, the pictures represent (i) the enthronement of St. Thomas; (2) Henry II driving St. Thomas into exile—in the background he is, I think, kneeling before the pope at Sens, as in the Brunswick wall-painting; (3) St. Thomas accompanied by two acolytes, I suppose about to meet his murderers; and (4) the shrine of St. Thomas surrounded by worshippers.

A curious fact in this connexion is that, so far as I know (and I have also consulted Dr. Friedländer on the point) there exist no Early Flemish pictures either of the life of St. Thomas Becket or of a single incident of it. There is a picture in the collection of the Duke of Devonshire, famous in the annals of art-history on account of the forged inscription it once bore, purporting that it was a work by Jan van Eyck. This picture used to be interpreted as the enthronement of St. Thomas Becket, but it is now with greater reason and doubtless rightly regarded as representing the enthronement of St. Romold, archbishop of Dublin.

In sculpture, France can show an elaborate chronicle of St. Thomas's life in stone in the late thirteenth-century bas-relief above the gate of the southern transept of the cathedral of Bayeux (pl. xvii, fig. 1). An interpretation of the scenes which are represented in three tiers is rendered somewhat difficult by the mutilation which many of the figures have suffered; but we have in all probability here: (i) the council at Northampton and next to it the arrival of St. Thomas in France, greeted by King Louis VII; above this (ii) St. Thomas crossing back to England, proceeding on horseback to Canterbury, and being murdered; and at the top (iii) a scene at the tomb of St. Thomas.¹

Of all the scenes connected with the life of St. Thomas, it was, however, for obvious reasons, the martyrdom upon which attention in the first instance centred—the subsequent incident of the penance of Henry II was also repre-

¹ The question whether the life of St. Thomas Becket was represented in sequences of panels on English alabaster retables is one of considerable interest. Though no such retable has survived, there is of course every probability prima facie that retables of this type did exist; and there is also more definite evidence pointing in the same direction—namely the survival of individual panels portraying various scenes from the life of St. Thomas Becket. The martyrdom of St. Thomas Becket is thus represented on four alabaster panels which have come down to us—on this point further details are given below, p. 47. The council at Northampton is represented on an alabaster table in Elham church, Kent (see Ill. Cat. Exhib. English Medieval Alab. Work, Soc. Ant., 1913, no. 39, pl. xvi; and P. Nelson, in Trans. Hist. Soc. Lancs. and Ches., 1917, p. 87; see pl. vii). There are, moreover, in existence alabaster panels, such as the two in St. Louis-en-l'Isle in Paris, representing the birth and burial of an archbishop (see P. Nelson, loc. cit., p. 89 sq., and pl. ix), one in Dr. Hildburgh's collection, representing the consecration of an archbishop (see the Antiquaries Journal, vol. i, 1921, p. 227 sq.), and one in St. Mary's, Nottingham, representing the meeting of an archbishop and a pope (P. Nelson in Archaeological Journal, vol. lxxv, 1918, p. 332, pl. xxiv) all of which might represent scenes from the life of St. Thomas Becket.
sented with some frequency; but nothing like as freely as the murder, which, it is interesting to note, at Canterbury and elsewhere used to be enacted as a pageant. Before we go on to examine the individual representations of the martyrdom, I may perhaps be allowed to recall a few of the salient facts connected with it. The actual murderers were four: Reginald Fitzurse, Hugh de Moreville, William de Tracy, and Richard le Bret or Breton; and with them a degraded clerk, Hugh of Horsea, was present—it was he, in fact, who after St. Thomas had been slain, put his foot on the neck of the archbishop and scattered his brains over the pavement. Of his friends, three were with him at the beginning—Robert of Merton, William FitzStephen, and Edward Grim; and it was Grim who stood by him longer than any of the others, and in the struggle had one of his arms almost severed. Again, at no time after the irruption of the knights was St. Thomas praying at an altar, let alone saying mass: he first challenged the invaders from the steps leading down to the transept, and the actual struggle (in which the archbishop gave a very good account of himself) took place in the transept between a pillar and the wall forming one of the corners of the chapel of St. Benedict. The murderers were armed with axes and swords—Fitzurse had a sword in one hand and an axe in the other, eventually discarding the axe: he struck the first blow, which, however, only dashed off St. Thomas’s cap. The last blow—which severed the crown of St. Thomas’s head—was delivered by Richard le Bret, whose sword broke in two on striking the marble pavement. As to what St. Thomas wore on this occasion, we are told it was a white rochet with a cloak and hood over his shoulders.

The list of the different categories into which the representations of the martyrdom fall is in itself a lengthy one. We have to deal with pilgrims’ signs in lead and pewter, seals and other metalwork, sculptures in stone, wood-carvings, ivories, stained glass, embroideries, illuminations, enamels, woodcuts, easel pictures and wall-paintings.

The extensive and interesting category of seals is of particular importance, inasmuch as it includes the earliest more or less definitely datable representation of the murder: namely, the counter-seal of Hubert Walter, archbishop of Canterbury between 1193 and 1205 (pl. xvi, fig. 1). The composition includes

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1 Without entering in this connexion upon a discussion of the complex subject of the penance of Henry II in art, I may note in passing the interesting suggestion recently made by Mr. Campbell Dodgson (see The Burlington Magazine, vol. lxxii, Oct. 1928, p. 203) that Dürer’s woodcut of 1510, "The Penitent" (B. 119) may represent Henry II doing penance before the shrine of St. Thomas Becket. Unfortunately, however, there is nothing at all to indicate a kingly rank in Dürer’s penitent.

2 On these pageants, see Thomas Wright, "On the Municipal Archives of the City of Canterbury", in Archaeologia, vol. xxxi, 1839, pp. 207–9 (the date of the earliest pageant mentioned being 1501), and Dean Stanley, Memorials, p. 223, n. 2.
two murderers and Grim. Next follows the counter-seal of Stephen Langton (archbishop 1207–28), with four murderers and a dove descending from above (pl. xvi, fig. 2); while the counter-seal of Richard Grant of Wethersfield (archbishop 1229–31) introduces a composition in two tiers (pl. xvi, fig. 3): above in the principal compartment a scene of the martyrdom with four murderers, below a very curious and indeed so far as I am aware unique feature: the heads of the horses of the four knights, held by two men. In the counter-seal of Edmund Rich of Abingdon (1233–40) this feature is replaced by a half-length profile of the archbishop praying (pl. xvi, fig. 4). Though there are many variations in detail, this became the standard type for the seals of the archbishops of Canterbury for quite a long time: of later examples, I reproduce (pl. xvi, fig. 5) the fine seal of Thomas Arundel (archbishop 1397–1414). The seal of the Prerogative Court of Archbishop Wareham (1504–32) shows a particularly dramatic scene of the murder in which St. Thomas is kneeling facing the spectator and the coat of arms of the archbishop replaces the figure of the bishop below (pl. xvi, fig. 6). Two kindred post-Reformation examples here reproduced are the seal of the Prerogative Court of Cranmer, sede vacante (1533–5) during the imprisonment of the archbishop (pl. xvi, fig. 8); and the seal (pl. xvi, fig. 7) of the Prerogative Court of Cardinal Pole (1555–8), in both of which the scene of the murder—after its excision in the seals of the archbishops of Canterbury and elsewhere—reappears. A particularly interesting seal iconographically is the reverse of the third seal of the Cathedral Priory of Canterbury, made in 1233 (pl. xvi, fig. 10), in which the scene of the murder is displayed in four arcades of the front of the cathedral: in the centre, two murderers, St. Thomas, and Grim, on the left two more murderers, on the right two friends of St. Thomas—a very unusual feature. Outside Canterbury there would be a number of interesting seals to quote; considerations of space prevent me from referring to more than two, the fine thirteenth-century seal of Arbroath Abbey, Angus (pl. xvi, fig. 9), and that, belonging to the same century, of the Priory of St. Mary, Langdon, Kent, of which the bronze matrix exists in the British Museum.

Of the examples of other metalwork, much the most notable is, I think, the fine reliquary in the church of Heidal, Valdres, Norway (pl. xvii, fig. 2), in all

1 See W. de G. Birch, Catalogue of Seals in the Department of MSS. in the British Museum, vol. i (1887), no. 1187.
2 Birch, op. cit., no. 1196.
3 Ibid., no. 1201, misinterpreting the horses as 'shields (†)'. The correct interpretation has been pointed out to me by Mr. H. S. Kingsford, to whom I am much indebted for information regarding seals bearing on the iconography of St. Thomas Becket.
4 Ibid., no. 1202.
5 Ibid., no. 1238.
6 Ibid., no. 1373. The friends of St. Thomas are here misinterpreted as knights.
probability the work of a Norwegian craftsman of about 1250. The accuracy of the representation here is considerable: there are five assailants, which is correct if we add Hugh of Horsea to the number; on the archbishop's side there are three people present; the archbishop's cap is shown falling to the ground, and the sword of one of the assailants breaks as he strikes the archbishop's head; Grim is represented carrying the archbishop's cross-staff, which is strictly inaccurate, but had by this time become the tradition—a tradition indeed, incorporated in the Golden Legend; and the altar with the chalice and the dove of the Holy Ghost gives a suggestion that mass was being said, which is a very frequent, but historically quite inaccurate, feature in these representations.

Of sculpture in stone, Scandinavia offers another example (pl. xvii, fig. 4), which is very notable for one thing on account of its date, which has been put as early as 1190–1200: it occurs on a font in the church of Lyngsjö in the Province of Skåne in Southern Sweden. The representation here actually begins with the interview between Henry II and one of the knights; then another is seen hurrying away; and finally two are seen attacking the archbishop in the presence of Grim; the chronicle of the event being rounded off by the reception of the saint in heaven. The presence of this subject on a Scandinavian font is all the more remarkable as no parallel to it exists on any English font. At Chartres, among the bas-reliefs of the North Door (c. 1250) we see a representation of the murder, with only two assailants present (pl. xvii, fig. 5); and in England the subject was repeatedly represented in the bas-reliefs of ceiling bosses—there is one instance in Chester Cathedral, and a particularly fine one at Exeter (pl. xvii, fig. 3), in which the full normal complement of actors in the drama is seen—four knights and Grim. The subject also occurs in the much decayed late fifteenth-century bas-reliefs on the tower.

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1 I am indebted to Dr. Haakon Sheelvig for supplying me with the photograph from which the reproduction is made, and for drawing my attention to the fact that this chasse and other examples of kindred character in Norway have lately been discussed by Dr. Thor Kielland, Norsk Gullmed-kunst i Middelalderen, Oslo, pp. 97–115.

2 Of pewter pilgrims' ampullae containing representations of the murder, five are reproduced in figs. 1, 2 (Guildhall Museum), 7–9 (British Museum). In the Musée de Cluny there is a notable example, from the Victor Gay Collection, showing the murder and another scene with St. Thomas seated, mitred, and addressing some clerics (reproduced in V. Gay, Glossaire archéologique, i, p. 39).

3 Compare Lars Tynell, Skånes medeltida dopfuntar (Stockholm, 1913), p. 33 sq. and pl. viii, 1–2. See also Romilly Allen in The Retiary, 1906, pp. 126–31. The photograph here reproduced has been most kindly placed at my disposal by Professor Otto Rydebeck of Lund.

4 For the excellent photograph from which this reproduction is taken I have to thank Mr. C. J. P. Cave, F.S.A. Mr. H. C. Waite has drawn my attention to a bas-relief on the double piscinai the chapel of St. Thomas Becket in St. Davids cathedral, which may be a fragment of a representation of the murder.
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of the church of St. Mary at Burnham Market, Norfolk.\(^1\) Of alabaster panels the number must originally have been very large, though I only know of four surviving examples: one in the British Museum (pl. xviii, fig. 1), one in the possession of Mr. F. J. Savile Foljambe,\(^3\) one in the Rouen Museum,\(^3\) and one in the collection of Mr. Frank J. Gould (this last dated 1460).\(^4\) As to ivories, I know of five examples, all dating from the fourteenth century: two in the Victoria and Albert Museum (pl. xviii, figs. 2–3), one in the Figgioro Collection, Vienna,\(^4\) one in the late Homberg Collection (sale in Paris, 1908, no. 486) (pl. xviii, fig. 4),\(^6\) and one in the Fitzwilliam Museum at Cambridge, McClean Bequest, no. 41.\(^7\) It is, of course, not a large number; but relatively not inconsiderable if one bears in mind how very rarely subjects from the lives of the saints occur on ivories of this period.\(^8\) As to embroideries, I can only briefly refer to the inclusion of the murder of St. Thomas among the subjects shown on some of the great examples of opus anglicanum—the cope in the Museo Civico at Bologna\(^8\) and the Lateran,\(^9\) and the dalmatic in the Cathedral of Anagni.\(^10\) This scene was also at times embroidered on bishops’ mitres, as may be seen from the fine example (pl. xviii, fig. 5) in the Bavarian National Museum at Munich.\(^11\) There are analogous mitres in the Treasury of the Sisters of Notre Dame at Namur\(^12\) and in the Cathedral Treasury at Sens.\(^13\) Again, of the category of woodcuts, which is plentifully made up from illustrations in Books of Hours, editions of the Golden Legend, etc., I will limit myself

\(^1\) Compare on these the Rev. T. Felton Falkner in *Norfolk Archaeology*, vol. xvii (1910), pp. 277 sqq.


\(^4\) Reproduced in *P. Nelson, Some Unpublished Alabaster Carvings*, in *The Archaeological Journal*, vol. lxxiii, pl. x, 1, facing p. 34.


\(^6\) R. Koechlin, *us.*, no. 346 ter.

\(^7\) R. Koechlin, *us.*, no. 346 bis.

\(^8\) I have to thank Miss M. H. Longhurst, F.S.A., for valuable information bearing on this category of work.

\(^9\) Reproduced in *L. de Farcy, La Broderie*, pl. 27 (second numbering).

\(^10\) Reproduced in *L. de Farcy, op. cit.*, pl. 43.


\(^12\) Already Dean Stanley (in *Historical Memorials of Canterbury*, 7th ed., 1875, p. 290, n. 1) has drawn attention to the fact that here above the scene of the murder appears the hand of God between two crescents, and associates this circumstance with the presence of the famous gilded crescent in the roof of Canterbury Cathedral above the shrine of the saint.


\(^14\) See E. Chartraire, *Inventaire du Trésor de l’Église primatiale de Sens* (Sens, 1897), p. 49. In the Sens mitre, as in the one at Munich, the other side shows the martyrdom of St. Stephen.
to mentioning one instance of definitely English interest, though of no great iconographical importance (pl. xviii, fig. 6)—the woodcut which occupies the top of a page in Caxton's edition of the *Golden Legend* of 1483.

I am passing somewhat rapidly over these examples, as the two principal categories associated with the representation of the martyrdom of St. Thomas Becket are the champlevé enamels and the paintings; and of these I would like to treat at some length before concluding.

The wide diffusion of relics of St. Thomas inevitably led to a corresponding demand for receptacles for these; and this demand was, in a large measure, supplied by the Limoges enamellers of the thirteenth century.\(^1\) The number of surviving Limoges châsses, either intact or more or less broken up, containing on the face a representation of the martyrdom of St. Thomas, is very large, and they can be traced throughout the length and breadth of Europe—from Sweden in the north to the kingdom of the Two Sicilies in the south. The Limoges châsses devoted to St. Thomas all date from the thirteenth century: at least I know of no examples dating from the twelfth century, and the series breaks off abruptly in the fourteenth. In that respect the St. Thomas châsses are, however, not peculiar, for the sudden extinction of the species of Limoges châsses in the fourteenth century is one of the most curious and inexplicable episodes of the history of medieval art. The scene of the murder of Becket lent itself well to the frieze-like treatment which was the natural one for the shape of the caskets, and which made another subject—the journey and adoration of the Magi—such a very popular one for the Limoges châsses. There is a number of variations in the treatment of the scene, and on the whole very little heed was paid to anything like historical accuracy. The altar with the chalice placed on it is thus very seldom absent; and on the other hand there is never any indication of Grim or the other friends of the archbishop. It is true that there exists in the Cathedral Treasury at Sens a châsse (pl. xix, fig. 1)—made up in the last century from different sources—the front of which shows the martyrdom of a bishop, who has been thought to be St. Thomas Becket and who is accompanied by two laymen who are being massacred by the four assailants. The general disposition of the scene well accords with that which we find in most martyrdoms of St. Thomas on Limoges châsses. The altar with the chalice is there, the Hand of God emerges from a cloud above on the right, blessing the martyr; and the axe figures prominently among the weapons.

\(^1\) Of other reliquaries connected with St. Thomas Becket we may here note that containing a relic of the Saint's arm and hence shaped as an arm, in silver, which used to be in the cathedral of Gravina in the south of Italy, near Bari (cf. P. Ughelli, *Italia Sacra*, 1717, vol. vii, col. 117). I have to thank Mr. A. Hamilton Smith, C.B., F.S.A., for this reference, as well as for a photograph of the comparatively recent reliquary which now replaces the old one at Gravina.
of the assailants. Above, on the roof of the châsse, is, as may frequently be paralleled, a symmetrical representation of the burial of the martyr; and the analogy of this arrangement with the top portion of the Chartres window is one that leaps to the eye. All things considered, in spite of the undoubted analogies here displayed to the St. Thomas Becket châsses, there is, however, every probability that M. Mayeux has found the right solution when interpreting the scenes on the Sens châsse as relating to the legend of St. Savinianus, a martyr of local renown in Sens, who was slain together with two companions.

The only instance known to me of a châsse, the front of which shows a scene identifiable with the murder of St. Thomas Becket and including four assailants, therefore, is the noble châsse belonging to the Society of Antiquaries (pl. xix, fig. 2). Its provenance is Naples, where it was acquired by Sir William Hamilton in 1801, and the roof shows the burial of St. Thomas Becket. Much the largest groups among the material we are now surveying are those showing three or two assailants. Of those containing three assailants, one is of particular interest since it forms part of the only châsse with a rendering of the murder of Becket which still remains in English ecclesiastical ownership, belonging as it does to Hereford Cathedral (pl. xix, fig. 3). Another kindred example, to judge by the style of considerably later date, is in the possession of the church of Trönö in Sweden (pl. xix, fig. 4). The examples next reproduced introduce us to a new type, inasmuch as the roof of the casket shows, not the actual entombment, but the soul of the deceased carried heavenwards in a halo by two angels. One example in which the assailants are three is in the Museum at Lyons (pl. xx, fig. 1); another, which shows but two assailants, is now in the British Museum (pl. xx, fig. 2) and is said originally to have had an English provenance and to have belonged to Cropland Abbey, Lincolnshire. Finally, we have to note the type of which again I know but a single instance, the


2 The following is a list of Limoges châsses known to me containing representations of the martyrdom of St. Thomas Becket in which three assailants appear: Gueret, Museum (reproduced Rupin, L'œuvre de Limoges, pl. xxxviii); Hereford Cathedral library; London, British Museum (front only); Lyons Museum (from the E. Odiot collection); Paris, late Sevich collection (sale, Paris, 1910, no. 185); late Spitzer collection, no. 236; Trönö church (Sweden); Utrecht, Archiepiscopcal Museum, no. 907.

In the following examples two murderers occur: Berlin, Schlossmuseum; Clermont Museum; Escorial (reproduced in Revue de l'Art Crétien, 1903, p. 293); Évreux, Doil collection; Hamburg, Museum für Kunst und Gewerbe (from the Bernal, Napier, and Johannes Paul collections); Limoges, Madame Fayette; London, British Museum (1) châsse from Cropland Abbey, (2) châsse, purchased 1854; Victoria and Albert Museum, front of châsse (1961-1856); Munich, A. S. Drey; New York, Metropolitan Museum of Art; Paris, Louvre, Donation Corroyer; M. Martin le Roy (reproduced in vol. i, pl. xix of the illustrated catalogue of the Martin le Roy collection, no. 23); M. A. Daguerre,
THE ICONOGRAPHY OF
châsse, here reproduced (fig. 11), at St. Laurent de Vige-ean, Mauriac, Cantal: here there is but one assailant, and above are seen the angels with the soul of the dead, whilst at the back is the burial scene. A further degeneration of the subject, iconographically speaking, is perhaps the one seen on a châsse in the Musée de Cluny (pl. xix, fig. 3), in which the slayers are two, but in which neither the setting of the scene nor the costume of the martyr points very
definitely to St. Thomas Becket; still, as the scene has a vague relation to the murder of Becket and is accompanied by a burial scene on familiar lines, there is some excuse for thinking that Thomas Becket is the saint represented. On the other hand, there is also the martyrdom of St. Candidus, slain by two soldiers, as represented on the eleventh-century reliquary in repoussé silver at S. Maurice d'Agaune: and we have to admit the possibility that he, or indeed some other saint, may be the martyr represented in the Cluny châsse.

Of the paintings representing the murder of St. Thomas Becket, the illuminations form a group of great extent numerically, and also include a number of examples of great importance artistically. The earliest of these—dating from about 1190-1200—occurs in a psalter in the British Museum (Harl. 5102). It is an impressively silhouetted and strikingly dramatic composition which has been frequently reproduced, thereby becoming, as it deserves to be, a classic of the iconography of this subject (pl. xxi, fig. 1). The knights are four, Fitzurse being distinguished by his armorial bearings: Grim is present holding the cross-staff, and the cap of the archbishop is shown falling to the ground. A good deal later (c. 1233-50) is the illumination in the Carrow Psalter
late Schevitch collection (sale 1916, no. 188), Tollin sale, 1897 (no. 51, reproduced p. 20 of the sale catalogue) (plaque only); Rome, Treasure of the Lateran (reproduced in Bollettino d'Arte, vol. iii, 1909, p. 32); Signaeringen, late Hohenzollern collection; Vienna, Weinberger collection (sale, Oct. 24, 1929; formerly in the cathedral of Palencia); Zurich, A. Rütschi collection.

1 This châsse is here illustrated from the drawing in Rupin, L'oeuvre de Limoges, p. 397.
ST. THOMAS OF CANTERBURY

(pl. xxi, fig. 2), which used to be in the collection of the late Mr. Yates Thompson, a scene of even greater animation, introducing the trampling on the body of the martyr, which tradition, as a matter of fact, associated with the person who accompanied the slayers, Hugh of Horsea; and as a notable rendering of about the same time we may further notice the tinted pen-and-ink drawing in Matthew Paris's Historia Maior in Corpus Christi College, Cambridge. As time went by, the number of illuminations of this subject grew considerably, especially in Books of Hours, and the increasing realism was not invariably accompanied by proportionate historical accuracy. Reproductions are here given (pl. xxi, figs. 3, 4) of a couple of characteristic late renderings—each taken from a manuscript in the British Museum, Add. 17012 and King's 9—which serve to emphasize the strangeness of the absence of this subject among Flemish fifteenth- and sixteenth-century panel pictures. Among individual panel pictures of this subject I indeed know of but one that has come down to us, and that an English picture—the grievously injured one in Canterbury Cathedral at the head of the monument of Henry IV and Joan of Navarre. Of wall-paintings again, solely depicting the murder, there still exist a great many, and perhaps the earliest in the series is one not in England but in Italy, in the church of SS. Giovanni e Paolo at Spoleto (pl. xxi, fig. 1). As this fresco is closely akin in style to the work of a master Alberto Sotio, who dated the crucifix in Spoleto Cathedral in 1187 or 1188, it is in all probability a work of the twelfth century. The fresco has been mutilated and is also in part covered up by later additions, but as far as can be made out it showed Henry II seated on the left, issuing his orders to the knights, the foremost of whom seizure by the hand St. Thomas, standing under a small edifice accompanied by Grim, and receiving the blow of the sword on his head. I am not acquainted with any other medieval wall-paintings of this scene in Italy, and with no existing one in France. In the Rhineland one might expect to find some, in view of

1 For a reproduction of this see M. R. James, 'The Drawings of Matthew Paris', in the Walpole Society's fourteenth volume, 1926, pl. iii.
2 Reproduced (in reconstruction) by J. Carter, Specimens of Ancient Sculpture and Painting now remaining in England, vol. i, 1786, pp. 56-7. Carter's original water-colour, and also one of the actual condition of the panel, are in the Victoria and Albert Museum.
3 It may be noted that the martyrdom of St. Thomas bears a considerable resemblance to the martyrdom of St. Magnus, as represented for instance in the fresco in the crypt in the cathedral of Anagni (reproduced by Toesca, loc. cit., pl. vii, facing p. 160); and to the death of St. Matthew as depicted e. g. by Niccolò di Pietro Gerini in the church of San Francesco at Prato (see R. van Marle, The Development of the Italian Schools of Painting, vol. iii, 1924, fig. 350).
4 G. B. Cola (op. cit., p. 145) notes the existence in the seventeenth century of a painting of the martyrdom in the church of St. Nicolas-aux-Fosses at Arras; but, as far as I can make out, the church in question no longer stands. The treasury of Arras Cathedral contains one of the bloodstained garments worn by St. Thomas Becket when he was slain.
the artistic and other relations between that part of Germany and England, but
Professor Clemen, the foremost specialist on medieval painting in the Rhine-
land, tells me that not a single specimen of the scene exists there. Turning
then to England, we find that definite records exist of wall-paintings, certainly
or possibly, of the murder of Becket, either lost or extant, to a number of
between twenty and thirty; and naturally the number was vastly greater before
1538. Of existing examples, one of the finest, as well as earliest, is doubtless the
painting in Bramley church, Hants (pl. xxii, fig. 3), which I am inclined to date
about 1300. Later there comes the painting in South Burlingham church, Norfolk
(pl. xxii, fig. 2), a frieze-like composition of singular effectiveness and monu-
mental dignity; and another very interesting example, showing a variation
on the usual type, is the painting in Pickering church, Yorks. (pl. xxii, fig. 4),
in which are represented the four knights waiting before attacking Becket, who
is seen on the right, kneeling in prayer. Of still later examples known to us
from reproductions, I may mention the one in the chapel of the Trinity at
Stratford-on-Avon, which is an interior, carried out in the spirit of realism
which we now, thanks to the rediscovery of the Eton wall-paintings, can
associate with English wall-paintings of the late fifteenth century. In view of

1 The following is a survey of the iconographical material bearing on the martyrdom alone sup-
plied by English wall-paintings known to the present writer: Bramley, Hants (see pl. xxii, fig. 3);
Burgh St. Peter, Norfolk, subject uncertain, destroyed (Keyser, List); Burlingham St. Edmund,
Norfolk (see pl. xxii, fig. 2); Canterbury, Eastbridge Hospital (Keyser, List); Easton, Norfolk (Keyser,
List); Eaton, Norfolk (Keyser, List, reproduced in Norfolk Archaeology, vi, plate facing p. 165);
Faversham, Kent (Keyser, List); Hemlington, Norfolk, All Saints (communication from Miss
Bardswell); Hingham, Norfolk (Keyser, List, concealed); Lydiard Tregoze, Wilts. (C. E. Ponting in
The Wiltshire Archaeological and Natural History Magazine, vol. xxvii, 1911-12, p. 441; now very
much faded; the mitre of St. Thomas seen on the floor as at Burlingham and Eaton); Mentmore,
Bucks. (Keyser, List, concealed); Merstham, Surrey (Keyser, List, subject uncertain, destroyed;
Newington, South Oxon. (Keyser, Arch. Journ., 1901, p. 54), subject uncertain; Pickering, Yorks.,
St Peter’s (see pl. xxii, fig. 4); Preston, Sussex (Keyser, List), reproduced Archaeologia, xxiii,
pl. xxvi, destroyed; North Stoke, Oxon. (reproduced from a drawing by Prof. E. W. Tristram
in Kendal, Mural Paintings, pl. xiv); Stone, Kent (thirteenth cent.) tolerably well preserved, draw-
ing by Prof. Tristram at the church and V. and A. Museum; Stoneleigh, Warwick (Keyser, List);
Stratford-on-Avon, Chapel of the Trinity, see below, n. 3, concealed; Sulhamstead Abotts, Berks.
(Keyser, Arch. Journ., 1896, p. 176); Wellow, Hants. (Keyser, ibid., p. 172); Whaddon, Bucks.
(Keyser, List); Winchester, St. John (Keyser, List; reproduced Journal Brit. Arch. Ass., x, pl. 5; the
only case known of a wall-painting showing the severed crown of St Thomas’s head falling
to the ground); Winchester, Magdalen Hospital Chapel (Keyser, List, subject uncertain; Wootten
Bassett, Wilts. (Keyser, List), destroyed; Yarmouth, Great, Norfolk, St. Nicholas (Keyser, List,
subject uncertain.

2 Both this wall-painting and the one at Bramley are reproduced from water-colours kindly made
for me by Mr. H. C. Whaiter. Closely allied in type to the S. Burlingham painting is the one at
Eaton (see above, n. 1).

3 Reproduced in A Series of Antient . . . Paintings . . . on the Walls of the Chapel of the Trinity at
Stratford-on-Avon, 1836, pl. xiv.
Fig. 1. Enamelled Châsse
Limoges, thirteenth century
Lyons Museum

Fig. 2. Enamelled Châsse
Limoges, thirteenth century
British Museum

Fig. 3. Enamelled Châsse
Limoges, thirteenth century
Paris, Musée de Cluny

Published by the Society of Antiquaries of London, 1929
Fig. 1. Illumination
British Museum, Harl. 5162
English. c. 1200

Fig. 2. Illumination
Carrow Psalter
English. c. 1233-50

Fig. 3. Illumination
British Museum, Add. 17012
Flemish. c. 1500

Fig. 4. Illumination
British Museum, King's 9
Flemish. c. 1500

Published by the Society of Antiquaries of London, 1929.
recent activities at Stratford one may perhaps hope that this wall-painting may yet be recoverable.

In later painting the subject is not a very frequent one. The tradition of depicting it was, however, kept up by the English College at Rome; it occurs in the series of gruesome scenes of martyrdom painted about 1582, in the College, by Niccolò Circignani (il Pomarancio), and now only known from engravings—a series of which Monsieur Emile Male has lately said, 'L'histoire de l'Angleterre y était racontée presque uniquement par des supplices'.

Later again, we find an anonymous Italian artist of about 1700 representing the scene in a picture, still belonging to the College at Rome: the composition has here taken on a character strongly reminding us of renderings of similar subjects by Murillo, say his martyrdom of St. Pedro Arbuez in the Hermitage. Thanks to its interest in English medieval history, fostered by the great French historians of the early nineteenth century, one would have imagined that the Romantic school in France would have taken to this subject with much zest; one feels it ought to have made a very congenial subject say to Paul Delaroche, but the nearest I have been able to get to him is a picture dated 1846, by one Camille Boucher, obviously an artist who felt the influence of Delaroche. The picture alluded to hangs in the ambulatory of Sens Cathedral.

From the account which has here been given—far from exhaustive as it admittedly is—it will, nevertheless, be seen to what an extent the imagination not only of England, but of the whole of Europe, was struck by the tragedy of St. Thomas Becket. Indeed, I think it may be said that it is the event in the twelfth century which stirred people's minds much in the same way as the humiliation and penance of Henry IV at Canossa did in the previous century: only the opportunities which the story of St. Thomas Becket offered for artistic treatment were immeasurably greater. One thing is certain: that it was through St. Thomas Becket that England made her principal contribution—and indeed a most important one—to the iconography of the Middle Ages, and, as we have seen, it is not a matter of hagiology pure and simple, but also of allied historical tradition and folklore surrounding the figure of the proud Norman, in whom the knight was but insufficiently merged in the archbishop, and whose whole personality comes out with such extraordinary

1 See his article 'Le martyr dans l'art de la Contre-Réforme' in Revue de Paris, Feb. 15, 1929, p. 722. Mr. Francis Shutt, of the Venerable English College, Rome, to whom I am indebted for photographs of this picture and the one by Durante Alberti, also kindly informs me that there exist records of a picture of St. Thomas by George Freman (?) painted in 1654, and of another painted for the church of the College in 1675 by Henry Corner (?).—English names evidently, though nothing is known about these artists, who were probably amateurs.
vividness in the pages of the chroniclers. Hence the peculiar interest and fascination which must attach to a study of this vast and complex subject.\footnote{An inquirer into a subject of iconography as complicated as that which concerns St. Thomas Becket inevitably places himself under a debt of gratitude in many quarters. In addition to the numerous kind helpers already mentioned, I should here also like to thank M. J. J. Marquet de Vasselot, Hon. F.S.A.; M. Ratouis de Limay; Dr. Philip Nelson, F.S.A.; Dr. W. L. Hildburgh, F.S.A.; Mr. S. C. Cockerell; Mr. Louis C. G. Clarke, F.S.A.; Professor Andreas Lindblom; Dr. Otto von Falke; Dr. Max Sauerlandt; Mr. J. A. Knowles, F.S.A.; Mr. A. F. Kendrick; Mr. Frank Simpson, F.S.A.; Professor A. Goldschmidt; Dr. G. Gronau; Herr Ludwig Stern; Professor Georg Pauli; Mr. H. W. Hull; Dr. Giuseppe Fiocco; Mr. Victor Perowne, F.S.A.; Mr. W. H. Woodward; and Dr. H. Bodmer.}

Stained Glass Panel; English, fifteenth century.
IV.—The Uranical Astrolabe and other Inventions of John Blagrave of Reading.
By Dr. R. T. Gunther, M.A.

Read 21st March 1929

The object of the present communication is to bring together again three closely related items of antiquarian interest, which have got separated, and thus to recombine the parts of a long-forgotten scientific instrument of the Elizabethan Age, the invention of John Blagrave of Reading. Were any one of these three clues to be lost, it would be impossible to reconstruct his Uranical Astrolabe.

The inventor was a man of exceptional character and tastes, and the circumstances relating to his other inventions are also worthy of being recalled, for he obviously lived in and for serious scientific studies in an age when the economic need for such studies was becoming increasingly felt. And it is certainly of interest to note how a native of a small inland town, who in all probability may never have seen the sea, was inspired to devote his genius to the improvement of instruments to help navigators, gunners, and surveyors, and to raise the standard of time-keeping among his fellow countrymen.

John Blagrave came of a prominent Berkshire family which produced several men of mark in the sixteenth and seventeenth centuries. His father, also named John Blagrave, lived at Bullmarsh near Sonning; his mother was a daughter of Sir Anthony Hungerford of Down-Ampney in Gloucestershire. A manuscript note in a copy of his book, The Mathematical Jewel, which was formerly in the Old Ashmolean, sheds an entertaining light upon the family circle:

Here stands Mr. Gray master of this house
And his poore catt, playing with a mouse.

John Blagrave marrie this Graye's widdowe (she was a Hungerford), this John was symple, had yssue by this widdowe
1. Anthony who marrie this Jane Borliss.
2. John, the author of this booke.
3. Alexander, the excellent chess player in England.

Anthony had Sir John Blagrave kt. who caused his teeth to be all drawne out, and after had a set of ivory teeth sett in agayne.

The chief facts of our John's life have been collected by Anthony Wood,

1 Wood, Athenae Oxoniensese, ii. 96.
who believed him to have gone from Reading School to St. John's College in Oxford, though he did not take a degree there, and no record of his name is now discoverable in the college books. For many years he lived at Swallow-field near Reading.

In 1591 his father settled on him a lease of lands in Southcote for ninety-nine years, which he bequeathed to nephews and their descendants, of whom as many as eighty are said to have benefited. He died on 9th August 1611, and was buried in the same grave as his mother in the church of St. Laurence at Reading, where there is a half-length portrait-bust of him against the south wall. To Reading he left certain legacies, one of which provided the sum of 20 nobles a year to be competed for by three maidservants of good character and five years' service under one master. They were to appear on Good Friday before the Mayor and Aldermen in the Town Hall, and there to cast lots for the prize.

His tastes appear to have been wholly scientific. Of his own early training, he says:

'After I had no small time travelled as far forth as my leisure would license me in most part of the Mathematicks, namely in Geometry, Arithmetick, prospective Cosmography, Topographic, Mensurations and such like, I think by the space of 8 years or more, and then at the last being drawn on by the study of Cosmography to the desire of Astronomy (which 2 cannot well be in sunder) I thought it my best course about 6 years past, to crave the conference of one Thomas White, Vicar and Curate of Berkshire, being 5 miles from Reading, of whom I heard very well of for his studie that way.

'I went to him and found him no less joyfull of my coming than I was careful of his acquaintance, but his studie way was altogether Astrology, Physick etc., where my desire was Astronomy, so that my hope of his help was almost on the soleaine frustrated; but there I found such choise of books for my purpose, that I repentted not my coming, where he on the other side having heard greater speech, than was cause perhaps, of me and my practise in painting, drawing, graving and such like, would needs crave my help to make him a Catholicion Astrolabe and to that end he delivered me Sconer, Stophler, Roias, and Gemma Frisius books of their several Astrolabes: but above all other he commended unto me, as there was cause, Gemma Frisius.'

Farther on he continues:

'I peruses them all. Sconer's devise was very stale and combersome. Stophler was artificial. Roias far inferior to Gemma. But both too combersome in my fancy that I could not well brooke them. In use uncertain for the slipping of any joynt or jogge.'

Blagrave turned his reading to such good use that he came to be esteemed the flower of mathematicians of his Age. He was the author of three inventions, which he described in detail in three books. The first was: The Mathematical Jewel.
INVENTIONS OF JOHN BLAGRAVE OF READING

The Mathematical Jewel, shewing the making, and most excellent use of a singular Instrument so called: in that it performeth with wonderfull dexterity, whatsoever is to be done either by Quadrant, Ship, Circle, Cylinder, Ring, Dyall, Horoscope, Astrolabe, Sphere, Globe, or any such like heretofore denised: yes or by most Tables commonly extant: and that generally to all places from Pole to Pole.

The use of which Jewel is so aboundant and ample that it leadeth any man practising thereon, the direct pathway (from the first steppe to the last) through the whole Artes of Astronomy, Cosmography, Geography, Topography, Navigation, Longitudes of Regions, Dyalling, Spherical Triangles, Setting figures, and briefly of whatsoever concerneth the Globe or Sphere: with great and incredible speede, plainenesse, facultie and pleasure:

The most part: newly founde out by the Author, Compiled and published for the furtherance, as well of Gentlemen and others desirous of speculative knowledge, and private practise: as also for the furnishing of such worthy minde, Navigators and trueyeles, that pretend long voyages or new discoueries: By John Blaggrave of Reading Gentleman and well-willer to the Mathematices, who hath cut all the prints or pictures of the whole worke with his owne hands. 1585.

Imprinted at London by Walter Venge, dwelling in Fleetelane ouer against the Maidenhead.

Fig. 1. Armillary Sphere engraved and signed by Blaggrave.

From the Title page of the Mathematical Jewel, 1585.
The earlier or geometrical part of the work appears to have been founded upon the *Rudimenta Mathematica* of Sebastian Munster, printed at Basel in 1551, and this view is supported by the circumstantial evidence of a volume presented by John Aubrey to Ashmole's Science Museum at Oxford in which the books of Munster and Blagrave are bound up together. Blagrave dedicated this, his first work, to Lord Burleigh, taking the opportunity of drawing his Lordship's attention to those grievous troubles which he had recently experienced owing to 'the monstrous and detestable drifts and devises of those notorious, lewd and wicked practises against us, who fought *guagne injuria* to stripe us out of whatever we possessed, without any colour almost of matter or cause'. He had evidently been greatly injured, and, as he says elsewhere, for a period of six years, i.e. from 1577. The financial loss was estimated as 3,000L. That he cut his wood-blocks himself indicates that he was not affluent at the time, and he attributes the delay in the production of his book to 'those caterpillars of the commonwealth, those unconscionable hunters of mens titles, those wicked Hamons... who hindred my travailes, and brought me dayly out of course with my determinations'.

In the book the use of his instrument is extra-illustrated by occasional personal and local notes. He tells us, for instance, that while spending the Christmas holidays of 1579 with his uncle, Sir John Hungerford in Gloucestershire, there was a heavy fall of snow on 2nd January, and the lower region of the air became obscured by 'rimie thinne vapours... that much brake the force of the sunne beames', so much so that at two o'clock in the afternoon they were able to see the planet Venus, between the sun and the moon, and to measure her altitude with the Astrolabe. Again, in October 1580, while living at Bummarsh, he observed the comet on several nights (9th, 10th, 12th, and 26th Nov.), a matter of great interest in those days.

In 1581 he added to his practical experience as a diallist by setting up a dial on the wall of Sonning Church on 26th July, 'to set the clock by', and about the same time laid out a large garden dial at Aldermaston for his very near kinsman Humphrey Forster. It was on a sloping bank of earth, and three yards square.

It is likely that ideas afterwards embodied in the Uranical Astrolabe were then in his mind, for in the conclusion to his book he declares himself 'sorrye that my other 6 little bokes be not ready to go to the Press with these'. Had he produced them, he would have set the cart before the horse: 'Therefore considering I have kept a needful order in this my worke by passing from the lowest matters to the highest, the one to explode the other, and that I have done my uttermost (as is well known) that my leysure would permit, I hope I shalbe the lesse blamed.'
INVENTIONS OF JOHN BLAGRAVE OF READING

Blagrave's Astrolabe or Mathematical Jewel consisted of four movable parts, Mater, Rete, Label, and Rule. He considered that its special merit lay in the dispensing with separate plates for special latitudes, such as those which were used in Chaucer's astrolabe, and in the substitution of a single plate which might serve generally 'through the whole world from pole to pole'. This baseplate or 'mater', embellished in his drawing with emblematic figures of Geometry with square and compass, Astronomy with cross-staff and armillary sphere, Navigation with cross-staff, and Cosmography with plummet and globe, was inscribed with a projection of the sphere covered with a net of meridians and parallels for every second degree. The equator, tropics, polar circles, and

ecliptic were picked out by conspicuous lines. The border was divided into degrees numbered by tens to 360°, and also from 0° to 90° in each quadrant.

The Rete was similarly inscribed in its upper half, with the addition of some twenty-four stars, but in the lower semicircle stars only were represented 'linked together by small branches handsomely'. A graduated ecliptic band traversed both semicircles. When drawn on paper the rete was stiffened by being mounted upon a plate, preferably of thin metal, and all unmarked parts were removed with a file or penknife, but 'chisell you must not, nor strike with great pouches', lest distortion ensue.

The Label, graduated as in the figure, facilitated the reading of positions. An alidade or rule on the back, with two folding sights, served for the observation of celestial altitudes. When completed, the mater, rete, label, and alidade were fixed together by a small central rivet.

The manifold uses of the instrument are fully described in the third book of the Mathematical Jewel.

In the fourth book, Blagrave suggests that his readers should have not only little portable Jewels of metal, but also 'great Jewels of two foote diameter, if not of metall, yet made of a round boorde, covered with a fine paste boord'. whereon necessary lines may be distinguished with coloured inks 'very beautifully'. Arcs of great radius were to be drawn with a triangular instrument of
Fig. 3. The Base-plate or 'Mater' of Blagrave's Astrolabe.
Fig. 4. The Rete of Blagrave's Astrolabe.
Blagrave's own devising. It consisted of two straight rules $AB$ and $AC$, jointed like a pair of compasses at $A$, and held open at a definite angle by a third rule $EF$, which could be clamped in any desired position.

![Diagram of Blagrave's Instrument](image)

Fig. 5. Blagrave's 'Instrument of three straight Rules, better than any Compasses to describe any Arch with be his center never so farre off'.

In use the rules $AB$ and $AC$ are traversed against two fixed dogs $R$ and $S$, and the required arc is traced by a steel graver $Q$, which is passed through a perforated rivet at $A$ and is clamped there by the screw $P$.

**The Familiar Staffe**

He did not, however, proceed right away, since five years later he interposed a new device, his Baculum Familiare Catholicum or Familiar Staffe, the circumstances of which are also worthy of being again recorded. In the summer of 1589 he was on a visit to his 'most honorable favorer' Sir Francis Knollys at Grays Court in Oxfordshire, when the arrival of the earl of Essex was expected. To do honour to the latter's return from the 'late desperate voyage' from Cadiz, Sir Francis arranged a competition in which his son and heir, Sir William Knollys, was to shoot at a mark with guns on the leads of the house—one of them, a saker, lately brought home from the winning of the Groyne in Spain. Blagrave was consulted as to the best method of getting the range of the mark certainly and speedily, 'as well for annoying of the enemy, as sparing of shots spent in waste'. 'So that I was', he wrote, 'in manner assured that no Treatise was like to be more acceptable unto his Honour (next unto books of sincere religion), than such as should tend towards the defence and safe keeping of this his native country.'

The result was the Familiar Staffe which is fully described and figured in a little book of that name published in 1590. Its manifold uses are therein set forth in thirty-two chapters and an appendix, of which, however, a fair summary is also given on the title-page.

From its primary and simple use as a range-finder, the author proceeds by a series of graduated exercises to chapter 32 to show 'how a Captaine may sett
in platte or mappe any province of the enemies country'. And this is of special interest because it proves Blagrave's invention, like the topographical instrument of Leonard Digges, to have been primarily an instrument for the use of gunners, and secondarily an instrument of topographical importance, an

DE. Running Staff, in which GH, the Graduator, divided into degrees, runs.
DF. the Hanging Side.
S. Tresle supports.

M, N. Sliding Bollts with Sighting pins which could be aligned with another pin at A.

The use of the Familiar Staffe to get the height of a Tower speedily 'where you dare not come neare the base for danger of shot or let by reason of some depe mote or ditch', p. 22.

Fig. 6. Blagrave's Familiar Staffe, 1590.

association and sequence of which we are still reminded by the 'Ordnance' surveys of the present day. At the request of Sir George Carew, chief captain of the Isle of Wight, it was also adapted for use at sea.

The Familiar Staffe was made by 'a verie arteficiall workeman in Hosier lane, called John Reade'. No example is now extant, but a model has been made for exhibition in the Lewis Evans Collection at Oxford.
THE URANICAL ASTROLABE AND OTHER

THE URANICAL ASTROLABE

In the meantime, no doubt partly owing to his father's death, his circumstances appear to have improved, so that six years later, after the publication of the Staffe, he was able to engage the services of the skilful engraver Benjamin Wright, and to produce the Uranical Astrolabe. In designing this instrument Blagrave was determined to break with past tradition and embody the latest teaching of modern science. He determined to show the earth turning below a fixed sky, instead of a firmament turning round a fixed earth.

'Old Stophlerus', he wrote, 'and our old English Laureat, G. Chaucer, according to the auncient astronomers, appointed the Starry Heavens to move rightwards from East towards West, upon the Earth or fixed Horizon of the place. And I according to Copernicus cause the Earth or Horizon to move leftwards from West towards East, upon the starry Firmament fixed.

'In so much that if in this my Astrolabe you hold still that particular mover with one hand, and with your under hand turn about the Celestial, then is it jumpe Stophler again. In which motion (a pretty thing to note) one that standeth by shall hardly perceive any other but that the Rete moveth, although indeed you turn about the mater, strongly confirming Copernicus' argument, who sayth that the weakness of our senses do imagine the Heavens to move about every 24 hours from East to West by a Primum mobile, whereas indeed they have been always fixed, and it is the earth that whirleth about every 24 hours from West to East, of his own proper nature allotted unto him.'

It is doubtful whether any complete example of the Uranical Astrolabe is now in existence, because the separate parts of which it was composed are rarities which are keenly sought after by different categories of collectors. Even in the British Museum its parts are stored in separate departments, estranged from the book which supplies the only clue to their use in combination.

First, there is John Blagrave's book entitled Astrolabium Uranicum Generale, printed in 1596 as his third work. Although he describes this astrolabe as 'a necessary and plea'ant solace and recreation for Navigators in their long Jorneying', his thirty-two chapters thereon are incomprehensible without the instrument, and so have escaped the attention they deserve. The book is very rare, and though there are two copies in the Bodleian and one in the British Museum, neither catalogue has any cross-reference to an instrument.

Secondly, A Map of the World, designed by John Blagrave but engraved by Benjamin Wright in 1596, has been recently published in facsimile by the Trustees of the British Museum in their atlas of Six Old Maps, printed in 1928. Attention has been drawn to the ingeniously strained projection by which the continents of Africa and South America, and the southern lands of the Indian Sea have been worked into the corners of a polar chart of the northern hemi-
sphere, but no description has been given of a very remarkable diagonal scale which is engraved upon the side of the same plate. This is the Zenitifer. It has no connexion with the map of the World, but is the second essential part of the Uranical Astrolabe.

It was while I was studying a print of this scale bound in the Ashmolean Manuscript no. 417, that I found the third part of John Blagrave’s instrument, his original Celestial, a wonderful piece of craftsmanship, well executed and signed by the engraver. It is a circular planisphere showing all the northern, and certain of the southern, constellations engraved on a plate measuring $10\frac{1}{4} \times 10\frac{1}{4}$ in. In the corners are calendars and horary tables, with winged heads of the winds decorating the spandrels. In the lower angle is the title

**ASTROLABIVM VRANICVM Generale Cenun hab[e]ns stellat[u] fixi terram-que sine horizontem in 24 horarum spacio continuo circumvolverent cum omnibus supplementis ad artem judicandis necessariis. PER IOANNEM BLAGRAVVM generosum Readingensem mathesibus benevolentem.**

*Beniamini Wright Angius Londinensis coelator.*
*ANNO DOMINI 1596.*

This engraving is thus the earliest known work by Benjamin Wright, who was also engaged upon a plate of *The Armes of all the chiefe Corporations of England* which he ‘soulde at the harts horne in pater-noster rowe’ in London. His representations of the constellations are quite remarkable and show a great advance on the crude work of Augustin Ryther dated six years earlier. Sir Sidney Colvinn has followed up Wright’s later career between 1602 and 1620 on the Continent, where he engraved many maps for J. Langeren and J. I. Pontanus in Amsterdam, and for the Italian atlas of Maginus.

The date upon the Blagrave engravings is 1596, and there was no ground for attributing them to any more recent period, until Mr. E. Heawood, the librarian of the Royal Geographical Society, who has made a special study of water-marks, informed me that the Blagrave map in the British Museum is printed upon paper marked with a fool’s cap as commonly used from about 1650–80. A re-examination of the Ashmolean prints has reassured me of their antiquity, for both the Terrestrial and Astronomical maps show the same water-mark, a simple fleur-de-lis on a shield surmounted by a crown, and from the point of the shield are suspended the letters W.R. Marks of a similar type are referred by Briquet, *Les Filigranes*, to the period 1585–90, when they were used by the maker, W. Richel of Strasbourg.

The arms and motto *Virtus Invicta*, of Charles Lord Howard of Effingham, to whom the work is dedicated, occupy one-third of the uppermost corner. Next to the coat of arms is a triangular scale of hours, an *Horarium Planctarium* devised by Blagrave in triangular form 'never seen before'. This scale was completed by the addition of a small label, graduated with the six planetary hours, which was pivoted at the centre. A sketch for this label is engraved near the Zenitfer on the Terrestrial map. The use of the little instrument is explained in chapter 29 of the book: the label had to be set to the hour of sunrise upon an arc, graduated for hours from sunrise to sunset, *Hore ortus et occasus*, numbered 1–10 and divided into thirds. From each division proceed lines drawn parallel to the base, which intersect a straight scale of common or equal hours, *hore diei ac noctis*, numbered in both directions 3 to 12, and 1 to 9.

The corner with the inscription also contains a semicircular *Domineering Table*, giving the symbols of the planets which rule each planetary hour of each day and night. For instance, if the day be Thursday, or the 5th day of the week, Sunday being the first, seek 5 in the scale marked *Noctes*: then below the 9th planetary hour is the sign 7, showing that 'Saturn beareth dominion'. The other two corners are occupied by Precession Tables, the *Tabula perpetua radialis aequalium motuum celestium*. Blagrave knew that the places of the fixed stars were being altered at the rate of one degree in every 67 years, by reason of the *Aequalis motus precessioni*. His tables show how much this amounts to in periods of 1 day, 1 year, 4, 20, 100, and 1,000 years.

But he also knew that the precessional movement was not quite uniform. As he puts it, 'skillful artes-men have found a certain librament or ballaicing of the Equinoctial and Poles which sometimes helps forward the equal motions, at another pulleth it back, even up to 71 minutes or 1° 11', by which the equal motion becomes unequal'. So he added a second part to his table to show how much is to be subtracted or added, or as he termed it *Aequationes Octavae Sphaeræ Ablativeræ* and *Aequationes Octavae Sphaeræ Adjunctiveræ*, computed up to the year A.D. 3446.

But the chief interest centres in the treatment of the Celestial Planisphere. It is a stereographic projection of the stars which are visible in the northern hemisphere. In the centre is the North Pole with the Pole Star correctly set at a little distance from the Pole. With the Pole as centre there have been drawn the equatorial circle and the limiting circle divided into 360° starting from the first point of Aries. These, with a scale of degrees of altitude numbered from 0° at the Equator to 90° at the Pole and to 30° south of the Equator, are the only lines relating to the daily rotation of the Earth, all other measures being made by the application of a special revolving rule, the Zenitfer.

The net of co-ordinate lines is composed of eccentric circles, the projec-
tions of the ecliptic and of circles parallel to it, drawn for every fifth degree up to the pole of the zodiac and for varying distances to the south of the zodiac. These are crossed by azimuthal circles passing through the zodiac pole and every fifth degree of the zodiac. Every sixth azimuth delimits a sign of the zodiac, and is twilled, and the space within it is shaded with waves, flames, dots, or is left white in accordance with the attribute of the sign, whether Watery, Fiery, Earthy, or Airy.

The ecliptic is divided into 360°, or 30 degrees to each sign, each of which is marked in accordance with a scheme, the Directoria zodiaci, by means of which the gradus masculini can be readily distinguished from the gradus feminini, and the qualities of the days predicted: the possibilities being tenebrosi, vacui, lucidi, famosi, debilitanies, Fortunam augentes, puteales.

Stellar magnitudes are distinguished by seven graduated star symbols. It is unfortunate that the projection does not admit of the constellations being all drawn to a uniform scale, those nearer the pole being much more cramped for space than those farther south, even in the zodiac. To north and south of the zodiac are inscribed Facies Planetarium and Terminii Planetarium. A planetary symbol is set to each fifth degree, doubtless in illustration of Claude Dariot's book on Judicial Astrology, which Blagrave mentions as 'by good hap now newly imprinted in English'. Notes of the planetary significance of the twelve Signs are inscribed round the outer circle, and the precessional movement of the northern and southern stars among the constellations is recorded in two inscriptions: 'Stelle meridionales ad annum domini 1570 quibus addendo gradu 1 mi. 30, anno 1652 convenient.' 'Stelle septentrionales ad annum 1652 in quo anno metus veri et equales fixarum convenient quibus detraxendo gradus 1 mi. 30 anno 1570 respondebunt.'

Finally, as an object of special interest, a large comet is represented near the hind legs of the Great Bear, and thus the map was brought quite up to date by the insertion of Blagrave's own observation. My friend Professor H. H. Turner informs me that this was the comet of July 11, 1596, discovered by Tycho Brahe and by Moestlin. It was visible for five weeks.

So far this planisphere would be nothing more than what it has hitherto been recognized as, namely, a map of the heavens marked for use as an astrological diagram. That it might be used as an instrument, Blagrave fitted it with a moving rule, one inch in width, pivoted at the centre and stretching diametrically across the planisphere. This attachment was his own invention. He called it a Zenitfer. The Zenitfer was provided with a Cursor, to which a further part, the Almicantifer with a Pointer, could be added. This furniture, he tells us, is best made of metal. All parts were delineated by the side of the

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1 A Latin edition was printed at Lyons in 1557.
terrestrial map, and a pattern was on view at the house of Mr. Matts, the bookseller dwelling at the sign of the Plough over against St. Dunstan’s Church in Fleet St, ‘who shall easily at all times send any lettre or notice weekly unto me by our Carryer’s’. If the Almicantifer be not to hand, a thread and pearl would serve, for the pearl shall supply the steed of the pointer, and instead of a ‘ledge of brass’, a breadth of ‘lantern horn’ might be used. The scales on the Zenifter are so elaborate, and the description of them so involved, that I doubt whether any one would ever have been able to reconstruct them, if it had not been for the original engravings on the border of the map of the Earth.

At the centre is a Circle of 24 hours with the opposite 12 o’clock points joined by the fiducial edge of the rule, the ends of which are marked Meridies and Media nox.

The Almicantifer roots are numbered on the outer side of the Zenifter from their extreme points inwards towards their said Zenith points, ending with them with 90.

On a scale along the fiducial line are ‘planted the radial degrees of the projectement on both sides of the scale, because they require double numbering for sundry purposes’.

a. The Radial degrees which bond on the fiducial line are numbered from the equinoctial (marked by a small cross) both ways, viz. towards Meridies as far as the Zenifter will give leave, which are about ‘36’ (in text, but apparently only 28 on the instrument), and towards the centre ending there at 90. These serve to descry the declination of the fixed stars and planets, but chiefly for the 90 zeniths which appertain to the 90 general Horizons, and for distinction’s sake, ‘I call them the 90 Vertical Points’; and they correspond exactly with the 90 lower ends of the 90 Zenith lines, which Blagrave called the 90 Zenith Points. So that when the Cursor is moved its fiducial line cuts both the Vertical Point and the Zenith Point of any latitude at the same time.

b. Towards Media Nox the Radial degrees are numbered from zero at the centre to 90° at the equinoctial. These graduations serve for the 90 intersections of the 90 general Horizons with the North Line, and ‘therefore I call them the 90 Horizontal Points’.

c. The Radial degrees on the inner side of the northern half of the scale serve to find the 12 Hours. They are intended to be numbered in the reverse direction 0°–90°, but ‘L, LX, LXX, LXXX’ only are marked.

d. Similarly along the southern half, the Radial degrees are numbered in pairs, from the centre to Meridies, X, XX, XXX, XL, L, so that the XLV division coincides with 90° on the equinoctial line. These divisions ‘I call Domifieing roots’.

The Scale of ‘slope lines’ or Domifieing Scale is a help to get 8 of the 12
INVENTIONS OF JOHN BLAGRAVE OF READING

'houres in that latitude whose number it showeth', by a method described in chapter 27 of the book. In the text the numbers are described as beginning with 60 and ending at the centre with 90. In the figure the numbers begin with 60 and end with 0 at the centre. Degrees numbered L to LXXX are used in connexion with this scale.

The Cursor. The fiducial line of the 'Cursor always runneth' square to the fiducial line of the Zenitifer. On to it is jointed the Almicantifer—a plain label or 'loose scale' without graduation, but having sliding upon it a small index, the Pointer.

Blagrave also gives directions for adapting this general instrument for use in a particular latitude by the addition of a rete or mover with a circle of hours and a Horizon Circle constructed in accordance with the method of Stoeffler with the Arcs of the 12 hours. The sliding pointer is not essential, since the Almicantifer may be graduated with the particular degrees of altitude for a given latitude, 'all which shall better appeare by such Astrolabes as I meane to set abroade ready furnishd'.

'And to the end that every man may see how it ought to be made in metal, I have caused a rude pattern of each furniture in metal to remain with the said Mr. Matts. Notwithstanding, for such as will not go to that little charge, I have upon better advise ment caused the Zenitifer and Cursor to be imprinted with the Astrolabe, to be set either on past-boord or cuttle's scale to serve the turn.'

The places of the Planets were to be found with the help of Planetary Tables aided by a small circular attachment fixed to the mater with four or eight rivets. But as there is no drawing of such an addition, we cannot be sure of its application. Blagrave also intended to fix an Organon Vranicen or Calendar of the Year to the back of the instrument, but evidently it never materialized, for he recommended the use of a scale of Months indicated by initial letters placed outside the ecliptic.

For the measurement of altitudes the instrument was suspended perpendicularly and sights were taken through the two vanes of an ordinary centrally pivoted alidade.

Occasionally Blagrave's similes are strikingly picturesque. He had evidently found some difficulty in making some one understand exactly what a stereographic projection of a sphere is. His exposition was as follows:—

'Even as a loaf of dowre or paste, after it is new moulden round and Copped, if you then put it into a presse, will become a flatte-cake: Even such a cake made of the round Sphere or Globe pressed, is the Celestiall of our new Astrolabe, which I would have you now for this purpose imagine to be a loaf or round Globe againe: and that every of his circles had their due convexities in such sort, that a little pretty fellow like Tom Thumbe might easily seat himselfe under them as under a Canopy in the very centre of the concavity.'
There were occasions when he believed that his instrument might serve for forecasting the weather.

'For example, this yeare 1596 some 5 or 6 dayes together before the end of September after long sitting all day writing this present booke, I was in the evenings hindred of my recreating walks by sodaine rising of the winde with showres of raine, though the daisies were reasonable faire. I therefore sought my new Astrolabe....'

'Also the 2 of October 1596 I was sodainly overtaken riding from Reading to my poore house at Swallowfield at even, with a most stormy rayne that continued a hour or two often very exteme, it made me looke at my Astrolabe againe, where I found....'

Blagrave then narratives how the stars in their courses presaged such weather. But he then with very commendable caution admits

'I dare presume no further least I should be billed amongst the common liers, as others are, happily causeless' (chapter 26).

Blagrave was evidently convinced that his invention would prove to be a 'best seller', for he addressed his gentle readers in the following terms:

'The ears of my conceit being continually troubled with such a noise and clamour for my Uranical Astrolabe, so long and largely promised, as greedy auditors are won't to make at a Stage play: calling "Come away now", with boys throwing volleys of stones rattling at the gates of my otherwise busy employments, maketh me here in haste (God grant to your liking) to come up the Stage with this rare piece of Mathematik, to stay your languishing expectations, and sufficient to entertain the time until Midsummer when the stately Comedy of Queen Uranya her pageants shall offer themselves to your pleasant view. Solace yourselves I pray you here-with, and be bold with me if in anything you doubt. You shall have me, God willing, once every term in London reading to your wish at a poor lodging within Maister Green's Wharf near unto Ch. X, and at Master Jacksons at the sign of the Swan in S. Paul's Churchyard or at Mr. W. Matt's, Stationer at the sign of the Plough, who hath the impression of this book, you shall ever know whether I be at any time in the City: with whom I have taken order to furnish with these instruments and their supplements any that shall want them.'

The Art of Dyalling

His last book was on The Art of Dyalling dedicated to Sir Thomas Parry, chancellor of the Duchy of Lancaster, in grateful remembrance of his father.
having lent Blagrave 'in his infantry such mathematicke books, as in those daies were hardly, or not else where to be gotten'. The work was in two parts.

'The first shewing plainly, and in a manner mechanically to make dyals to all plaines, either Horizontall, Murall, declining, reclining or inclining with the Theoriche of the Arie. The second how to performe the selfe same, in a more artificiall kind[e], and without use of Arithmeticke, together with concave and convex Dyals, and the inserting of the 12 signes and the howres of any other country in any diall, with many other things to the same Art appertaining. The whole differing much from all that hath beene heretofore written of the same Art by any other, and the greater part wrought by diuerse new conceits of the Author, never yet extant, now published By John Blagrave of Reading gentleman and Mathematician this yeare, 1609.'

The numerous diagrams which illustrate the book are more neatly executed than those in the chapters on Dialling in the Mathematical Jewel, and there are many local references to Reading. Blagrave notes that on or about 2nd August 1604 he pulled a dial down 'from S. Laurence Church in Reading, which had there stood time out of mind, that went 3 of an hour false'. This error he attributed to the ignorant use by the original diallist of a magnetic needle 'which commonly varieth 11 or 12 degrees from the true North' and has 'caused in times past many false dyals to be made'.

But it is for his Mathematical Jewel and his charity that John Blagrave is chiefly remembered, and even in 1658 in a catalogue of books and instruments made and sold by Joseph Moxon at his shop on Cornhill at the Signe of Atlas, customers could obtain 'The Catholick Planisphere, call'd Blagrave's Mathematical Jewel; made very exactly on Past-Boards; about 17 inches Diameter'. In the same year his instrument was again published by Mr. J. Palmer, M.A., in a small volume on the title-page of which the author's good angel is broadcasting with two trumpets the fame of Blagrave, whose portrait is engraved in the left upper corner.

The inscription below his monument¹ at Reading is a reminder of his charity:

¹ A sepia drawing of the monument, inscribed 'copied from his Monument at Reading by Mr. Ashmole' is inserted in the copy of 'The Mathematical Jewel' in the Lewis Evans Collection at Oxford. This copy contains the signatures of Daniell Bentley, John Edwards 1679, Lewis Evans, F.S.A., and the book-plates of Wm. Simonds Higgins, F.S.A., 1813, and John Richards, junr., F.S.A.
Here lies his corps, which living had a spirit,  
Wherein much worthy knowledge did inherit  
By which, with zeal, one God he did adore,  
Left for maid-servants, and to feed the poor;  
His virtuous Mother came of worthy race,  
A Hungerford, and buried near this place,  
When God sent death their lives away to call,  
They liv'd belov'd, and died bewail'd by all.

Two of his poems are still extant: of himself he wrote  
Where gathered he his skill? What tutor tolde him in?  
The Universities denill That ere he dwellt therein  
And London laughs to thinke She scarce doth knowe hys face.  
How comes he then to linke With Uranes worthy grace?  
My answercare shall be short, My paine this peece hath pend  
God lent it to my lot, And hee shall me defende.  
The Psalmes say sucklinges young His glory shall disclose  
Which warrants me among My wrangling wrabbish foes.

I. B.
V.—Roof Bosses in the Nave of Tewkesbury Abbey.

By C. J. P. Cave, Esq., M.A., F.S.A.

Read 17th January 1929

The roof of the nave of Tewkesbury Abbey belongs to the first half of the fourteenth century; the bosses are carved in stone. Those down the central rib represent scenes from the life of Christ; those on the sides are angels, some with censers, some with musical instruments, and some, at the east end, with instruments of the Passion; there are also the four evangelistic symbols. For purposes of reference I have numbered the central line of bosses from the west end C 1, C 2, etc.; those at the side are numbered from the east end, on the north side N 1, N 2, etc., and similarly on the south side. I have numbered them thus as the central bosses obviously begin with the Nativity at the west end, while the side series have the most important figures at the east end.

The roof was cleaned and painted by Gambier Parry about 1878; at the same time a slight amount of restoration and gilding was done on the bosses; it was also at this time that casts were made of a number of the principal bosses, and these are now preserved in the abbey library, where there is a note-book with various notes, newspaper cuttings, etc., concerning the abbey. Amongst the notes are three descriptions of the bosses; they are evidently copies of lists, the originals of which I have not been able to find. The first is by J. D. Thomas Niblett, on the centre bosses of the nave; a note in pencil gives as the date 17th June 1878. These notes as far as they go are very puzzling, and it is not quite clear whether they were made when scaffolding allowed a near approach, or whether Niblett had only examined the bosses from the floor. My own impression is that he had not seen any of the bosses except from the floor, for he makes various mistakes that would be inexplicable had he obtained a nearer view; for instance, in the Adoration of the Magi, he says that none of the figures is crowned, whereas two of them wear crowns; of the most easterly boss which he calls ‘our Lord in Majesty’ he mentions that the hands show the stigmata: there is no trace of such now.

Another set of notes on the same bosses is by H. Paget Moore; he made these notes after Gambier Parry’s work had been done, and makes one or two curious mistakes which will be noticed later.

More important than the above is a partial copy of ‘Mr. Gambier Parry’s notes on the state of the bosses in the nave’. I have tried in vain to find the
ROOF BOSSES IN THE NAIVE OF

original report. Mr. C. M. Oldrid Scott, whose father was the architect under whom the restoration was carried out in 1877-9, does not know of the existence of such a report; he referred me to Messrs. Burlinson & Grylls, the firm who had much of the actual work in hand. Mr. Grylls informs me that they have now no papers referring to the Tewkesbury restoration.

Finally Mr. Gambier Parry's son, Major E. Gambier Parry, has written to me on the subject, but he has no copy of the report. He gives, however, some interesting details of the work at Tewkesbury. Of his father's work he says: 'I was familiar with all his fresco painting work from the first Ely days, when I often stood model for him for legs and arms and hands, etc., till the time of his death, when he was completing part (a further part) of his work in St. Andrew's chapel, Gloucester cathedral. Of course I have a very clear recollection of the time when he was engaged upon Tewkesbury Abbey, and he frequently talked to me about it, and especially of the roof bosses. He said he found these, as also the adjoining members, "coated with endless coats of whitewash, so much so as to obliterate entirely their beautiful forms and designs—that is, all possibility of their being seen from the floor of the nave." He therefore set to work to have them carefully scraped, and I recall his delight at the beautiful things he found. Having cleaned them in this way, he filled in the backs in colour, and then used gold to accentuate the parts, so that each subject declared itself and could be seen.'

The only copy, then, of Gambier Parry's report appears to be the one contained in the note-book in the abbey library, and that is avowedly incomplete, and deals only with the five western bays. It must, I think, have been written before any scaffolding had been erected and before the whitewash had been removed, when the detail was not easy to make out from the floor of the nave, for the boss representing the Finding in the Temple is described as 'our Lord on a pedestal before the chief of the Doctors; the biretta of the latter is smashed.' This would be a very likely interpretation before the work was begun and the bosses cleaned. There are also various notes of damage to some of the bosses, especially to the wings of angels, but in view of the above and without knowing exactly when the notes were made it is difficult to reconstruct the condition of the bosses before the work of restoration began. There is, however, a definite statement in Niblett's notes that in the boss of the Nativity the top of the head of St. Joseph was missing, the beard and chin alone remaining; and that above the figure of the Virgin are the remains of a sitting figure, the upper part above the knees being lost. A note in pencil states that the head of St. Joseph was restored in the week ending 18th May 1878. Also in Gambier Parry's notes it is stated that on the boss of the Crucifixion wet
plaster repairs were done, and that there was evidence of old colour; also that the cross must have been shown by colour, as it is not carved, and Paget Moore states that Gambier Parry put in the cross, apparently in colour.

As to the general work of restoration on the roof we find in the *Tewkesbury Register* for 10th March 1877 an account of a meeting at Lambeth Palace at which it was stated that 'the partial colouring and gilding on the vaults of the choir have been restored to their original state, as have also the beautiful artistic and historical bosses in the tower, the transepts and the two bays of the nave which have been taken in hand with the choir'. There was a further meeting at Lambeth Palace which was reported in the *Tewkesbury Register* of 5th April 1879; at this meeting Mr. Oldrid Scott stated that

'The whole of the nave has been cleared of modern whitewash which disfigured it, and all defects in the stonework have been made good. This refers to the interior. What is of special interest here is the treatment of the vaulted ceiling. The bosses of the groining when first uncovered showed signs, though not very distinctly, of their ancient coloration, and it was at the time determined to restore them. The result, however, was unsuccessful, and the treatment was stopped after two bays had been so dealt with... It quickly appeared that any treatment of [the bosses] in full colour tended only to obscure their design, and to emphasize their incompleteness. So much was this felt that for a considerable time it was the opinion of Mr. Gambier Parry, who had given the matter much consideration—as it was my own—that it would be best to attempt no decoration whatever. The greater part of the ceiling was therefore left plain, but the effect from below was by no means satisfactory, and at length Mr. Parry proposed a method of treatment which he has now carried out in a portion of the groining... it has now been decided that the treatment shall be continued throughout the whole of the nave.'

Mr. Gambier Parry followed and said that

'if it was desired that he should speak about the decoration he was carrying out on the roof of the nave, he must say that the roof was a marvellous specimen of English carving... The details of the roof of Tewkesbury must not be looked into, but taken as a whole it exhibited a vigour of conception and charm of inspiration which quite atoned for its fault, but the series of grand skeletons was very imperfect. It was as if the carver had chipped away from the stone just as the spirit moved him, until he got round the corner, when he found there was no room to complete the work. The figures were left in a very imperfect state, for the painter or decorator to fill in, but they were strong and vigorous... One of the most remarkable bosses is that of the Crucifixion, for it is a crucifixion without a cross, but he had taken the liberty to put in a cross in gold below the Crucified One... If they inspected the colouring of the roof they had few records from which to judge. He was of opinion that it was extremely coarse.'

I have gone into these details to try to determine, rather unsuccessfully
fear, the state of the bosses prior to the restoration, and to put on record what
was done to them at that time.

It appears that the roof of the nave as we actually see it to-day belongs to
the first half of the fourteenth century, and the bosses may be considered to
belong to this period. It will perhaps be convenient to deal first with the side
bosses which represent angels. Ten of these carry censers, sixteen musical
instruments, and four of them passion emblems; in addition there are the
four evangelistic symbols, making thirty-four figure bosses.

The censing angels (pl. xxiv, figs. 1 and 2) are, with two exceptions, represen-
ted kneeling on one knee; they are in long plain robes, with a girdle round
the waist, and with wide collars fitting closely round the neck, except in two cases
where the collar is lower, leaving the shoulders bare; the sleeves are narrow and
fit quite close at the wrist. The feet are bare; the wings are extended and are
visible on each side of the figures; the hair is fairly long, reaching half-way to
the shoulders, and it sometimes appears to be plaited at the sides. The actual
censers are plain hemispherical bowls to which several cords are attached;
these are brought together at the top and are held by a round piece of wood
or metal; and this in some cases has a ring attached to it. Two of the angels
are standing instead of kneeling.

The angels bearing musical instruments are represented in similar costume,
but several of them wear in addition cloaks which cover the upper part of the arm;
in the case of one of the harp-players this cloak is thrown back over the right
wing, to leave the arm free. Some of the angels are standing, others are seated
on what appear to represent stone benches; in one case the bench is draped.

Stringed instruments:

Harps, N 2 a (pl. xxiv, fig. 3); small harp of the Celtic type, with curved
fore-pillar, and almost straight sound-board. The drapery round the base of this,
and the other two harps, probably represents the bag in which the harp would
be carried, slipped down to be out of the way when the instrument is being
played. There are five strings. N 14 (pl. xxiv, fig. 4); a rather larger harp of
similar type, but with eight strings, and seven or perhaps eight tuning-peggs.
This angel is the one who has the cloak draped over the right wing. S 11
(pl. xxiv, fig. 5); this harp is very similar to the above, but it has ten strings
and tuning-peggs, the strings radiate somewhat, instead of running parallel, and
the sound-board is more definitely curved. Part of the fore-pillar is broken.

Citéole, N 9 (pl. xxiv, fig. 6); the instrument is held horizontally and is
played with a plectrum; the body and neck are not differentiated, as was the
case with later examples of this instrument; there are three strings which
Fig. 1. Censing angel
Fig. 2. Censing angel
Fig. 3. Harp

Fig. 4. Harp
Fig. 5. Harp
Fig. 6. Citole

Fig. 7. Gittern
Fig. 8. Gittern
Fig. 9. Guitar fiddle

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Fig. 1. The Nativity

Fig. 2. The Circumcision (?)

Fig. 3. The Journey of the Magi

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are attached to a tail-piece. In most cases the strings of the citole are fastened to a bar across the belly of the instrument, but there are exceptions, as in this case.

Gittern, N 11 (pl. xxiv, fig. 7); this instrument closely resembles the citole, and it too is held horizontally and played with a plectrum; but the sides are incurved like those of a guitar; there are four strings attached to a tail-piece, which is in the form of a fleur-de-lis. S 2a (pl. xxiv, fig. 8) represents a second gittern, which differs from the last example in several particulars; the neck is longer and is, indeed, unusually long for this type of instrument; the sides are much less incurved, and the strings are attached to a bar across the lower part of the belly.

Guitar fiddle, N 12 (pl. xxiv, fig. 9); this has three strings passing over a bridge to a very small tail-piece; in many respects this instrument resembles a gittern, the sides are incurved; the bow is held over-hand, like a violin bow, and not under-hand like a viol bow.

Symphony, S 12 (pl. xxv, fig. 1); this has one string and apparently nine keys, which was the usual compass, but there should be more than one string. The handle is turned with the right hand and the keys are depressed with the left.

Psaltery, S 10 (pl. xxv, fig. 2); the instrument is of the usual type; it is held on the knee and played with the fingers: there appear to be seven strings.

Wind instruments:

Portative organ, S 9 (pl. xxv, fig. 3); there appear to be sixteen pipes; the right-hand rests on the keys, and the left may be meant to be on the keyboard or else working the bellows. The bass pipes are to the right instead of to the left as is ordinarily the case; this is possibly done for artistic reasons.

Bagpipe, S 13 (pl. xxv, fig. 4); with mouthpiece, chanter, and one drone. The wind-bag is shown quite free of the arm of the player; the single drone is trumpet-shaped, and is slightly curved in the body, not the bell; it is very short; the chanter is rather large.

Shawm, S 16 (pl. xxv, fig. 5); with wide mouthpiece and ordinary bell-shaped end; the horn tip enclosing the reed is well shown.

Wind and percussion instruments:

Pipe and tabor, N 16 (pl. xxv, fig. 6); the whistle mouthpiece of the pipe is well shown; the pipe is held in the left hand as usual; the tabor is slung outside the bent left arm, instead of hanging under it as is more usual; a snare is shown. The stick is very large.
ROOF BOSSES IN THE NAVE OF

Percussion instruments:

Tabor, N 10 (pl. xxv, fig. 7); very similar to the last example, but no snare is shown; the tabor is balanced on the left arm as was often done, though the usual method was to hang it from the arm.

Timbrel, S 15 (pl. xxv, fig. 8); with four large sets of jingles; no snare is shown.

Cymbals, S 14 (pl. xxv, fig. 9); a pair of very small cymbals; the lower one rests in the hollow of the left hand; the upper one is held by a handle or strap.

In the quire of Gloucester Cathedral there is a set of bosses representing angels bearing musical instruments. The date of these would be about the middle of the fourteenth century, and I thought that they were possibly carved by the same hands as those at Tewkesbury. Mr. Sydney Pitcher has taken a beautiful series of photographs of these bosses, and a comparison of these, with the photographs of the Tewkesbury angels leads me to think that they are certainly not by the same hand. The costumes are much the same, but there is more movement and originality about the Gloucester angels. One of them, the bozine-player, has the same curious arrangement of his cloak as one of the harp-players at Tewkesbury; the cloak is thrown over the right wing. The wings at Gloucester are treated differently: in most instances they have no feathers on the upper part of the wing, and the ‘primary’ feathers are narrower and more numerous than at Tewkesbury.

We now come to the angels bearing instruments of the Passion; there are four of these and they are at the east end of the nave. On the north side we have an angel carrying a spear in the left hand and a scourge in the right (pl. xxvi, fig. 1); the scourge consists of a long handle with a number, about six, of knotted cords at the end. The second angel (pl. xxvi, fig. 2) carries a long staff with a round top, the pillar of the scourging, in the right hand, and a scourge in the left; this is like the other scourge, but there are only knots at the ends of the cords. The first angel on the north side (pl. xxvi, fig. 3) carries a perfectly plain cross in the left hand and a scourge in the right; the second angel (pl. xxvi, fig. 4) on this side carries a crown of thorns in the right hand and a small oval-shaped object in the left; it is difficult to say what this object is intended to represent; possibly the sponge that was soaked in vinegar and placed on the reed. This angel is different from the others in that the head is covered by a veil which falls over the shoulders. The nose has evidently been broken off and replaced, and both wings have been somewhat broken round the edges.

1 The left wing has been considerably broken; the left edge seems to have been chipped, and the lower part has been broken off altogether.
Fig. 1. The Adoration of the Magi

Fig. 2. The Finding in the Temple

Fig. 3. The Entry into Jerusalem

Fig. 4. The Last Supper
Fig. 1. The Betrayal

Fig. 2. The Scourging

Fig. 3. The Crucifixion

Fig. 4. The Resurrection

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These examples of Passion emblems are rather early; they are prior to the time when such emblems were treated as armorial bearings.

Just west of the above come the evangelistic symbols; each of these bears a large label, but no inscription is now visible on any of them. The most easterly on the south side is the eagle of St. John (pl. xxvi, fig. 5); the label is pierced by its right talons, and then lies sloping to the left across the breast, being held up by the left foot. The right wing is closed, the left extended above the figure. The figure is a striking one, but it is not very like an eagle; it is more like a hawk or a kestrel which the carver must have seen, while probably he had not seen an eagle. The next figure is the angel, or winged man, of St. Matthew (pl. xxvi, fig. 6); the figure sits on what is no doubt intended for a bench, and bears the label in each hand; the wings are extended on each side. On the north side is the winged lion of St. Mark (pl. xxvi, fig. 7); the label which is nearly hidden by the figure, is held in the right paw; the tail, which is curved between the hind legs, is very bushy. Lastly comes the winged bull (pl. xxvi, fig. 8), which strikes one as a very wooden figure.

We now come to the bosses of the central rib of the vaulting; which represent scenes from the life of our Lord, beginning with the Nativity at the west end.

The Nativity (plate xxvii, fig. 1). The figure of the Virgin is lying on drapery that hangs from the manger; her head is on a pillow; she is dressed in a close-fitting gown open at the neck, with close sleeves, fitting tightly round the wrists; there is a waist girdle; a veil is over the head, the ends hanging down over the shoulders and the hair is visible at the sides beneath the veil. The Infant Christ is lying in a manger in swaddling clothes; the right hand is raised in benediction, but all the fingers are extended; the head is bare and rests on a pillow. At the foot of the manger is the figure of St. Joseph, bearded and leaning on a very stout staff; he is represented in a long robe with a cloak which covers most of the arm. In Niblett's notes it is mentioned that the beard and chin alone remain, the top of the head being gone, and a note in pencil states, 'This head was restored in the week ending 18 May 78'. Above the manger are the heads of an ass and an ox, both looking down into the manger. Above the head of Christ is a demi-figure with a string and tassel hanging down from the neck. It is idle to speculate what this figure is meant to represent as the head is apparently modern; Niblett says 'over Mary remains of sitting figure (query angel) upper part above the knees gone'. I am not absolutely certain whether this was meant to represent a figure at all; may it not have been part of the stall of the stable and the cord be part of a halter?
(?) The Circumcision (pl. xxvii, fig. 2). The second boss from the west end is rather difficult to interpret. It has been considered to represent the shepherds at Bethlehem, but I think the figure on the right-hand side is meant for a woman, and if it represented the shepherds three male figures would have been included. I thought at first that it was the Presentation in the Temple, but if it were so I think it would have come after and not before the bosses representing the Magi. I am inclined to think that it is intended for the Circumcision. The figure of the Virgin stands before what on this interpretation would be the High Priest. She is dressed in a costume similar to that shown on the first boss, but she has long sleeves pendent from the elbow. The High Priest stands full face, and is dressed in a long close-fitting robe, with a broad waist-band; he also has pendent sleeves; in his left hand he carries what seems to be a large bowl. Behind the High Priest stands a female figure dressed in a plain robe like that worn by the Virgin, but with a wimple round the chin in addition to the veil over the head with a pendent end over the shoulder; she also wears long pendent sleeves. Behind the Virgin is a male figure in costume similar to that worn by the High Priest. Both of the male figures are bare-headed.

The Magi on their journey to Bethlehem (pl. xxvii, fig. 3). The Magi, one of them nearly hidden, are shown in long simple gowns, cut rather low at the neck with close-fitting sleeves, and sleeves pendent from the elbow; a broad waist-band is worn; the figures are bearded and have long hair; they are all crowned; behind them is an angel placing his hands on the shoulders of one of them; the angel wears a close-fitting gown with a waist-band; the head is bare and the hair long; the wings are extended behind. In front of the figures is part of a star; as Gambier Parry noticed, part of it is broken off.

The Adoration of the Magi (pl. xxviii, fig. 1). The Virgin, seated, is supporting the Infant Christ who stands on a stool or seat; before Him kneels one of the Magi, the other two stand behind. The Virgin is dressed in a simple gown with apparently an overmantle which covers the arm; on her head she wears nothing but a crown. Christ wears a simple, rather ample gown and His feet are bare. The Magi wear rather voluminous robes; the two standing are crowned, the kneeling figure is bare-headed; all three carry caskets in their hands. Above the figure of Christ is a large star. Gambier Parry says that the heads of this boss are ‘terribly mutilated’.

The Finding of the Child Christ in the Temple (pl. xxviii, fig. 2). The Virgin is seated on a bench, before her stands the Child Christ on whom she is gazing, and whose two hands she holds in hers; both figures are clothed as in the last boss, but the overmantle of the Virgin can, on this boss, be seen
TEWKESBURY ABBEY

covering her shoulders and upper arm, with the end thrown back over the bench. This is the boss that, as has already been mentioned, was supposed to be the Infant Christ before the chief of the Doctors.

*Christ's Entry into Jerusalem* (pl. xxviii, fig. 3). Christ, sitting on an ass, is approaching the gate of Jerusalem; He is bare-headed and wears a simple and rather full robe; His left hand is raised in benediction, His right hand holds the reins. Behind and above Him are the twelve apostles; of most of them only the heads are visible; they are all bare-headed; seven of them are bearded; three of them carry books; one carries a smaller article; this may be Judas with his money-bag. On the sinister side of the composition is the gate of Jerusalem; the gateway itself with a window over it is flanked by octagonal turrets; round the whole are crenellated battlements. The whole has a pointed roof, and the turrets have pyramidal tops; near the top of each turret are windows with pointed heads; below is a cross-shaped loophole; at the window is a figure with his arm out of the window holding some object in the hand, apparently about to drop it on to the ground; on the ground is a large mantle, and what are evidently intended to be branches of trees; 'and a very great multitude spread their garments in the way, others cut down branches from the trees and strawed them in the way' (Matt. xxii. 8). Paget Moore in his memorandum on the bosses says 'there appears to be a figure of Satan on the right of the gateway'.

*The Last Supper* (pl. xxviii, fig. 4). Christ is seated at a table; on His right hand are the Virgin, and three apostles, on His left four apostles; St. John is prone on the table, his head in front of Christ, and Judas, holding a large covered salt, is kneeling in front of the table. Christ is clothed in an undergarment over which is a cloak fastened at the neck by a large clasp; the Virgin has a veil over her head; the apostles are dressed in rather full garments fitting fairly close at the neck. On the table are loaves of bread, and the apostles have their hands resting on these loaves; Judas is no exception. Christ has the right hand raised in benediction, His left hand is touching the head of St. John. Above all these figures are demi-figures of angels swinging censers; the two censers meet just over the head of Christ. It will be noticed that only nine of the apostles are represented.

*The Betrayal* (pl. xxix, fig. 1). Christ stands in the middle of the group; in front of Him is Judas kissing Him; behind Him are three soldiers in armour, and behind them a figure carrying a large lantern. Kneeling behind Judas is Malchus, and behind him is St. Peter severing his ear with a sword; Christ is touching the face of Malchus with His left hand. Besides St. Peter there are six other apostles, their heads only being visible. The chief point
about the costume on this boss is the armour of the soldiers. It is rather difficult to tell exactly what this is meant to represent as the surface of the only full-length figure that is visible does not show any representation of chain mail; the outer garment, however, seems to be the surcoat. The sword is of the pattern found on fourteenth-century brasses, but the shield is a small target-shaped one; the helmet is slightly pointed and bears a fan crest, similar to crests found on seals dating from about 1300. The other two figures have ridges down the front of the helmets, and in both cases visors may be intended. Both the man carrying the lantern and Malchus have coarse features with thick and rather flattened noses.

The Scourging (pl. xxix, fig. 2). Christ stands with His hands bound round a somewhat slender pillar; He is wearing a garment reaching to below the knee; but He has been stripped to the waist and the upper part of His garment is hanging in folds. The face seems to be a good deal worn and may possibly have suffered in the whitewashing and subsequent cleaning. Round the head is the nimbus with the cross. On each side stands a figure holding the handle of a scourge, and in attitudes as though about to strike; each is bearded and is turning his head towards Christ; their features have obviously been made to look extremely unpleasant; the scourges show only the handles, which extend to the edge of the boss; the thongs were probably never shown. The feet of Christ are bare; the other two figures wear rather pointed shoes.

The Crucifixion (pl. xxix, fig. 3). Christ is shown in the attitude of crucifixion; His arms are stretched over the upper convex surface of the boss; the knees are bent, and the two feet are nailed together; there is no representation of a cross, except between the body and the feet, and that was painted in by Gambier Parry. Christ wears the crown of thorns, and round His head is a nimbus, on which no cross is visible. The wound in the right side is represented. On the dexter side of the composition the Virgin stands with her hands clasped across her breast. Over a close-fitting garment she wears apparently an over-garment open from the neck to the waist, with full sleeves with pendants at the wrists; over her head is a veil which falls over her shoulders and reaches to the elbow. On the other side stands St. John with a book in his left hand, and holding his right hand up to his cheek; he also has long sleeves pendent from the wrist.

The Resurrection (pl. xxix, fig. 4). Christ is stepping from the tomb; a cloth, probably intended for linen, is draped over His two arms and reaches to the knees; in the left hand is borne the cross of the Resurrection to which is attached a banner with a plain cross on it; one arm of the cross is broken. The right hand was evidently raised in benediction, but it has been broken off. The
Fig. 1. The Ascension

Fig. 2. Pentecost

Fig. 3. The Coronation of the Virgin

Fig. 4. God the Father

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wound in the side is shown. On each side of Christ is an angel; each, with wings extended, kneels on one knee on the top of the tomb and swings a censer upwards. Below are demi-figures of soldiers probably intended to be in surcoats; one carries a spear, the other two have swords fastened to the right side; all three have heater-shaped shields, the two figures with swords carrying them on the left arm. All three have helmets with a ridge down the front and visors; one figure is closing or opening his visor.

The Ascension (pl. xxx, fig. 1). This boss and the next are carved with much finer detail than the other bosses and remind one of alabaster figures. The feet of Christ and the lower part of His robe are seen disappearing into conventional clouds. Below is a group with the Virgin in the middle and with six apostles on each side of her. Her costume is similar to that shown in the Crucifixion except that she wears no veil; her hair hangs down over her shoulders; the apostles wear an undergarment and a cloak the end of which crosses over and is carried over the opposite arm. St. Peter carries a key, and three of the apostles carry books; all are bearded.

Pentecost (pl. xxx, fig. 2). This is a very similar boss to the last one, but above the group of the Virgin and apostles is the Holy Ghost in the form of a dove flying downward; three of the apostles carry books; one only is not bearded.

The Coronation of the Virgin (pl. xxx, fig. 3). Christ and the Virgin are seated side by side on a throne. Christ is crowned; He wears a flowing robe, but at the wrists the sleeves of a closer-fitting undergarment can be seen; His left hand is resting on a globe and His right hand is raised in benediction. The Virgin is crowned; she also has a veil which hangs over her shoulders, and her hair is long and also falls over the shoulders; she has a close-fitting undergarment, with a waist-cord with a pendent end. Over this she wears a long mantle open in front and draped over her knees.

God the Father (pl. xxx, fig. 4). A seated figure with both hands raised and all the fingers extended; as has been mentioned already, there are no signs of the stigmata, and I think there is little doubt that the figure is meant to represent God the Father. The costume consists of a fairly close-fitting undergarment with sleeves fitting quite close at the wrists; over this is worn a very voluminous outer-garment, draped over the knees, and extending out on each side, rather as though blown out by the wind; it is fastened just below the neck by a diamond-shaped clasp. The feet are bare and between them is a globe.

This boss at the east end concludes the series of the nave bosses. To judge by the costumes and by the armour of the military figures it would seem that the date of these bosses is round about 1320, or even a little earlier.
ROOF BOSSES IN THE NAVE OF TEWKESBURY ABBEY

My thanks are due to Canon E. F. Smith, the Vicar of Tewkesbury, for kind permission to photograph the bosses, and both to him and to Mr. Davies, the verger, for continued assistance during the times I was taking the photographs. I am also much indebted to Major C. J. Scoulkes, F.S.A., for information on points connected with the armour represented on some of the bosses, and to Mr. William Bentley for information on the musical instruments carried by the angels.

Read 13th December 1928.

Corfe Castle is situated in the centre of the Isle of Purbeck, about ten miles SW. of Bournemouth, and midway between Wareham and Swanage. The Isle of Purbeck is bounded on the north by Poole Harbour and the river Frome, on the west by the stream called Luckford Lake, and on the south and east by the English Channel. It is bisected by a range of chalk hills which stretch across the island from east to west and attain a height at one point of over 600 ft. In the middle of the range is a great gap forming the natural pass from the northern portion of the island to the coast of the southern portion and called by the Anglo-Saxons Corvensesget or Corfe-Gate. Commanding this pass, and set in the midst of it, is a precipitous hill which rises to a height of about 200 ft. and is almost surrounded at its foot by streams forming a natural moat. Upon this hill the castle of Corfe is built (figs. 1, 2, 3).

One of the earliest mentions of the Corfe Gate occurs in the Anglo-Saxon Chronicle under date 979 and refers to the murder of King Edward the Martyr. 'This year was King Edward slain at eventide, at Corfe-gate, on the 15th before the Kalends of April, and then was he buried at Wareham, without any kind of kingly honours.' An ode is appended but no further details are given. The circumstances are narrated at greater length by William of Malmesbury and other chroniclers, who attribute the crime to the instigation of the king's step-mother Elfrida. The king on his return from hunting called upon his step-mother, who lived in a neighbouring mansion, and while his attention was engaged in giving her the salute he was mortally wounded by her attendants.

Corfe Castle is not mentioned in the Domesday Survey under that name, but there is very good reason to suppose that it occurs under the name of Wareham. It appears almost certain from the Anglo-Saxon charters that at the time of the Domesday Survey the site of Corfe was within the manor of Kingston, a manor which was held by the abbey of St. Mary and St. Edward at Shaftesbury. Domesday Book contains this entry De manerio Chingestone habet Rex i hidam in qua fecit castellum Warham et pro ea dedit Sancte Marie ecclesiam de Gilingeham cum appendiciis suis. Now the Book of Fees, commonly called
Testa de Nevill, referring to this same transfer of the advowson of the church of Gillingham states that *Advocacio ecclesie de Gillingham data fuit abbacie de Sancto Edwarde in escambium pro terra ubi castellum de Corfe positum est.*

Here, in a later document, therefore, with reference to the same transaction, the castle is called by its present name. The town of Wareham itself was Crown property, having been transferred among the possessions of Edward the Confessor, and therefore William would have no occasion to buy any of the land on which it stood.

That a castle existed at Corfe at the close of the eleventh century is indicated by the character of the great wall surrounding the upper ward, most of which still remains. According to Benedict of Peterborough, Robert duke of Normandy, brother of Henry I, was imprisoned here when brought from Normandy in 1106. Benedict says that Robert, having been overcome in the battle near Tinchebrai, had his eyes put out, and was held in captivity in the castle called Chorf in England for the rest of his life.

1 *The Book of Fees.* Ed. 1920, part 1, p. 97.
Fig. 1. Corfe Castle from the west

Fig. 2. Corfe Castle from the south

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Fig. 1. Corfe Castle from the east

Fig. 2. Plan of Corfe Castle, drawn by Ralph Treswell, 1586

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From this time onward Corfe Castle appears to have been used as a state prison. But primarily it was a royal residence and as such the expenditure on its buildings and defences was lavish. From about the middle of the twelfth century to the end of the fifteenth century vast sums of money were
spent, first on the construction and embellishment of buildings within the upper enclosure, and then on the extension and perfection of the defences beyond that enclosure. The Close and other Rolls contain numerous references to such expenditures.

The great keep, called the King's Tower, to judge from its design, construction, and details, was built during the latter years of Henry I. Before this time there must have been buildings of a domestic as well as defensive nature within the shell, but since no trace of these is now to be seen their character must be a matter of conjecture. They were doubtless placed against the shell walls, as at Trematon and Restormel, where the original corbels for the support of the roof still remain. Outside the shell, however, in what is now the middle bailey, are the remains of a rectangular building which still preserves sufficient details to show that it is of early Norman date. But this building has no defensive, as it certainly has no ecclesiastical, characteristics. Its construction, design, and the position it occupied, where protection could only be effected by a palisade, suggest its use as a store or outbuilding of a subsidiary nature.

After the keep was built little seems to have been done for about seventy years until the reign of King John. During this reign an enormous sum of money was spent in new buildings and repairs. Another tower, to which the name of Gloriet was given and which contained the long hall, was built. This building was ready for occupation by 1215, for on the 25th May in that year the king commanded Peter de Maudlay, constable of Corfe, that should Robert de Drewes land in his jurisdiction he was to be entertained with due honour and hospitality in aula nostra in ballio castri et si placuerit ei in turrim intrare: illam et alia ei exponatis. It is clear that the aula here belongs to a building quite distinct from the tower, or keep, and must therefore refer to the hall in the Gloriet.

Having built his sumptuous Gloriet, the king was determined to put the castle into a more thorough state of defence. There can be no doubt but that the ditch, called John's ditch, was dug at this period. For on 23rd November 1214 John ordered William de Harecort to send to Corfe fifteen of the king's miners and quarrymen (minatores et petrarios) quatinus ipsos operari faciat in dova fossati apud castrum nostrum de Corfe. This evidently refers to the work of digging the ditch. When completed, this ditch constituted a most formidable defence to that side of the castle hitherto the most vulnerable. It was cut right across the brow of the hill from east to west, its north

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CORFE CASTLE: THE KEEP

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Fig. 3. Corfe Castle and environs, drawn by Ralph Treswell, 1585.
bank rising precipitously to the curtain wall (pl. xxxix, fig. 1). Further, the
defensive armament of the castle was strengthened by the addition of two
stone-throwing engines. On 16th May 1215 the king ordered the constable
of Gloucester to send to Corfe, under safe custody and by a secure route, one
‘mangunellus’ and one ‘petraria’ with all the apparatus belonging to them.¹

John imprisoned here his niece, the high-spirited Eleanor, whose personal
attractions won for her the name of the Beauty of Brittany. Eleanor’s impris-
onment in this country lasted until her death at Bristol forty years after-
wards in the following reign. John also sent to Corfe Margery and Isabel,
daughters of William king of Scotland. William had committed the offence
of arranging the marriage of one of his daughters without the sanction of the
king of England, his overlord. This action was resented by John with force
of arms, and in order to appease the king William delivered his two daughters
into John’s custody to be disposed of in marriage. Beyond keeping them at
Corfe, the king does not appear to have taken any further steps in regard to
their disposal, but they were both married in the following reign. At one time
Queen Isabella herself was imprisoned at Corfe.

It is not to be supposed that these ladies were kept in durance vile. On
the contrary, short of absolute liberty, all the refinements of life belonging to
their degree were granted to them. The Close Rolls contain many entries of
the king’s commands to the mayor and reeves of Winchester and to the con-
stable of Corfe regarding their comfort. Thus on the 6th July 1213 the mayor
of Winchester was commanded to send in haste to the king for the use of
Eleanor, Margery, and Isabel, robes of dark green, namely, tunics and super-
tunics, with capes of cambic, and fur of miniver, and twenty-three yards of
good linen cloth; also tunics and supertunics and cloaks with capes of miniver,
or rabbit skins, and furs of lamb skins, and thin shoes for their use and the
use of the three waiting-maids; also for the use of the king’s niece one good cap
of dark brown, furred with miniver and one hood for rainy weather, and also
for Eleanor’s use one saddle with gilded reins.² And again on the 5th August
of the same year the mayor and reeves of Winchester were ordered to send to
Corfe for the use of the king’s niece a beautiful saddle with scarlet ornaments
and gilded reins.³ Many notable persons were imprisoned at Corfe by later
monarchs, especially by Edward II, and that unhappy king himself passed
some of his last days here before his murder at Berkeley Castle.

During the long reign of Henry III there is continuous reference to the
sums spent on the castle of Corfe and the purposes to which the money was

Fig. 1. The Middle Gateway

Fig. 2. The Keep. Fragment of east wall. Exterior

Fig. 3. The Keep. Fragment of west wall. Showing entrance from fore-building into hall and vault over the rampart walk

Fig. 4. The Keep. Fragment of east wall. Interior. Showing remains of upper doorway, gutter, and parapet

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Fig. 1. The Inner Bailey from the west. Showing fragments of the bailey wall and of the east and west walls of the keep.

Fig. 2. Window of hall, converted into a doorway.

Fig. 3. The Keep. Newel-stairway from hall to parapet.

Fig. 4. The Keep. The south wall. Interior.

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applied. By the end of the reign practically the whole castle was completed as it stood before it was dismantled in the seventeenth century. It is difficult to trace in many of these records the precise buildings indicated, though in the case of some of them there can be little question. But by a comparison of the works themselves with the records the sequence of building indicated is as follows: first, the two walls east and west of the north part of the outer bailey; secondly, the middle bailey with its gateway; and, thirdly, the outer bailey with its wall-towers and gateway (pl. xl).

In 1235 there is an expenditure of £62, in duobus murius bonis faciendis loco palicis quod est apud Corfe inter vetus baillium eiusdem castri et medium baillium ibidem versus occidentem et simuliter loco alterius palicus inter turrim eiusdem castri et forinsecum baillium versus austrum. It is difficult to identify the precise position of these two walls, since the present outer bailey was not built at this period. But by comparison with other expenditures in the same year they appear to be those flanking the steep bank rising from John's ditch.

Corfe was one of the castles demanded from the king by Simon de Montfort, but in 1263 it was again held for the king and fortified by Henry, son of the earl of Cornwall, on his secession from the barons. In 1261 the sheriff of Dorset and Somerset was ordered to make a stable in a convenient place within the castle of Corfe large enough for twenty horses, and to repair the gates and bridges of the castle without delay. Whether or not this large stable was built it is not possible to say. But in the fabric roll of a century later (1366–8) is the statement that unus parum stabulum factum est de novo in inferiori warda. This last is doubtless that represented in Treswell's plan and now swept away. Its capacity of about five horses corresponds with the description, unus parum stabulum.

The chapel of St. Mary within the castle is often mentioned in the records from Edward I to Edward III. Between 1338 and 1341 Walter Mogga, a mason, was employed 'in cutting free-stone for the stairs before the chapel of the Blessed Mary in the upper dunjon' and also 'in cutting stone for the steps leading to the tower'. Both these stairways remain in part, one leading to the gloriet, the 'upper dunjon', and the other leading to the tower, or keep. The king appears to have had chambers in the gloriet as well as the queen, and there are references to windows between the chapel and the king's chamber and to the chamber above the chapel. All this agrees with the site of the chapel indicated on the drawings. That there was a building here of

1 Pipe Roll, 20 Hen. III. E. 372, no. 80, memb. 16.
2 Liberat Roll, 41 Hen. III, memb. 11, no. 37.
3 Exchequer Accounts Various, 41 Ed. III, 46 Ir. memb. 4.
4 Ibid. 15-14 Ed. III. E. 10 ir, 469/27, memb. 3.
delicate and elaborate construction is clearly shown even in the scanty details still existing, while the present condition of the building suggests that the full fury of the Parliamentarians was directed against it.

The construction of the outer bailey appears to have been begun about 1260. In that year Henry III ordered Thomas de Sancto Vigore and the sheriff of Somerset and Dorset to pay Henry of Germany, his nephew, and Alan de Plokenet, wardens of the castle, one hundred pounds for work done at Corfe, and the tower at the north-east of the bailey is doubtless the first portion of the new work built. This tower stands across the head of John’s ditch at the foot of the wall running up the steep bank to the inner bailey. It bears the shield of Alan de Plokenet on the east face. By 1280 the bailey was probably complete, for the constable’s expenses for that year include amounts for iron-work for the outer gate, and for a bridge.

Several works were carried out during the reign of Edward III. The stable, above referred to, was built in the outer bailey and in 1376 a new bridge was made. The position of the bridge is not specified, but it was probably before the middle gate, its stone piers being incorporated in the supports of the present bridge. Between 1377 and 1379 Richard II built a new tower called La Gloriet. This new gloriet was doubtless the building at the north of the inner bailey, only fragments of which now remain. Henry VII repaired the castle at enormous expense for the reception of his mother the countess of Richmond.

Corfe remained in royal possession, save for a few short periods, until 1562. Queen Elizabeth then sold it to the Lord Chancellor, Sir Christopher Hatton, who made many alterations, chiefly in the addition of upper storeys to the keep, and in opening out large windows in it.

In 1635, on the eve of the Great Rebellion, the castle was sold to Sir John Banks, Lord Chief Justice, ancestor of the present owner. Sir John had received the command of King Charles to attend him at York in 1641, and Lady Banks, anticipating the impending storm, retired to Corfe Castle with her children. For about two years the castle remained unmolested, but from May 1643 until March 1646 this great lady held the castle with a comparatively small garrison against almost overwhelming odds. The engines and artillery of the Parliamentary forces were directed against its walls without avail. In October 1645 Corfe was the only castle held for the king between Exeter and London. Indeed, the fortress proved quite impregnable against all

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1 Liberate Roll, 2 April, 54 Hen. III, 46, memb. 7.
2 Exchequer Accounts Various, 8-9 Ed. I, E. 101, 450/27.
3 Ibid., 51 Ed. III, 1376-7, 461, no. 7.
4 Ibid., 1-3 Richard II, 461, no. 9.
the attacks from without and was only taken eventually through the treachery of one of the garrison.

The splendid resistance offered by the castle was not without its effect upon Parliament, which, having acquired it, ordered its destruction forthwith. The demolition was undertaken with unusual vehemence. The towers and walls were undermined and blown up with gunpowder. The great keep and the long hall with its chapel and apartments were utterly shattered, and the curtain walls generally overthrown. There can be no more eloquent proof of the strength of this magnificent fortress than is shown by the thorough and apparently vindictive manner in which it was destroyed, when at length it fell into the enemy's hands (pls. xxxi, xxxii).

In October of 1927 I devoted five days to the survey of the ruins of the castle. After a careful examination and measurement both of the parts standing and of the portions overthrown and lying on the ground, it was found possible so to piece the fragments together as to reproduce practically the whole castle as it existed before its destruction by order of Parliament in 1646; and this despite the very deliberate and thorough manner in which the demolition was carried out. Most of the principal buildings, as the great keep, called the King's tower, the long hall with its adjoining apartments, and the two gatehouses, can be reproduced with practical accuracy, as also can the walls of the three principal wards with the towers attached to them. All these have been plotted and drawn to scale in plan, section, and elevation. Some of the minor buildings, such as the kitchen and domestic offices in the upper bailey and the stables in the outer bailey, have been destroyed completely or are represented at present only by foundations and fragmentary masonry. In order to indicate these buildings use has been made of a ground-plan of the castle, drawn in 1586 by Ralph Treswell, steward of Sir Christopher Hatton, and preserved at Kingston Lacey (pl. xxxii, fig. 2). Two other drawings preserved in the same collection, which are evidently plans of the keep before its destruction, have assisted in the restoration of the keep.

The primary object of this paper is to place before the Society the results of the survey made in 1927, to describe the several buildings as they appeared before 1646, and their condition at the present day.

By a comparison of the historical record outlined above with the buildings themselves I find that the shell crowning the hill was built soon after the Conquest, while the fragmentary building in the middle bailey is of about the same period. The keep was built during the later years of Henry I. The long hall with the chapel and royal apartments attached to it, together called the gloriet, was begun by John and finished by Henry III. Henry III also built the middle bailey and the first part of the outer bailey, the outer bailey being
completed by Edward I. Henry VII added a new gloriet to the north of the inner bailey; and finally, at the time of Elizabeth, Sir Christopher Hatton made considerable alterations, particularly to the keep, and repaired the bridges (pl. xl).

The masonry throughout the castle is of most excellent quality. The walls are faced with a very durable limestone, quarried locally, and the core is composed of chalk and rubble. So powerful is the mortar employed that whole masses of masonry, having fallen from a great height, have held together so tenaciously as to remain on the ground unbroken. The west tower of the middle gate was undermined and has dropped vertically, with half the archway attached to it, a distance of eight feet. Yet the whole of its masonry has held together without disintegration or fracture (pl. xxxiv, fig. 1). Aesthetically this castle, from whatever point of view it is seen, is one of the most striking and imposing ruins in the country.

The shell wall follows round the brow of the upper platform and is 12 ft. thick on the south side and 9 ft. 4 in. thick elsewhere. Before John's ditch was dug the fall of the ground on the south of the castle must have been relatively gradual. It was, therefore, desirable that the wall should be especially strong here. Necessity for protection on this side doubtless also governed the position of the keep, which is built immediately inside the south wall.

The foundations of the early structure in the middle bailey were laid bare about fifty years ago by Mr. Thomas Bond and proved to follow the lines shown on the plan (pl. xl). Only the south wall now remains. This is of herring-bone construction 3 ft. 4 in. thick and contains three original windows. Externally the windows are simply square-headed loop-holes 6 in. wide and flush with the outer face. Internally the jambs are splayed and crowned with a round arch (fig. 4). The character of this wall, when considered in relation to the plan of the building of which it formed a part, suggests that the wall is the remaining portion of the undercroft of a two-storeyed building of eleventh-century date, built under Norman influence.

The keep (plate xxxiii) was a rectangular building of two lofty storeys and an undercroft. Each storey was divided into three compartments. Externally the storeys were marked by off-sets and the walls strengthened by buttresses and a deep battered plinth. A blind arcade, interrupted only by the buttresses, ran round the upper part of the walls (pls. xxxiii and xxxiv, fig. 2). Originally entry was by a doorway at the south-west of the upper storey. This doorway was approached, first by a straight flight of steps constructed against the side of the keep and carried over a barrel-vault with heavy ribs, and secondly, by

1 History and Description of Corfe Castle, by Thomas Bond, B.A., Lond., 1883, p. 60.
Fig. 1. Fireplace, rebuilt in cottage at south of village

Fig. 2. The Keep. Vault over rampart-walk, from the east

Fig. 3. Plokenet shield on east face of the Plokenet tower

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flights of steps contained in a fore-building. Parts of the first flight, and the shattered vault over which it was carried, still exist; and the last steps of the flights in the fore-building can be seen in the entrance doorway itself (pl. xxxiv, fig. 3, and xxxv, fig. 1).

The ground floor and the first floor were each divided into three compartments. Fragments of the cross-wall running east and west still exist and contain remains of a doorway in each stage. The lower doorway was plain, but that on the first floor was embellished by shafts with carved capitals and abaci and by moulded arches (pl. xxxiv, fig. 4, and xxxv, fig. 1). I have seen no traces of the other cross-wall, but this is doubtless because the destruction here has been so thorough. The wall is shown in Treswell's plan of 1586. In the centre of the south side of the keep on the first floor is one original window (pl. xxxv, figs. 2 and 4). Its carving and mouldings are of a similar character to those of the doorway in the cross-wall; when the addition was made to the keep on the south, this window was converted into a doorway and its opening has been, therefore, considerably mutilated. The walls containing the principal fireplaces have been destroyed, but a stone fireplace, probably taken from the keep and rebuilt in its present position, stands in the cottage of Mr. Hibbs at the south of the village. It has an opening 5 ft. 11 in.
wide by 4 ft. 1 in. high and is a fine example of the period of Henry VII (pl. xxxvi, fig. 1).

From the first floor the parapet was gained by a newel-stairway at the south-east corner (pl. xxxv, fig. 3). This was constructed on a spiral vault, and parts of it, as well as of the entrance doorway from the first floor, still remain, some in their original position and some fallen on the ground 40 ft. below. No trace remains of the stairway leading from the first floor to the ground floor, but at some late period a doorway was made opening directly to this floor from the fore-building. The keep was covered by a twin roof having a valley running north and south along the middle. The line of the verges of the roof, where it joined the south wall of the keep, is seen in pl. xxxv, fig. 4, and the gutter on the east side in pl. xxxiv, fig. 4, above the doorway. The roof itself was concealed by the enclosing walls of the keep, which were carried up above the line of the ridges.

Shortly after the keep was built an addition was made on the south. This was constructed against the external face of the shell-wall of the castle and connected to the keep by a lofty barrel-vault, spanning the rampart-walk. The south portion of the lower stage was divided by a thick cross-wall and had a garderobe on the west, and a guard-room, opening for its full width to the rampart-walk, on the east. Originally the upper stage also had a cross-wall, but this has disappeared. The vault over the rampart-walk is divided by a transverse arch which supported the upper cross-wall (pls. xxxiv, fig. 3, and xxxvi, fig. 2).

The long hall, the chapel, and the royal apartments attached to them (pls. xxxvii and xxxviii), were approached by a wide and easy stairway on the west. This led to a porch having two wide doorways, one leading to the hall and the other to the chapel. The arch at the entrance to the porch is broken away, but there is a peculiarity about the jambs and springers, which are 19 in. higher on the north than on the south, suggesting that actually there were two arches here (fig. 5). The hall was of four bays and had a vaulted undercroft. It was lighted by twin-light windows with plain tracery and covered by a timber roof, some corbels of which still remain. Moulded string-courses run round the walls and buttresses externally (pl. xxxviii, fig. 2). At present there is no trace of a fireplace. Of the chapel only the south-west corner remains, but the mouldings here of the shaft and springer of the ribbed vaulting which covered the chapel are sufficiently well preserved to indicate the delicacy and ornate character of the whole. Only the undercroft of the buildings on the south of the hall remain, while the royal apartments to the north of the hall are now represented by low walls. The kitchen has been swept away entirely.
CORFE CASTLE.
THE HALL AND CHAPEL

PARTS EXISTING
PARTS DESTROYED

SECTION A.B.
BAY OF HALL

ELEVATION OF DOORWAYS
SECTION THY DOORWAY TO CHAPEL

PLAN OF DOORWAYS TO CHAPEL AND HALL, AND OF HALL WINDOW

SLIDREW TOY, F.S.A., meso. et delt. October 1929

CORFE CASTLE: THE HALL AND CHAPEL.

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AND PRESENT CONDITION

The middle bailey is enclosed by a curtain wall of coursed rubble, 7 ft. thick, which follows round the precipitous crest of a lower platform. The wall was strengthened by three towers. The north tower, which alone remains standing, has four loops and was covered by a timber roof, the roof being protected and concealed by the walls of the tower, which still retain the verge-courses and the rain-water outlet (pl. xxxviii, fig. 3). The south tower has fallen down. The west tower, called Butavant, was a large octagonal structure of considerable strength. Only the eastern portion of the newel-stairway remains standing. Its lower storey was evidently ill lighted, if lighted at all, and, to whatever purpose this undercroft was devoted, it had to be cleansed in 1280, and candle-light was required for the purpose.\(^1\) The tower was shattered in 1645.

\(^1\) Exchequer Accounts Various, B-9 Ed. I, E. 101, 460/27.
and, having become disintegrated by the weather, a large portion of it was blown down by a gale in 1866. There is a blocked opening in the curtain west of the north tower. This is shown on the plan of 1586 and may have
Fig. 1. The Long Hall from the west

Fig. 2. The Long Hall from the east

Fig. 3. Tower in north wall of the Middle Bailey. Interior

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Fig. 1. The Keep, the Middle Gateway, and John’s Ditch

Fig. 2. The Outer Gateway

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been a sally port. But all the dressings of the opening appear to have been removed before it was blocked, and nothing can be seen now to indicate its original character.

Approach to the bailey is from the east, through what is now the middle gateway, built on the west bank of John's ditch (fig. 6 and pls. xxxiv, fig. 1, and xxxix, fig. 1). The strength of the masonry of this structure has already been described. Its design is no less remarkable. Each of the flanking towers contained a guard-room on the lower floor and had walls of great thickness. A stairway from the room on the north led to the rampart ascending to the keep. The plans of the upper floors can be followed in part only. The gate
CORFE CASTLE: ITS HISTORY, CONSTRUCTION,

itself when closed was secured by three heavy timber bars drawn across the gateway. There was one portcullis before the gate and another on the inner end of the gateway, while between the outer portcullis and the gate was a line of four machicolations divided by webs of masonry (figs. 6 and 7).

Perhaps the most striking feature of the great outer bailey is the relative strength of its flanking walls. The west wall is 10 ft. 6 in. thick and defended by four wall-towers, while the east wall is 7 ft. thick and had only two towers. The reason is obvious on examination of the site. On the west the fall of the ground is relatively gradual, while there is a large flat and open space at the foot of the hill from which attack might be expected. On the east the fall is precipitous and there is no such vantage ground beyond. The west, therefore, was the more vulnerable side. The wall-towers here are pierced by loops 12 ft. high, which commanded the outer face of the walls and the field. The wall crossing the south end of John's ditch is of a different character from the rest both in construction and thickness. It had no rampart-walk, but the four loops it contained were probably approached by timber staging, which could be quickly erected or removed as the defence found desirable. Between the two southernmost towers of the west wall are the remains of a sally port, which was defended by a heavy timber bar.

A large portion of the east wall has been razed to the ground, but the tower near the gateway, which is of two stages, is almost complete. Of the stable nothing can be seen in its original position, but a portion of it lies some distance down the slope, where it was recognized by our Fellow Mr. Harold Sands. The other tower stands at the head of John's ditch and has on the outside face a sculptured shield bearing a bend indented (pl. xxxvi, fig. 3). This charge was borne by the Plokenets and it is very probable that this tower was built by Alan Plokenet, who was constable of Corfe in 1269. A newel-stairway on the north probably led to the rampart-walk between this tower and the great shell wall. Both the towers on this side are circular inside and outside. There appear to have been three stairways leading from this ward to the ramparts, two of which have been destroyed, but fragments of the third, near the outer gateway, still remain.

The outer gateway is of still more formidable construction than the middle gateway (fig. 8 and pl. xxxix, fig. 2). Here the flanking towers are quite solid in the lower storey, but extensive accommodation for the guard was provided behind the gateway. The guard-rooms were covered by lofty barrel-vaults, portions of which still remain, while the foundations of the rooms themselves can still be traced below the grass. The gate was defended by two machicolations, each extending the full width of the gateway and spaced 6 ft. apart, and by a portcullis between the machicolations (figs. 7 and 8). Considering the
AND PRESENT CONDITION

design of the middle gateway, there was probably an inner portcullis also in this gateway, but all traces of it have disappeared. The walls of the upper

storeys have been destroyed, but the lower parts of the loops defending the gateway still exist (pl. xxxix, fig. 2). Adjoining a tower to the north of the outer gateway there is a wall chamber the purpose of which is somewhat obscure. It is 6 ft. 3 in. wide and 10 ft. 8 in. high, but since only one end of it remains, its length is unknown. Its vault is constructed of flat stone slabs, supported on four courses of encorbelment (fig. 8).

Both the outer moat and John's ditch are now spanned for their full width by stone bridges. The arches of both bridges are probably the work of Sir Christopher Hatton, but the piers on which they stand are of the thirteenth
and fourteenth centuries. The head of each was originally commanded by a drawbridge. Among other works ordered to be carried out at Corfe on 5th February 1239, repair of the pontem colethicium was included. This doubtless refers to the bridge leading to the middle gateway, the only one then existing. The constable’s accounts for 1281–2 include seven shillings and sixpence paid for four cords of hemp for raising the bridges of the castle, both bridges having then been completed.

Before concluding, I must express my great indebtedness to our Fellow Mr. Harold Sands, who has unreservedly placed at my disposal his great store of knowledge on the subject and has rendered invaluable assistance in the production of the paper at every stage. In addition he has contributed largely towards the cost of the illustrations. My thanks are also due to our Fellows the Rev. E. E. Dorling, who has kindly read the proof, and Dr. Dru Drury, to whom I am indebted for the photographs of the shield and fireplace on pl. xxxvi.

I have attempted here to direct attention to the salient features of the subject only. Sufficient has been said, however, to indicate that this castle is one of the finest examples of military architecture of the middle ages in the British Isles. After careful examination of its ruins, it is impossible not to be stirred with admiration at the strength of its construction and the skill of its design. Despite its shattered condition, Corfe Castle is a priceless possession.

1 Liberat Roll, 23 Hen. III, memb. 20. The mandate for this fragment occurs twice on the Roll under the same date and place; first in memb. 21, where the obscure word colethicium is rendered colethicis, and again here, where the scribe wrote part of the word, viz. colethicis, crossed this out and rendered it colethicium.

2 Exchequer Accounts Various, 10 Ed. I, 460/27, memb. 2.

Read 31st January 1929

The present article gives the account of the excavation of the Temple of Nabû in Kouyunjik, the larger mound of Nineveh, under British Museum auspices. A brief description has already been given in our A Century of Exploration at Nineveh (Luzac, 1929, referred to herein as CEN), and so we shall avoid repetition so far as is consistent with due description. Besides the excavation of this temple, our digging revealed the first chambers of a palace of Ashurnasirpal at 23' to 26' depth,¹ and in digging out part of a house built by Sennacherib for his son Ashuršumumabšî (?)(here abbreviated to SH) we found a practically perfect prism of Esarhaddon, and about fourscore more pieces of prisms of Sennacherib, Esarhaddon, and Ashurbanipal (see CEN 83), as well as numerous pots and lamps.²

¹ That is, judging from the brick inscriptions of this king and his son Shalmaneser in situ (see nos. 56-6, 64). At the same time the bricks of Ashurnasirpal also mention the Temple of Ishtar, and the inscription on the sculpture (nos. 4-10) may be a record of his restoration of that temple: from the zigae inscriptions nos. 122b, d, and e we learn that the Temple of Nabû was 'ina 'bih' the Temple of Ishtar. From a comparison with the building texts of Sennacherib we must at present assume that the Temple of Ishtar lay in the central ridge somewhere between the Temple of Nabû and Sennacherib's palace, while our new palace of Ashurnasirpal occupies a site on the SE. front of the Temple of Nabû.

² This palace is the objective of the next expedition, 1929-30. The money which we had been able to collect (partly from the interest on Miss Gertrude Bell's bequest, partly from donations from the Percy Sladen Memorial Fund, the Research Fund of the Society of Antiquaries, also from Mr. O. C. Raphael, F.S.A., and Miss Eleanor Hull, and from the sale of copies of CEN at the British Museum bookstalls) has now been augmented by Sir Charles Hyde, who has not only made up the deficit necessary for the first season, but is generously providing the whole cost of two more seasons. The last week's excavation at the end of the 1928 season revealed its chambers in a good state of preservation built of brick walls, with brick pavements (bricks 1' 7' x 1' 7' x 4' 3''), containing a flat (now semicircular) piece of limestone with a broad rim, originally 30' diam.: a marble door socket 2' 7' x 2' 7' (with hole 12' diam. x 10' deep): a stone mill (?) with circular grooved gutter, and hole for outflow: and the great Tukulti-Ninurta inscribed slab (no. 1), and the clay tablet no. 122a. The pottery was both glazed and plain, like that of the temple, but with a few shapes paralleled only in SH.

³ In 1903 Dr. L. W. King reopened the excavations at Kouyunjik on behalf of the British Museum, and I joined him in 1904. The actual discovery of the temple-site was made in the autumn of 1904 after he had gone home, but the existence of the temple and its library had long been
The provenance of each object found is marked by a Roman followed by an Arabic numeral, which indicates the superficial position and depth from the surface respectively. Buildings, conversely, are represented by their position in feet relatively above or below (+ or −) the top of the Sargon well, which is taken as the zero line. The surface of the earth above the well-top was about 10'-11' higher: at the SE., SW., NE., NW. edges of the temple, about 16', 13', 11', and 7' respectively. At the same time a very little study will show the disturbed state of the mound, and the uncertain value of evidence as afforded by the record of depths.

(A) The Assyrian Temple of Nabû (Nabû and Marduk) of the Eighth-Seventh Century b.c.

The name of the original founder is lost, but according to zigāti-inscriptions of Sargon it was built in the time of the new great gate (nos. 122 D, F, and o). The first restoration was made by Adad-nirari III in 788 B.C. (ibid., and Eponym Canon). It was restored again by Sargon (721-705 B.C.) (see no. 69 ff.), and its pavements were repaired by Ashurbanipal (no. 44). The position of this temple is just to the S. of the southern corner of Ashurbanipal's palace, which would appear, from Rassam's map (Trans. Soc. Bibl. Arch., vii. 37, and see pl. lxii), to have made a re-entrant at this corner, so close did the temple lie to it, and it may be that this consideration for the amenities of the temple bears out what Ashurbanipal says of his palace (Prism x, 78) 'I was fearful in the presence of the sanctuaries of the great gods, my lords, and did not raise the structure of that terrace overmuch'. Its SE. frontage abutted on a broad pavement (at least 200' × 15'), which may perhaps mark part of a roadway along

known. By February 1905 the inner rectangle of the temple had been cleared, not merely to the floor level about 10' or 12' down, but almost always to a depth of 20' and sometimes 25'. When the excavations were reopened in 1927-8 for the purpose of clearing the outer rectangle, the cost was borne by the British Museum, the Percy Sladen Memorial Fund, Merton College, Oxford, and myself, while Mr. R. W. Hutchinson volunteered to come as my assistant for his bare expenses. The whole of the eighth-century temple (with the exception of a very small area in the W. corner, where the solid late masonry has destroyed all hope of Assyrian remains) has now been cleared, down to the surface of the massive libn (unburnt brick) foundation which is about 10' thick. Mr. Hutchinson and I shared the work on the excavations; more particularly, his province was the pottery and the Greek inscription, while to me, apart from the general direction, fell the cuneiform, the drawings, and the maps (most of which have been redrawn professionally). We are greatly indebted to Sir Frederic Kenyon, the Director of the British Museum, for his care and interest in fostering the undertaking in every way from the beginning, and to Dr. H. R. Hall, the Keeper of the Egyptian and Assyrian Department, for his readiness to help us: and to Mr. R. S. Cooke, then Director of Antiquities at Bagdad, for the way in which he assisted the expedition whenever he could. Major Jardine, and after him, Major Wilson, at Mosul, were equally ready to do anything they could for us. Finally our thanks are due to the Governor of Mosul for the pleasant memories of our sojourn in Mosul.
the top of the mound from N. to S., and this was repaired by Ashurbanipal, with inscribed slabs (no. 44), which were set herein and in other restorations usually face downwards, the total number of these slabs reaching originally perhaps 400. This pavement was about 1'6" higher at its SW. end than at its SE. end, and it lay at an angle of 32°-33° E. of N. In or just beneath it was found a fine but broken piece of sculptured marble, representing Sennacherib's campaign in the marshes with marsh Arabs in boats, and the capture of a fortress called Ki-in ... (see pl. LVIII, fig. 6). The Temple of Ishtar must have been somewhere in this direction, judging from the zigûti-inscriptions nos. 122 D, F, and O. Originally the area of the temple appears to have been about 190' square, the SE. front lying at an angle of about 32° E. of N., but the NE. and NW. fronts were apparently altered by Sargon and more correctly orientated, like the Sumerian buildings. This reduced the sides to 190' (SW.), by 170' (SE.), and 190' (NW.) by 150 (NE.). The explanation of this variation is perhaps to be found on the inscriptions nos. 122 D, F, and O, where Sargon explains that repairs were made in such a way as not to alter the position of the temple with the Temple of Ishtar.

The foundations consisted of (a) an Outer Base of massive unburnt brick, about 10' thick, on which the chambers had been built, containing (b) an Inner Rectangle of earth 103' x 78'. The top of the Outer Base (a) was about 3' above the zero-level of the well-top, 4' above the SE. paved frontage, and 9' above the floor of the adjacent palace of Ashurnasirpal, of which we discovered the first chamber in our last week (CEIX. 82), and the great difference in the levels of this palace and the temple-floor of Sargon shows first that it was probably the restoration by Sargon which raised the temple to this height, and secondly, in consequence, the palace of Ashurnasirpal must have been in ruins and forgotten by the end of the eighth century.

Little trace of buildings was left on this outer base (a), due probably to their having been made of walls of unburnt brick. Even the exterior walls were made of this perishable material, which soon collapses if exposed un-repaired to Mesopotamian weather. These exterior walls were based, like those of the modern garden-walls in Mosul, on a layer of limestone lumps, so that the original lie, at all events, was easily traceable.

One interior pavement of limestone slabs, about 17' x 11', marked a court towards the S. corner (pl. LIX, fig. 3), each of the slabs (except one) being either wholly or in sections inscribed with the dedicatory text of Sargon (no. 69) and set face upwards. At some later date a shaft had been dug down through the pavement from above, and in its earth we found sherds of the period tenth to twelfth century A.D. These later shafts or holes were frequent in this outer base.
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There was a gateway in each side, the best being to NE., marked by a heavy threshold slab 5' 3" × 4' 1" × 9½", also inscribed with the same text (no. 69), but larger. Two round holes had been drilled longitudinally in the SE. edge, doubtless for staves for easier transport. There were remains of a well-laid pavement in front, about 15' square, repaired also with Ashurbanipal's inscribed slabs. The line of the old wall from the N. side of the door was still marked by 15' of revetting stone wall.

The NW. and SW. gates were less important, but near the latter was a large limestone door-socket. The SE. gate was equally simple, the walling being marked by the courses of its ruined base built on the long pavement restored by Ashurbanipal. Near here, beneath the pavement, we found almost the whole of the Ashurbanipal prism in pieces, giving his restoration of various temples.

The Inner Rectangle (b) doubtless contained one or more courts by which the chambers surrounding it were lighted, as well as the vegetable garden for the priests. This was cleared in 1904-5 to a depth of from 20' to 25' from the surface, and in the SE. side, partly let into the libn, was a well, built or restored by Sargon, 6' square inside. It was the discovery of this well with its numerous bricks inscribed with Sargon's dedication (no. 70) which finally settled that we had at last, after two years' search, found the temple. The inside was carefully revetted for several yards down with bricks, many of them inscribed as above, the lower part being left without any casing; their dimensions were 1' 1" × 1' 1" × 4½", or, if 'headers', 1' 1" × 6½" × 4½", and they were set with clay (not mortar or pitch). We found water at 90' depth, and in the mud at the bottom some bronze buckets, and from this well the pieces of bronze gates (?) came.1

On the opposite side of the courtyard was a privy, also containing Sargon's bricks, a simple slit in the floor with a drain leading off.

(B) THE DESTRUCTION OF THE TEMPLE IN 612 B.C.

The temple, like the rest of the buildings on the mound, was burnt in the general débâcle, the ash strata being obvious, particularly on the top of the Sargon courtyard (about 3' above the well), where the fallen libn of the walls was marked in a well-defined mass 2' thick above the ash. At viii the ash-line lay on the libn, 3' below well-level, the libn here being lower than on the SW. end of this side: it was plainly marked above the - 1' wall-base, and

1 The latter published by Nassouhi, Mitth. d. Alt. Gesellsch., iii, 18, ana. in Nabû bel-šu Šargina šar ʾelḥ Aṣṣur ana bālāti-šu B.A., ESS 'Unto Nabû, his lord, Sargon, king of Assyria, for his life has presented.'
below the +0′ 7″, showing that the +0′ 7″ repairs were made after the Destruction. Outside the temple, near the SE. end of the −2′ 3″ wall in the E. corner, ash lay thick, and near the SE. doorway at xiv the ash was 6″ thick about 1′ 6″ below the level of Ashurbanipal’s pavement, while at xxi it lay 1′ 6″ above this pavement. This ash confirms all the traditional accounts of the Destruction.

It is not easy to explain the presence of the three repairs in the E. corner (+0′ 7″, +2′ 5″, and +4′ 2″). All are subsequent to the Destruction; +0′ 7″ included the big E-Akit block (no. 43), probably filched from Sennacherib’s Temple: +2′ 5″ included pieces of sculpture both of Ashurbanipal and Sennacherib. Indeed, there are many repairs on the SE. side.

(C) The Occupation of the Temple Site after the Destruction

In CEN 139 will be found the evidence for the later occupation of the mound in general. Briefly there appears to have been a gap between 612 B.C. and the Seleucidae, under whom the mound appears to have been occupied. In 1904–5 was found a Greek inscription on a cylindrical block of limestone in the Inner Rectangle (see p. 140). We found fragments of red pottery on the site, to be attributed to the first century B.C., and of terra sigillata of the first century A.D., and two lamps of the third century (pl. LV, nos. 217 and ‘VI, 6’). Layard’s discoveries of this and subsequent periods will be found in Nineveh and Babylon, 591; we can add a hoard of Sassanian silver coins of Bahram V, A.D. 420–38.1

The sixth and seventh centuries A.D. may be marked by the fragments of pottery stamped with medallions of animals, etc., in relief; the eighth to ninth centuries are marked by barbotine ware (see p. 139).

From the ninth to the fourteenth centuries the site above the temple is marked by a succession of five (perhaps six) buildings, ranging from +6′ 10″ to +10′ 3″, a difference of only 3′ 5″. The walls were of solid stone and cement, and the floors of thin cement: and the best preserved portion of the 5th(6th)

1 We are indebted to Dr. G. F. Hill for his identification of the coins of this hoard, and for the following found on the temple site (except one from the surface):

building was a portico set on a cement floor, the doorway being approached from the NW. by a step, and flanked by two small columns (the bases set in or on the 6th cement floor), giving entrance to a small atrium. A second long step up (marked ‘L’) to the higher cement floor was made by a revetment of cement and bricks 8” high. From this point to SE. began a succession either of restorations or of fresh buildings up to the 2nd cement floor. The 4th (+8’ 10”) contained a blue-glazed sherd of Sultanabad type embedded in it: the 3rd (9’ 1”) was particularly marked by three oil presses (see CEN 141): the 3rd and 2nd (10’ 3”) were marked by pottery of blue and mottled glaze, Mosul jugs, and, in the case of the 3rd, yellow lustre ware. 6’ 6” from the surface (6’ 0” above Sargon’s well) was a kind of receptacle or pot, embedded in cement, 3’×1’ 10”×2’, set at 50°, containing a lamp (pl. LV, fig. 213): the Syriac inscription no. 35 and the inscription no. 40 were near this spot, impressed in the cement. The drains from the earlier floors (5th–6th? at +7’ 0”) were represented by two pot-pipes, one fitting into the other, with fall to E.: the later (2nd) are marked K1, K2, K3, K4 on the plan, K4 consisting of four pot-sections, each being jars about 3’ 8” long, the pointed bottom of the one fitting into the mouth of the other, the third one from N. being marked with a cross in black paint. The fall was about 1’ to N. K3, six pot-cylinders, probably once seven, each about 11”.

The dating is indicated by (a) the Syriac inscription in plaster (no. 35), and also by the green glazed pottery (pl. LVI, ‘XXIV, 3”) and by (b) the glazed pottery similar to the material from Samarra (ninth–thirteenth centuries). For the burials, see p. 110.

(D) The Chief Finds during 1927–8

1. Prisms from SHI (see p. 103 and CEN 83). Sennacherib to Ashurbanipal.
2. Prism of Ashurbanipal (see p. 106 and CEN 76).
3. Numerous fragments of cuneiform tablets.
4. Fourteen fragments of zigûiti (nos. 122 B-L and O-Q).
5. One piece of minutely written tablet from Ashurnasirpal’s palace (no. 122 A).
6. Pottery (see p. 135).
7. Limestone objects: shrine,1 some distance above latest Assyrian level, xv, c: censer (?), xxiv, 6 (no. 337): column-base, xli, 5: niche (XXVII) 2’ 6”×1’ 3½”×1’ 6” with red paint (apparently) on back: bath or trough, in two pieces, xvii, 7, outside 3’ 6”×2’ 2”, depth inside 1’ 8½”, outside about 2’: trough, xiii, 5, 1’ 10”×1’ 10”×9” (6” deep inside): block with depression in top surface, and small runnel therefrom (religious use?), 2’ 9”×2’ 2”×1’ 8” high, depression 1’ 4½” wide, runnel 3” deep, from first building, 2’ SW. of long +12’ wall, xix, c, 3: macehead, i, 8 (no. 304). For the stone inscriptions see pls. xli ff.

1 For the form, cf. the so-called ‘shrine-stones’ of Tanit, found in the early Punic levels at Carthage (see Harden, Am. Journ. Archaeology 1927, 297).
8. Furnaces, or pot-ovens: (i) IV, 2', circular pot-oven, falling to pieces; height 10", diam. 18", thickness 1 1\(\frac{5}{8}\)". (2) VI, 2', similar, diam. 18", with hole for observation. (3) VI, 5', two similar; (a) height now 7", inner diam. 2', 2", thickness of pot 1"; no bottom; ashes at base: (b) built on level of floor near; diam. 1' 8". (4) LXXXVII, 5', similar, diam. 1' 10".

9. Sculpture: (i) Numerous pieces of the scene of Ashurnasirpal attacked by a lion and his thanks for his sport (pl. LIX, 4: CEN, pls. vi, vii); (2) Sennacherib's campaign in the Marshes (pl. LVIII, 6); (3) two pieces of reliefs of tutelary deities; (4) four pieces of carved pavement, filched from Ashurbanipal's palace (one from 2' 5" wall, and another XV, 9); (5) fragment of horse's hoof with mountains (from small base at SW. gate); (6) fragment of soldier marching on mountains with dwarf oak; (7) piece of winged figure; (8) fragment of palm tree; (9) relief of lion's claw (probably Ashurbanipal), E. pavement (x-xii, 1' 7" or 2' 5""); (10) reeds (Sennacherib) (viii-xi, 2' 5" wall, west).

Statue: rough marble head and torso of uncertain date, about life-size, found as part of the building in the wall-base at the SW. gate.


10. Bronze: see pl. LVI.

11. Glass: see pl. LVI.

12. Ivory object inscribed, as Dr. A. E. Cowley, the Keeper of the Bodleian Library, has suggested, perhaps in Sassanian (no. 743).

13. Steatite plaque incised with scene (of bull?) and inscription or monogram (no. 339).

14. Bricks. The numbers refer to the text in the plates. Not necessarily from the temple-site. One class of baked bricks, from Ashurnasirpal to Sennacherib, appears constant in size:

Ashurnasirpal, 1' 1\(\frac{1}{4}\)" x 1' 1\(\frac{1}{2}\)" x 4\(\frac{1}{2}\)" (no. 61).
Sargon, 1' 1" x 1' 1" x 5"; 1' 1" x 1' 1" x 4\(\frac{3}{8}\)" (two); 1' 5" x 5\(\frac{3}{4}\)" x 5" and 1' 1" x 6\(\frac{1}{2}\)" x 4\(\frac{1}{2}\)" (headers) (no. 70); and one from 'Ain Sebna 1' 2\(\frac{1}{2}\)" x 6\(\frac{1}{2}\)" x 4\(\frac{3}{8}\)" (no. 72).
Sennacherib, 1' 1" x 1' 1\(\frac{1}{2}\)" x 4" (see no. 82): 1' 6\(\frac{3}{4}\)" x 5" x 3\(\frac{1}{2}\)" (see no. 82): 1' 1\(\frac{1}{2}\)" x 3\(\frac{1}{2}\)" x 4\(\frac{1}{2}\)" (no. 82): 1' 5\(\frac{1}{2}\)" x 1' 1\(\frac{1}{4}\)" x 3\(\frac{1}{2}\)" (no. 82).

So many of the bricks are broken that the only size-datum available is the thickness:

Tiglath-Pileser, 2\(\frac{1}{4}\)" to 2\(\frac{3}{4}\" (nos. 55 ff.).
Ashurnasirpal, 1\(\frac{3}{8}\)" to 4\(\frac{3}{8}\" (see pl. XLIV).
Shamshi-Adad, 3" to 5" (nos. 114 ff.).
Adad-nirari, 3" to 4\(\frac{3}{8}\" (nos. 66 ff.).
Sargon, 2\(\frac{1}{2}\" to 4\(\frac{3}{8}\" (nos. 69 ff.).
Sennacherib, 2\(\frac{1}{2}\" to 5" (nos. 76 ff.).

Numerous bricks shaped in angles or with curved sides were found near Ashurnasirpal's palace. Note also the eight plano-convex with finger holes (11" x 11" x 2\(\frac{3}{4}\" from LXXXV (1' 3" 4") Unburnt late Assyrian bricks measured 1' 2" x 1' 2" x 4\(\frac{3}{8}\" from VII, and 1' 1" x 1' 1" x 3" from platform near Sargon's pavement.

1 Here, for want of a better place, should be mentioned that we were shown two small plaques—one in gold, the other in lead—inscribed with a text of Ashurnasirpal, indicating that he had decorated the palace of the city Apki for his abode. I will not discuss the text further, as it would trench too far on the possessor's rights, but they were said to come from between Tell Afar and the Sinjar Hills.
1. Built Graves.

(a) Level + 2, XXXV (9 deep in Assyr. ḫīn floor): grave (7’ 4” x 2’ 5”) built of squared stones, four on end each side, one at each end, two still covering top: cement between them and on floor. One of the stones is a perfect slab inscribed with Ashurbanipal’s inscription (no. 44). Size of one stone 1’ 7” x 1’ 3” x 5 1/2”. Bones scattered: 303°.

(b) Level + 3, XXXIV (9’ from surface): two graves side by side, the one to W. was under 2’ of solid rubble and cement, which shows that it was earlier than the immense cement masses here. Walls of small stones and cement (6’ 2” inside x 2’ 3” outside): skeleton much destroyed, body full length on left side, head to NW. 309°. The other to E., 10’ distant from first at SE. end, 3’ lower, skeleton also on left side, head to NW. 320°. Associated with pottery like that of Third Cement building.

(c) Level approx. 4’, XXIX: built grave 6’ 7” x 1’ 9 1/2” x 2’ deep. Lined with blocks of limestone, and evidently originally plastered. Plaster rim round edge, and one line of limestone slabs and bricks above. No skeleton. 315°.

2. Larnax Burials, etc.

(d) Level + 3’ 6”, XXI (10’ deep, 5’ below Second Cement): pot-bath’, 3’ 6” x 1’ 10” outside measurement. Only a few bones and part of a lamp. 295°. Perhaps Parthian.

(e) Level 5’ 3”, XX, C (7’ deep): pot-bath’, broken at W. end (3’ 3” outside x 1’ 6 1/2”: ext. height 1’ 6”). Body with legs bent lying on right side, head to NE. 40°. The cut in the Second Cement floor shows definitely that this is subsequent to this building.

(f) Sennacherib’s House (see CEN 84, 87, and 108 for Mr. Dudley Buxton’s note on the Armenoid character of the skull): pot-bath’, 8’ down, just below a similar (empty) larnax-burial. Skeleton on right side, huddled up, head to NE. 67°. Bronze cup with it (no. 300). Perhaps ninth century B.C.

(g) Level + 8, Fifth Cement floor. Jar-burial, containing skeleton. It had apparently been let into the cement.

3. Various Graves.

(h) Level + 3’ 0”, XL. Skeleton laid on its back, perhaps wrapped, probably of a woman, on the Assyr. ḫīn flooring: grave made of ḫīn walling with two Assyrian bricks on top, about 6’ x 1’. Head to NW. 305°.

1 Rassam ‘discovered at Kuyunjik several tombs built of slabs of stone . . . in one of them, I understand, was found a gold coin of the Emperor Maximinus. They contained, however, very interesting relics in the same precious metal and in glass. In one of them was a thin gold mask, still preserved, which perfectly retained the features of the corpse’ (Layard, Nin. and Bab., 592).

2 We are inclined to think that the frequent occurrence of these larnax-coffins in use at all depths, and apparently in use in Assyrian times (f), as well as after the Second Cement building (e), i.e. fourteenth century or later, A.D., shows that these coffins, which perhaps represent the common Assyrian method of burial, were dug up by later inhabitants and reused.
(i) L.V., about 3' 0" deep, skeleton laid on right side, apparently loosely covered with rough stone slabs. Head to NW.

(ii) Level +6', xxii, b. Skeleton laid on left side, head to N.

(iii) Level +4' 6", xxix, 3' 9" below Second Cement floor. Rough grave made of old bricks and stones, with brick floor, approx. 6' x 1'. Three iron nails came from it.

(F) The Gates of Nineveh

As will be seen from CEN 127, we remapped the site partly on account of the gates in the ramparts, and partly because of an error which had crept in in regard to the fortifications (CEN 120: see pl. Ixii). L. W. King (Suppt. to the Catalogue of Cun. Tablets, xix) went very fully into the literary matter of the Gates, and correctly suggested as a possibility for the Gate of Ashur the larger of the two breaks in the S. wall. From two prisms of Sennacherib, one written in Ab, 694 B.C., and the other, Marcheschwan, 696 B.C., it would appear that Sennacherib increased the number of gates in the Inner Rampart from fourteen to fifteen, changed the title of one, and entirely renamed another. The Assyrian king fortunately is precise in his description, giving them in both their order and their orientation. Taking them in their order in 696 B.C.:

(A) 'South and East'.

(a) Gate of Ashur, doubtless leading to the City of Ashur, and King's suggestion is probably correct (cf. also Rich, Koordistan, ii, 40). It is the larger of the two openings in the SE. wall, 20–30 yards wide, the walls being still 50' above the road. A dry wady in front shows how this wall must have been protected by the addition of running water, and the road appears to have passed what was once a suburb marked by rising ground covered by potsherds, etc. and noted by Rich (loc. cit.; cf. CEN 20).

(b) The Halzi Gate, for which there are two possibilities: (a) a well-marked opening in the SE. wall 200 yards E. of the Ashur Gate; (b) an ill-marked dip in the high NE. walling some 400 yards N. of the E. corner. (a) is well defined, with its walls still 40' high, but against it is the fact that it is very near the Ashur Gate; (b), on the other hand, is set very high in a high wall with an ill-defined gap.

(c) The Shamash Gate, of which there is no doubt. It is the best-marked gate in the walls, being marked by two high peaks close together in the NE. wall, and the gap (10 yards wide) is still used. The wall is about 50' above the roadway, and the liboa walling is still showing. It was excavated by Layard (Nineveh and its Remains, i, 123), who found it panelled with alabaster slabs.
(d) The Ninlil Gate, the gap to the S. of the Khosr, through which the little river runs through the walls. The present road passes to the south and probably marks the old road (see pl. lxx, fig. 5 and CEN, pl. iii).

(e) The Mushlal Gate. The word mushlal, often used in building-inscriptions, appears to mean a wall buttressed as a stairway (see Luckenbill, Anc. Rec., pars. 30, 49, 77–9, 124, 678, and vol. ii, 397, 468, and 725, in which two latter examples the mushlal is built of limestone blocks), and its position and appearance suggest a river-wall built in steps, perhaps connected with šalaš and the ladder. We shall discuss on p. 114 the great dam a little higher up at Ajilah, which we have identified with Assyrian work, one possibility being that this dam is the mushlal indicated. But the objection here is that the obvious gap which should lead to this dam is the next one, the Shibaniba Gate, and if, therefore, the two small alternative gaps in the wall which suggest themselves for the Mushlal Gate, about 500–700 yards N. of the Khosr gap, are not accepted, it may be that the mushlal either refers to what may be a very crude old dam represented about a mile below Ajilah by large masses of conglomerate, or more probably by the masonry which was still standing at the Ninlil Gate in 1905 (mentioned also by Rich, loc. cit. 39) and, in this last case, the Mushlal Gate would then be in the same gap as the Ninlil Gate, but on the N. bank of the river.

The title given to this gate, ‘That which causes the flesh of the ašakku-sickness to go forth’, was explained by King as indicating that it was a Leper’s Gate. It is quite reasonable to suppose that there may have been a sulphurous or bituminous spring in the neighbourhood, as at Hammam Ali and ’Ain Susra (cf. George Smith, Assyrian Discoveries, 94, 95).

(f) The Shibaniba Gate, i.e. leading to the place of that name. The gap is well marked and the present road through it leads to a ford below the lower dam at Ajilah.

(g) The Ḥalaḥḥi Gate, which fits the last gap in the NE. wall, still being used for a road.

(b) ‘North’.

(h) The Adad Gate, either a poor gap about 500 yards from the N. corner, or to be set less probably in the broader gap 500 yards farther on. The former appears to have been close to a tower on the walls, and if this really was the gate, the road outside would have had to cross a steepish wady, usually dry, the spring-head of which is only a few hundred yards distant in this saddle outside the walls.
(i) The Nergal Gate, the great gate in the NW. wall excavated by Layard (Nineveh and Babylon, 120), wherein he found colossal bulls and limestone pavements, the latter still marked by chariot-wheels. This gate leads towards Tarbiṣ (Sherif Khan). It is still marked by a high cone, but the sculptures, some of which were still here in 1905, have been taken away (see King, Cun. Texts, xxvi, 20).

(j) The Sin Gate, the gate of the New Moon, the most probable identification being a gap some 200 yards NE. of the W. corner of the walls, but a narrow gate without any distinction. It is worth notice that Kouyunjik lies midway between the Shamash Gate and the Sin Gate, the presumption being that an observer on Kouyunjik could mark at some period of the year the sunrise and crescent moon over these gates.

(c) 'West'.

(k) The Gate of the Watering Places, the most likely place being just under the W. corner of Kouyunjik, where the broad, shallow channel of an old watercourse marks the Tēbīltu which washed this flank of the mound, doubtless where the animals were watered. It is 150 yards broad, and is thus far more likely than the little gap 200 yards to the NW.

(l) The Quay Gate, obviously another water-gate, in the gap at the SW. end of Kouyunjik by the Khosr, doubtless on the right bank to allow entry to Sennacherib’s palace. As will be seen, the next gate, that on the other side of the Khosr, was added in 694 B.C., which would rather indicate the lack of a gate on the left bank.

(m) The Desert Gate, made after 696 B.C., the gap some 200 yards SE. of the present Khosr bridge, through which a road still passes.

(n) The Armoury Gate, naturally the gate under Nebi Yunus, where the Armoury was. It is a broad gate with a road leading under the N. slope of Nebi Yunus to the Shamash Gate.

(o) The Handūri Gate, an obvious gate in the SW. wall, but one of little distinction, about 500 yards SE. of Nebi Yunus. Handūri is a difficult word, with which be insurers, either ‘beggar’ or ‘pot’, might be associated. ‘Beggars’ Gate’ is unlikely here, as beggars would sit in the largest thoroughfares: ‘Gate of Pots’ is more likely, either because the potters had their quarter here, or because it represents the origin of the tradition noted by Rich (loc. cit., ii, 62) that Yarimjah, a mound and village about two and a half miles to the south of this gate, was considered to have been the ‘Pottery’ of Nineveh.
(G) The Agammu (Pool or Reservoir) of Sennacherib on the Khosr

In CEN 129 we discussed the waterworks which Sennacherib built for his city, and on pp. 130–1 we described an ancient double dam in the Ajilah gorge, some two miles NE. of Kouyunjik, which appears never to have attracted more attention than a mere passing reference to it as a 'dam' or 'mill dam' on the maps, as though it were of modern construction. But it struck us as obviously Assyrian work of a good period, and we think we can make out a case to have discovered the agammu of Sennacherib. After his description of his damming of the upper waters of the Khosr, he says: 'To assuage the flow of these waters I made an agammu (pool or reservoir) and set out a marsh within it: I loosed therein storks, wild swine, and pelicans.' This, as he goes on to say, made everything luxuriant, the vine, almond, cypress, and mulberry thriving, while in the thickets the storks nested and the wild swine multiplied.

Ajilah lies perched on the right bank of the Khosr on a bluff about two miles NE. of Kouyunjik. At this point the Khosr, here about 30 yards wide, exchanges its low undulating terrain for a defile between two steep heights, 80' on the W. and 120' on the E. respectively. The E. hill of conglomerate and reddish clay marks the N. end of the outer rampart, natural, it is true, but forming a slightly 'refused' flank.

In this defile is a magnificent double dam. That it is of Assyrian workmanship will be obvious from a comparison with the photograph (pl. LVIII, fig. 1) of the Assyrian walling at the base of Qal'ah Sherghat. Here are two massive river-walls, the upper about 150 yards upstream of Ajilah, the lower 250 yards below it, the river now passing unfettered through both.

Of the upper there remain three segments in or near the right bank, and a few ponderous masses up the hill-side. One segment lies broken off, at right angles to the stream, and this with the other two once formed a solid wall of roughly shaped blocks of limestone, sandstone, or conglomerate, firmly mortared together and built in at least five courses stepwise on the river-side and sheer on the bank-side, 5' 3" wide at the top and 8' 6" at the base at the NW. end, the height of the top above the water-level on 1st January 1928 being 4' 6". At the SE. end the width is 9' 6". The left bank opposite is some 20' to 25' high, of mud, full of martins' holes, and sheer almost to the water. Probably the original dam-gate or sluice was on this side, as there are certainly apparent remains of artificially cut stones, or, at all events, masses of conglomerate. Four hundred yards downstream of this is the second and far more imposing wall stretching diagonally across the river downstream from the left bank, but now, like the upper, without anything in the nature of a sluice-gate or dam to link it right
across. The total length is about 250 yards; the height at one point is 9′ 6″ outside, above the water which flowed past it, and inside, 8′ above the bank-level. The lower part is curved against the flow, as is natural, in two salients,
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1' 4" × 9", while the thicknesses of two blocks were 1' 3" and 1' 0". On the waterside, below the water-line, the wall was built of rubble.

Presumably the upper wall is to reinforce the lower by acting as an additional dam to a further supply of water above. The evidence would point to this undoubted Assyrian dam being the *agammu* of Sennacherib, by which he secured the irrigation of the fields which intervened between here and the heart of Nineveh, the alternative being, as we have already discussed on p. 112, that this dam represents the *mušlalu* (stepped river-wall) to which the Mushlal Gate led. But it is also possible that this *mušlalu* was the river-wall at the Ninlil Gate.

(H) OTHER MOUNDS NEAR NINEVEH

A. No. 1 mound (Hashamiyah) on the right bank of the Khosr, about one mile above Hashamiyah (not shown on Felix Jones's map). Position by magnetic compass: to Ḥalahhi Gate 197°; Minaret of Nebi Yunus 187°; highest point above dam (at Ajilah) 163°; Hashamiyah 158°. Not more than 1½ miles from the Ḥalahhi Gate. It is a small conical mound about 60' high and 30 yards in diameter.

This settlement seems to have been occupied only during the prehistoric period. We picked up blades of flint chert and obsidian together with some fine, hand-made, painted sherds resembling the finer examples from Kouyunjik, one or two coarse red unpainted ones, and buff sherds with striations (see pl. IX).

B. No. 2 mound (Abbasiyah), half an hour from No. 1 (which lies at 191° E. of N. from it). Position: Highest point above dam 179°; Minaret of Nebi Yunus 188°; Shibaniba Gate 193°. Right bank of Khosr. Width of mound 80 yards. The ancient Assyrian village lay to SE. on the flat. The summit was about 70' above the river, the lower half being probably natural, since the prehistoric sherds occurred at a height of 30' above the water. The painted sherds were much coarser than those from no. 1 mound and there was only one chert implement. The Assyrian site to the SE. was covered by a thick medieval deposit.

c. No. 3 mound (Gintarah). Position: Great Minaret, Mosul, 232°; Shibaniba Gate 234°; N. end of inner rampart of Nineveh, 244°; on dry wady, two miles from outer wall of Nineveh, 100 yards long, 60' high. Remains of occupation visible on flats near; one burnt brick found. On the mound itself fine painted and coarse red and buff sherds (as in no. 1 mound), with flint and obsidian blades, and a few later sherds (probably Assyrian). On the far side of the wady bounding the mound on the N. were flint and obsidian blades, one rather coarse painted sherd with hour-glass ornament, some plain buff and
black ware (uncertain date), part of a saddle-quern, and some late green-glazed ware.

D. Yarimjah. A high mound about 3½ miles to the south of Kouyunjik, past which the Tigris at one time flowed, leaving much of one side now exposed, so that the different strata of occupation from prehistoric times are clearly visible. We took out some obsidian flakes from the lower levels, as well as some chert flaked in the manner of flint, and in the strata and on the ground near were potsherds both painted and plain prehistoric, and one which might be Assyrian.

(I) INSCRIPTIONS

(1) Stone

No. 1. Inscription of Tukulti-Ninurta II (890-884 B.C.) on a limestone slab (3' 2" × 3' 2½"
× 10") found in the palace of Ashurnasirpal (xviii, c, 24). In later times it had been cut down and the back hollowed as a trough 6½" deep. The phraseology is much like that of Ashurnasirpal.

(1) ["Tukulti-"Innurta šar kiššati šar maš-Assur] ašip Adad-nirari šar kiššati šar
maš-Assur ašip Assur-dan(an) šar kiššati šar maš-Assur-na (2) gišm (?) riša šarru ša
ištu (sic) šir-ta-an ašu Dilkat a-di mašu Išu-te (3) [mašu La-ši-ša ana si-šir-ta] ša mālāti Na-i-ri a-na
pat gin-rī-ša mašu Su-hi a-di (4) [ašu Ka-pi-ši ištu mašu ni-riš] mašu Kir-ri-ša a-di mašu Gil-za-a-ni
mašu A-pa-a šar ašu Hiu-nu-ši-ša (5) [kat-su ilₙₕu-ši-ša ištu ni-riši ša mašu Ba-bi-te a-di (6)
[mašu Haš-mar mašu Za-ma-a ana] si-šir-ta-ša ištu mašu Za-ba šašilila(i) (7) [a-di ašu Til-ba-ari ša]
el-lu-zu Za-bašu mašu Hi-ri-mu mašu Ha-ri-tu (8) [mašu-ba-a-te ša mašu Kar]-du-ni-šu ištu ašu Su-ši-ša
ša er mašu Dilkat a-di (9) [ištu ašu] Dur-Kuri-gal-zi a-di ašu Si-bur ša ilₙₕu Ša-maš ašu Si-bur

(1) [Tukulti-Ninurta, king of multitudes, king of Assyria], son of Adad-nirari, king of multitudes, king of Assyria, son of Ashur-dan, king of multitudes, king of Assyria: (2) ... [all] (?) of it (?); the king who from across the Tigris as far as the land of Hatte; (3) [the land of Lakē throughout] its [whole extent]; the lands of Nairi in their length and breadth; the land of Suši as far as (4) [the city of Rapiš]; from the pass of the land of Kirāri as far as the land of Gilzāni; Apā, the king of Ḥubushka (5) ... [his hand cap]ured (?); from the pass of the land of Babīte as far as (6) [the land of Hashmar; the land of Zamua throughout] its whole extent; from the lower Zab (7) [as far as Til-bāri which] is above Zaban; the lands of Hīrimu (and) Ḥarūta (8) [the fortresses of the land of Kāršūniash; from the city of Suši which is on the Tigris as far as (9) ...; [from] Dur-Kurigalzu as far as Sippur of Shamash

1 From the evidence of ll. 1 and 7 there are about eight characters missing at the beginning of lines throughout.

2 A new name.

3 For Apāši (see Schell, "Annales de Tukulti-Ninur II"), where the king lost his way in the "woods" for three days before he came to Dur-Kurigalzu.

4 Possibly no. 19 is a duplicate of ll. 1-4: (1) E-[kat "Tukulti-Ninurta, etc.]; (2) ašip Assur-dan(an), etc.];
(3) giš-r[še, etc.]; (4) a-na [si-šir-ta, etc.]; (5) a-di "[ašu Ra-piš] ...
THE EXCAVATIONS ON THE


No. 2. Limestone slab from xxi, c, 10 (out of place, some 15' above Ashurnaširpal's palace).

(1) "Aššur-našir-pal šarru dan [nu] ... (2) šu Bēl ša šiṭ-rī-šu ... (3) šu ša-[nu-tu] ... (4) šu ik-[šu-nd] ... (5) ihu ...

(1) Ashurnaširpal, the powerful king ... (2) Bēl, who his name ... (3) the mighty mountains ... (4) his hand conquer[ered] ...

No. 3. Limestone (lxix, 9). Doubtless the inscription related to some large pieces of sculpture of the protecting demon raising his club, which were found in the debris, doubtless originally from Ashurnaširpal's palace. For a representation see pl. lix, fig. 2, and probably the demon in the frontispiece of my Devils, vol. ii.

(1) Nu-ad-ru gab-šu sa-ak-pa an ... (2) kippu tar-su ta-rīd pa-ni ... (3) la a-di-ru sak ... (4) la-hu da ... (5) kāṭ (?!) ...

(1) Fierce, powerful, overthrowing ... (2) Kippu stretching out, driving the front ... (3) not fearing ... (4) la-hmu ...

Nos. 4–10. Pieces of limestone inscription from various places on the temple site, forming fourteen lines horizontally between two sculptured scenes of Ashurnaširpal, the upper being the attack of the lion on his chariot, the lower his thanks for his safety (see pl. lix, fig. 4, and CEN, pls. vi, vii). It probably records the restoration of the Temple of Ishtar (cf. l. 9, and see King, Annals of the Kings, 158). On the back, inscribed in the direction from the bottom to the top, is an inscription in large characters of a dedication to Nabu by an unknown king, probably Adad-nirari III (see no. 49). He has avoided the curse by not obliterating Ashurnaširpal's name, but certainly removed the slab.

(1) ... nakirē š[u ana šu-pē]-šu] u-sik-niš ... du-[šu-ma ...] [ta]-ru ... rabûntu [ku]-sua ... ka-hu ... (2) ... [š]a ... (3) ... šu [niš ... na] ... (4) ... šu [i]-ha ... (5) ... šu [t]-lu-tu ... [šar ...] (6) ... šu [a]-nir ... (7) ... šu [šu-ša]-ni ... (8) ... šu [šu]-ri ... (9) ... šu [šu]-nu ... (10) ... šu [šu]-ri ... (11) ... šu [šu]-ri ... (12) ... šu [šu]-ri ... (13) ... šu [šu]-ri ... (14) ... šu [šu]-ri ...

(1) ... subdued his foes [to his feet] ... and ... the great [ša] his hand conquer[ered] ... (2) ... weapon, sceptre ... (3) ... all princes, the glorious, the lord of lords ... (4) ... [Ashur-
1. Inscription of Tutulu, Neburta on limestone slab from XVIII.C.24 (the Palace of Ashurnasirpal), in later times shaped and used as a trough, 32' x 32' x 10', trough 63' deep.

2. XXI.C.10 Limestone

3. LXXX.9 Limestone

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TEMPLE OF NABÛ AT NINEVEH

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nasirpal, king of Assyria, son of Tukulti-Ninurta, king of Assyria, son of Adad-nirari... (5)... from the other side of the [Lower Zab] (6)... and the broad lands of [Nairi] (7)... [from the passes of Ba][bite as far as Hushmuri unto the people [of my land I counted] (8)... the fortresses of Karduniash to the borders [of my land I added]; (9) [the Temple of Ishtar] my great [lady] which the king(s) preceding me had bu[ilt] (10)... I restored, as a dwelling for [her divinity I made] (11)... therein I put. (12) [If any prince]... his lordship in all ... (13)... [who] (my) written name shall [erase, shall write his own name] (14)... may famine [come upon him].

No. 11. Basalt, mentioning Ashur.

Nos. 12-16 (20 ?). One complete slab and four (perhaps five ?) pieces of others, of Adad-nirari II (c. 911-891 B.C.), all found a few feet above the excavated chamber of the palace of Ashurnasirpal. A duplicate text exists on a cylindrical basalt object in the British Museum (King, Annals, 154).

(1) Ekal µmin Adad-nirari (2) šar kiššati šar ṭāru Aššur (3) apil Aššur-dan (2) šar kiššati šar ṭāru Aššur (5) apil Tukulti-apil-Ešar-va (6) šar kiššati šar ṭāru Aššur-ma.

(1) Palace of Adad-nirari (2) the king of Assyria (3) son of Ashur-dan (4) the king of hosts, king of Assyria (5) son of Tiglath-Pileser (6) the king of hosts, king of Assyria.

No. 17. Ashurnasirpal (restored from several texts in King, Annals). Duplicate on both sides. About 15' above the excavated chamber of his palace.

(1) [rapsaštu][tu] márratu Na-i-ri (2) [ana] patašīm-ra si-ša mátna La-ki e (3) a-ni si-šu-ša mátna Sa-hu (4) adi ašu Raa-pi kí ana šepaš-tu (5) ušik niš [ištu ni-riš ša mátna Kir-rū-ri (6) adi ašu Gil-za-an-ri šu ni-riš (7) ša ašu Ba-bit a-di mátna Haš-ma (8) ana niš šu mátna ša anu ištu e-biš-na-an (9) ura Zaa-ba šupita(an) adi ašu Til-ba-a-ri (10) ša ašu la-an mátna Za-ba-an-riš (11) ašu Tiša-ša Za-ab-da-ni ašu Til-ša-Ab-la-ni (12) ašu Hišimu ašu Har-tu (13) [ke] ra (4)? [ke ša mátna Kar-du-ni-šu], etc.

(1) The [broad] lands of [Nairi in their] (2) length and breadth; [the land of Lake] (3) throughout [its] whole extent; [the land of Suhî] (4) as far as the city of Ra[piki unto his feet] (5) he subdued. [From the pass of the land of Karruri] (6) as far as the city of Gil[šani; from the pass] (7) of the city Ba[mite as far as the land of Hashmar]; (8) as the peoples of [my] land [I reckoned. From across] (9) the [lower] Zab [as far as the city of Til-bârî] (10) which is above [Zaban, from] (11) the city of Til-ša-[Zabdani as far as the city of Til-ša-Abtani] (12) the cities Hišimu (and) Har[tu] (13) the fortresses [of the land of Karduniash], etc.¹

No. 29. Presumably duplicate of no. 69.

No. 31. Sennacherib.

¹ Restore the text of obverse no. 32, ll. 3-4, a marble inscription probably of Ashurnasirpal, from ll. 7-8, and ll. 4-5 probably from ll. 8-9. Reverse, from ll. 8 and 9. Restore: no. 23, obverse, ll. 3-4 from ll. 8, 9, but ll. 1, 2 are uncertain: reverse, from l. 9 (?), and for l. 2 read [ša]-šu-[ud] ? No. 25 mentions ura Za-šu.
THE EXCAVATIONS ON THE

No. 32. Mentions Marduk, i.e. the Temple of Nabû and Marduk.

No. 34. Text of Ashurnaširpal.

(i) ... te (?) a-na ... (2) [ha-su ik?] šu-du ištu riš[e-ni] (3) [mūra Su-ud] na-at a-di [ni-rib ša bi-ta-ni : raptāti māt]i Na-i-ri [naa paš (4) gin-rīša māt]i La-kî-e ana [i-hir-ti-ša], etc.

[his hand] captured (?) ; [from the source of the river Sub]nat as far as [the pass which lieth over against it], etc.

No. 39. Uncertain.

(1) ... a-akī a ... (2) ... mu (3) ... nīš (?) (4) ... uš-ta-na-bal (?) (5) ... et-ap-pa-šu (6) ... ti-i-a (7) ... u-ra-a ... (8) ... [tib (?)] bi zak-pu (9) ... su ... (10) ... -iš a-duk (11) ... u a-na "ana .....

Only a few words intelligible : (4) 'I caused to bring' (5) 'I made' (8) 'planted [in the midst (?)]' (10) '[with] my [weapon?] I slew'.

No. 41. Sargon’s dedication to the temple (cf. no. 69).

No. 42. Uncertain. Inscribed on both sides.

(i) ... [šar] yu rabû(u)... (2)... rabû(u)... (3)... šakû išù Bèl šangu [išù Aššur] (4)... dan apil(?) ...

No. 43. Sennacherib (?)

(2)... la šī... ma (?) (3)[a-na] kūni pâšu Bîl-â-ki-il (4)... iš-ku-un (?)... ku uš-šiš.

... not ... for the security of his reign the Temple of the New Year’s Feast ... he settled ... he caused to make.

It is Sennacherib who on K. 1356 (a tablet from Nineveh) relates how he built the Temple of the New Year’s Feast. of which ‘the cult had been forgotten since days of old’ (see Luckenbill, Sennacherib, 139: Fallis, The Babylonian Akitu Festival, 260). This block was found in the base of a wall (+ 8’ 7") which was near another wall containing a piece of Sennacherib’s sculpture (+ 2’ 5’).

No. 44. Ashurbanipal. Limestone paving slabs, of which about eighty were found complete; from these and from the pieces it may be calculated that there were originally about four hundred. These were laid face down in his pavements. The inscription has long been known, having been published in Layard, Inscriptions, pl. 85, and S. A. Smith, Keils. Asurb., i, 112. Translated in Luckenbill, Anc. Rec., ii, 383.

(1) 1 a-na ... inu Nabû bēli šīru a-sib Ezá-da (2) ša kiriō2 Ninuakkī bēli-šu ... išù Aššur-bani-pal šar ... ša-kīšu ... ša-kan šēmi ... ša-nân ur-tišu kābit-ti4 (5) ina mit-ku-ši ... abīšti akkisu(šu) ... sa-nārub ... šu-nārub ... ša-nārub ... šu-nārub.

1 V. ana. 2 V. šer. 3 V. ša-kīšu inu Aššur-bani-pal šar. 4 V. inu Aššur-bani-pal šar.
TEMPLE OF NABÛ AT NINEVEH


(1) Unto Nabû, the supreme lord, dwelling in E-zi-da (2) which is in the middle of Nineveh, his lord: Ashurbanipal, king of Assyria, (3) the one sought after and desired by his great divinity, (4) who at the utterance of his behest and the giving of his weighty ordinance (5) in the shock of battle cut off the head of the Teumman, (6) the king of Elam, and, as for Ummānigash, Tammaritu, (7) Pa'ē, Ummanaïdālas, who after Teumman (8) ruled over Elam, by his great command (9) my hand captured them and (10) unto the wagon, the vehicle of my majesty, (11) I yoked them and by his great aid (12) throughout all lands I secured what was due to me. (13) In those days the court of the Temple of Nabû, my lord, (14) with solid limestone its area I enlarged. (15) For all time, O Nabû, look with joy (thereon), and (16) may it be pleasing unto thee by thy ruled line (17) the securing of a life of long days for me, (and) (18) may thine ordinance go forth that (19) my feet be long to tread E-zi-da before thy presence.


Face A (mutilated).

Face B. (1) ... (2) e-pu-su ... (3) i-na ... (4) ar-ki ... (5) il śanši(ši)-išu A[dad] ... (6) šar mâtu Aš[ur] ... (7) šarru a-lišiška ... (8) ... ma (?) ina ... [The temple (?) of which ...] had built ... in ... after ... Shamši-Adad, the king of Assyria, the king going before [me] ...

Face C (mutilated). Face D, uninscribed.

No. 48. Fragment of alabaster bowl, xxxix, 4.
(1) ... 2 [m il ŠAš] sur-aḫ-e-iddin ... (2) ... ti mâšu Ku ... Esarhaddon's name, followed by an uncertain phrase which might possibly be [ki-ši?]-ti mâšu Ku[-uša] 'spoil of Kush'. But doubtful.

No. 49. Inscription on the back of Ashurnasirpal's sculpture (see no. 4). Dedication inscription for the Temple of Nabû.

1 V. dâ-i-ni. 2 V. tu. 3 V. KUR. 4 V. GID. DA. 5 V. LAL. 6 V. NIGIN. 7 V. mēditâ. 8 V. ma-a-tu, ma-a-ti. 9 V. ana. 10 V. lat. 11 V. pa-nu. 12 V. DIŠ. 13 V. DU. 14 V. bâiš, TIL. L.A. 15 V. uk. 16 V. GIN, GIN ku, GIN. GIN-iš. 17 V. ma-bar. 18 Tikip šataškša, a difficult and uncertain phrase.

VOL. LXXXIX.
(2) Bricks.

Bricks of Tiglath-Pileser I (c. 1100 B.C.).

No. 53. XIX, c. 19. (1) Ekal =Tu[kulti-apil-Ešar-ru] (2) šar kiššati [šar ṣaṣu Aššuri].

Palace of Ti[glath-Pileser], king of multitudes, [king of Assyria].

No. 54. A (xii, 7) : 54, B (xxii, and xxii, 11).

No. 55 (XIX, c. 7 : and duplicate from debris).


Palace of Tiglath-Pileser, the powerful king, king of multitudes, [king of Assyria], son of Ashur-rish-ishi, the powerful king, king of multitudes, king of Assyria, son of Mutakkiš-[Nusku], the powerful king, king of multitudes, [king of Assyria], who hath knitted the river-dam . . .

Bricks of Ashurnasirpal (883–859 B.C.).

(Composite texts from bricks, their provenance given on pl. xliv).

No. 56.

(1) Ekal =1 Aššur-našir-apli šar kiššati šar ṣaṣu Aššuri (2) apil =1 Tukulti-Ninurta šar kiššati šar ṣaṣu Aššuri apil =1 Adad-nirari (3) šar kiššati šar ṣaṣu Aššuri-ma bit ušIštar (4) liš ùš Ninua āpūš-ma arššip.

Palace of Ashurnasirpal, king of multitudes, king of Assyria, son of Tukulti-Ninurta, king of multitudes, king of Assyria, son of Adad-nirari, king of multitudes, king of Assyria; I have made and built the Temple of Ištar in the midst of Nineveh.

No. 57. This varies in l. 3 with ša, 'of', instead of 'in the midst of', and ak-šir, 'I have knit', instead of arššip. This restores King, Annals, p. 157.

No. 58. Lines 1 and 2 as ll. 1–3 above, to ma.1 Line 3 ša bit na-at-hi ša ùš Ninu-a, 'Property of the bit-nathî of Nineveh'. As a possible suggestion nathî might be referred to ùš, 'cut up in pieces', of meat of animals, etc., i.e. the place where the carcasses were cut up.

No. 59. Same as ll. 1–3 (to ma) of above (King, Annals, 156).

No. 60. Same as above, without 'palace' in l. 1.

1 Sometimes omitted. 1 Variants l. 1, danni for kiššati, l. 3, ma for nu.
TEMPLE OF NABÛ AT NINEVEH

No. 61.

(1) Ἀσσur-naṣir-apli šaknī ʾlu Bēl šangi Aššur (2) apil Tukulti-Ninurta šaknī ʾlu Bēl šangi Aššur (3) apil Adad-Nirari šaknī ʾlu Bēl šangi Aššur.

Ashurnasirpal, prefect of Bēl, priest of Ashur, son of Tukulti-Ninurta, prefect of Bēl, priest of Ashur, son of Adad-nirari, prefect of Bēl, priest of Ashur.

No. 62. Uncertain.

No. 63. Cf. no. 58. ik-ṣir (?) for ak-ṣir (?)

Bricks of Shalmaneser II (858–824 B.C.).

(Composite text from bricks, their provenance given on pl. xliv).

No. 64. (Cf. KA II, 107).

(1) ᾳkal m ʾlu Šulmanu(ma-nu)-aṣarid šar kīšati šar mātu Aššur (2) apil m ʾlu ᾳsur-naṣir-apli šar kīšati šar mātu Aššur (3) apil m Tukulti-Ninurta šar kīšati šar mātu Aššur-ma.

Palace of Shalmaneser, king of multitudes, king of Assyria, son of Ashurnasirpal, king of multitudes, king of Assyria, son of Tukulti-Ninurta, king of multitudes, king of Assyria.

No. 65. As above in two lines.

Bricks of Shamshi-Adad V (823–810 B.C.).

Nos. 114 (IV, 1), 119 (VII, 3, 10). (Restored from bricks found in 1929).

(1) [Ekal ʾlu Šamši]-Adad šarru dan-nu (2) šar kīšati šar mātu Aššur šar mātu Šu-me-ri Akkadian (3) [apil ʾlu Šulmanu(ma-nu)-aṣarid] šar kib-rat ūribiti (4) [apil ʾlu Aššur-naṣir-apli šar kīšati] šar mātu Aššur-ma.

[Palace of Shamshi]-Adad. the powerful king, [king of multitudes, king] of Assyria, king of Shumer and Akkad, [son of Shalmaneser] king of the four regions, [son of Ashurnasirpal, king of multitudes], king of Assyria.


(Composite text from bricks, their provenance being given on pl. xliv).

No. 66.

(1) ᾳAdad-nirari šaknī ʾlu Bēl šangi Aššur (2) apil ᾳSamši(ti)-Adad šaknī ʾlu Bēl šangi Aššur (3) [apil m ʾlu Šulmanu(ma-nu)-aṣarid šaknī ʾlu Bēl šangi Aššur-ma (4) [bit ᾳNa]bē bēlī-šu ša ki-rīb ᾳlu Ni-na-a (5) [ultu ušši]-šu adi tah-šu-bi-šu (6) [ana balaši-šu] Šulmu(mu) zirēšu u mātī-šu epaš(šu).

Adad-nirari, prefect of Bēl, priest of Ashur, son of Shamshi-Adad, prefect of Bēl, priest of Ashur, the son of Shalmaneser, prefect of Bēl, priest of Ashur, [the Temple of Na]bû his lord, which is in the middle of Nineveh, [from] its [foundation] to its roof [for his life], for the welfare of his seed and (his) land he hath made.

No. 67. xviii, c, 26, probably similar to above, but shorter.

No. 68. Lines 1–3 of above, except that l. 3 has omitted ‘prefect of Bēl’.
THE EXCAVATIONS ON THE

Sargoun (721–705 B.C.).

No. 69. Text from his limestone slabs in his pavement (xxvi–xxvii) and NE. doorway; with duplicates from about twenty-eight bricks (provenance on pl. xlvi). Also ii. r. 6, no. vii.

(1) "Šargina šakni₁₃ tia Bēl (2) nisak₂₁ šar Aššur (3) šakkanak₂₂ Nabū u₂₂ Marduk (4) bēš Nabū u₂₂ Marduk bēš (5) ūltu₇ uššišu₂₇ adi tah-lu-biš (6) a-na balaṭišu₂₇ šulmu₇ (7) ziršu₂₇ za-kap₇ ukakri₇ (8) šutšur₇ e-bur₇ mën₂₇ Aššur₇ (9) ša-lam₇ mën₂₇ Aššur₇ epuš₇ (1)²

Sargoun, prefect of Bēl, minister of Ashur, priest of Nabū and Marduk, the Temple of Nabū and Marduk, the lords, from its foundation to its roof for his life, the welfare of his seed, the destruction of his enemies, the prosperity of the crops of Assyria, the safety of Assyria he has built.

No. 70. Bricks from the Well and Latrine.

(1) "Šargina šarru danu šar kēšati šar mën₂₇ Aššur (2) bit bēš Nabū liš Ninurta (3) ana balaṭišu₇ arak balaṭišu₇ (4) ūltu₂₇ uššišu₂₇ adi tah-lu-biš (5) epuš₇ (6) uššak-lēl.

Sargoun, the powerful king, king of multitudes, king of Assyria, the Temple of Nabū in the middle of Nineveh, for the preservation of his life (and) the prolongation of his existence, from its foundation to its roof he has built, has completed.

No. 71. xxiv, pit, 1' below pavement. Similar text, with some change in the lines.

No. 72. Two bricks from Tag, near 'Ain Seifna.

(1) Ekal "Šargina (2) šakni tia Bēl nisak Aššur (3) šarru danu šar kēšati šarmatu Aššur.

Palace of Sargoun, priest of Bēl, minister of Ashur, the powerful king, king of multitudes, king of Assyria.

No. 74. Fragment from xxxii, 6.

(1) "Šargina šarru... (2) awt(e)Dur... (3) muššad (4) tia...

No. 80. xxviii, 12.

(1) "Šargina šar kēšati šar mën₂₇ Aššur (2) bit tia Siu₂₇ šamaš bēš (3) ša liš₂₇ Dūr-Sargina (4) ūltu₂₇ uššišu₂₇ adi tah-lu-biš (5) ša-na₂₇ balaṭišu₂₇ kēši₂₇ pal₇ (6) šutšur₂₇ e-bur₂₇ mën₂₇ Aššur₂₇ (7) ša-lam₂₇ mën₂₇ Aššur₂₇ epuš₂₇ (8).

Sargoun, king of multitudes, king of Assyria, the Temple of Šin and Shamash, his lords, in the middle of Dūr-Sargoun, from its foundation to its roof for his life, the establishment of his reign, [the prosperity of the crops] of Assyria, [the welfare] of Assyria, he has built

¹ V. ša-ak-ni.
² V. e-bur.
³ Omitted on variant.
⁴ V. Aššur.
⁵ V. epu-šu.
⁶ V. awt(E)
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Bricks of Sennacherib (705-681 B.C.).

No. 75. Surface.
(i) [m ɪnSi]n-aḫēʾ-eriba (2) šar mānu Aššur.
[Sen]nacherib, . . . king of Assyria.

No. 76. xxvi (2), 3 (2).
(i) [m ɪn] Sin-aḫēʾ-erib-[u] (2) [šarru] dan-nu šar mānu Aššur-ul.
Sennacherib, the powerful [king], king of Assyria.

No. 78. Probably surface. Sennacherib fragment.

No. 79. Surface. Sennacherib fragment.

No. 81. xxviii ? (cf. no. 100, xxii, b, 13).
(i) [E]bat [m ɪn]Sin-aḫēʾ-[eriba] (2) [šarru] rabu šarru dan-nu šar kiššati šar mānu [Aššur].
Palace of Senna[cherib], the great [king], the powerful king, the king of multitudes, the
king of [Assyria].

No 82. xxxvii, 6 (cf. nos. 91, xxxvi, 8: 92, xxv, c, 5: 95 a, lxxxiv, 4: 95, b, surface: 96, xxvi, b, 7).
(i) Māt [m ɪn]Sin-aḫēʾ-eriba (2) šar kiššati šar mānu Aššur.
Country of Sennacherib, king of multitudes, king of Assyria.

No. 83. From Sennacherib’s house which he built for his son, from which came the
Ezerhadon prism, and about four score pieces of others. Cf. no. 98, surface.
(i) [m ɪn]Sin-aḫēʾ-[eriba] . . . (2) nītu ša-bat (?) šar (?) . . . (3) bēlī a-nu [māri-šu epuš].
Sennacherib . . . after . . . (?), a house for [his son he built ?].

Nos. 85, 97, 101, also Sennacherib’s house.
(i) [m ɪn]Sin-aḫēʾ-eriba šar mānu Aššur (2) it-ti RU. E. APIN 1 Ninua 2 (3) bēlī epuš-na
a-nu māri-šu iiddin.
Sennacherib, king of Assyria, near the gardens 2 of Nineveh, a house hath built and
given to his son.

Nos. 84 (xxx (?), 9 (?)), 87 (xxviii, 7), 88 (picked up E. of Nebi Yunus), 94 (li, 3), 113
(xci, 6), 118 (xi, b, 9), 120 (viii, b, 1), 121 (surface).
(i) Ebat [m ɪn]Sin-aḫēʾ-eriba (2) šarru rabītu [šarru danu?] šar kiššati šar mānu (Aš)-šur

1 So Scheil’s duplicate (Z.A. xi, 425: RT. 1900, 37), which adds the name of the son, Ashur-shum-ashibishi.
2 The actual place whence these came was in a locality which might thus be described.
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(3) ekal nāri-[ia ku]di-un\(^1\) G1N (?). A (4) a-na mnšāb be-lu-ii-šu (5) ki-riḫ \textit{alu}Ni-u^2-a \ldots epuš(uš).

Palace of Sennacherib, the great king, [the powerful king], king of multitudes, king of Assyria: the palace of my true (?) youngest son for the dwelling of his lordship in the middle of Nineveh \ldots I built.

No. 86. Surface.

\(\ldots\ [m\ i.n] \textit{Sin-ahê} \textit{eriba šar män\ Asšur} (2) \ldots \textit{ki-riḫ alu} \textit{Ninnaḫi} (3) \textit{še-piš} (4) \ldots \textit{ma (?) \ldots}\)

Sennacherib, king of Assyria, the \ldots in the middle of Nineveh caused to build \ldots

No. 93. From Beisan.

\(\ldots\ \textit{Sin-ahê} \textit{eriba (2) [šarru rabû šarru dan]-nu şar kiššati šar män\ Asšur} (2) \textit{dûra u šal-hu-u ša alu} \textit{Ninna es-siš (3) u-še-piš-ma u-sak-ir ḫûr-ša-uš}.

Sennacherib, the great king, the powerful [king], king of multitudes, king of Assyria.

No. 99. xxxi, 7 (dup. of inscription on slabs from the wall of Nineveh, xxr. 6, no. viii, n).

\(\ldots [m\ i.n] \textit{Sin-ahê} \textit{eriba šarru rabû(u) šarru dan-nu šar kiššati šar män\ Asšur} (2) \textit{dûra u šal-hu-u ša alu} \textit{Ninna es-siš (3) u-še-piš-ma u-sak-ir ḫûr-ša-uš}.

Sennacherib, the great king, the powerful king, king of multitudes, king of Assyria, the wall and rampart of Nineveh anew I caused to build and raised as high as the mountains.

No. 102. From Sennacherib's house (as above).

\(\ldots [m\ i.n] \textit{Sin-ahê} \textit{eriba šar kiššati šar män\ Asšur (2) \ldots [šu alu] Nï-nu-a eššēš(es) epuš(uš)}.

\ldots [Sennach]erib, king of multitudes, king of Assyria the \ldots [of] Nineveh anew hath built.

Nos. 103–12, and 116. Various fragments of bricks written in archaic style.

No. 122. a. The Tablet from Ashurnaṣīrpal's Palace. In or on top of the wall of this palace were found two pieces of a tablet which when joined showed that the original tablet had been very large and thick, and written in six columns. It can hardly be later than the ninth century B.C.; it is written in a very minute handwriting, hard to read without a glass, and made still harder by the action of time. It is not unduly laudatory to say that it is a unique tablet from Nineveh, as it gives in poetic form the details of the wars of early Assyria, particularly against the Kassites who had occupied Babylonia. Column II deals with the events of the reign of Ashur-uballit II (c. 1386–1369 B.C.), the king of Assyria who corresponded with Amenhotep IV, the father-in-law of Tut-ankh-Amen, about the wild Arab tribes of the Suti, thus rousing the jealous fears of the Kassite king Burna-Buriash, who was not only in touch with the

\(^1\) Suggested restoration from KAH, i. 43, 5.

\(^2\) V. na.
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Egyptian king, but also had married his son to Amenhotep’s daughter. The successor of Burna-Buriash, who was actually the grandson of Ashur-uballit, by name Kadashman-Kharbe, was murdered in a revolution in Babylonia about 1368 B.C., and a usurper took his place, who was shortly to be overthrown by Ashur-uballit in vengeance for his grandson. This is the episode up to which the second column of our tablet is leading, opening with the address of the Assyrian troops to their king. Column V begins with an account of the octroi between Assyria and the Kassites under Tukulti-Ninurta, king of Assyria (c. 1256–1233 B.C.), and the imprisonment of certain Kassite merchants who had run the blockade on behalf of their king. The interesting point is that the Assyrian king, treating them kindly, sends them back home with his signet-seal as a gift to the Kassite monarch, and this is curiously confirmed or paralleled by a tablet of Sennacherib (c. 2673) \(^1\) about the beginning of the seventh century, which is inscribed with the direct copy of a text ‘written on a seal of lapis-lazuli’, and giving the inscription on the seal: ‘Tukulti-Ninurta, king of hosts, son of Shalmaneser, king of Assyria; booty from Karduniash (i.e. the land of the Kassites). Whoever destroyeth my inscription or my name may Ashur and Adad blot out his name and land.’ This seal from Assyria to Akkad \(\ldots\) \(\ldots\) (went), but I, Sennacherib, king of Assyria, after six hundred years conquered Babylon and from the spoil of Babylon I brought it forth’. On the edge of the tablet is written in archaic characters ‘Property of Shagarakti-Shuriash, king of hosts’. Now Shagarakti-Shuriash was the father of Kashtiliash II (c. 1249–1242 B.C.), the Kassite king with whom Tukulti-Ninurta was compelled to fight, defeating him and capturing Babylon. It may well be, therefore, that we have for the first time the story how the seal was first sent down as a friendly gift to Shagarakti-Shuriash, after which, apparently, it was recaptured by the donor, only to be lost once more and then regained by Sennacherib; presuming, of course, that it is the seal mentioned. From the prayer of the Assyrian king, it is clear that the fires of hatred between the two countries are already being fanned.

COLUMN I

(1) ... bu (2) ... ru (3) ... ki (4) ... ša-ak-nu (5) ... u ... ši-iš (6) ... pu-hur ... e-li (7) ... du-nu (8) ... iš (9) ... ma (10) ... e-pi-ri (11) ... e-lu-zu-a-an-an (12) ... [u-maš] šeru ma-te-ma bat-tu \(^2\)

(13) ... Ku-ti-i u-sed-kin (14) ... u-ki-iš kat ... (15) ... ma-li-ki (16) ... la-li ba-nu-la-at ... àli (17) ... ir-ta-su pi-ri ... ti (18) ... [šu] kussi ku-du-ur-ra ... ah (19) ... marati ki ru-bè-ù-a-an-an ... Ninà (20) ... la-eš-an šurru u bi (?) ti

(21) ... ša kip-pa-su (22) ... pa-at ... be-ri (23) ... ša-a ni-sir-ùa ... ilu-ul (24) ... la-at la-a mi-ni ba-u-la-âli (25) ... [šu] pu-su IX ... lu-at-ru (26) ... ku-li-ta šu-nu iš-a-at-ma (27) ... la-šu-nu i-kam-mar ma-an-nu (28) ... ga-li bi-i-ta ki-na ... (29) ... di-e mi-nu-ul ... iša narkabat \(^3\)

\(^1\) King, Tukulti-Ninib, 1, 106.
\(^2\) ‘... left never (a one) alive.’
\(^3\) ‘... daughters, princesses of Nineveh.’

\(^4\) ‘The number of the chariots.’
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(29) ... šar Kašši-i nišir-ta' (30) ... IGI-BAR tam-ha-ri (31) ...-nu-at ši-hir-ri
(32) ... i-ru-ut ma-a-ri (33) ... ka-nu-ba-ka (34) ... ri ri-

(35) ...-nam-ma (36) ... gi u ... (37) ...-kad ... (38) ... 16. kakki ... 

COLUMN II (top broken off)

(1) [Šar-r]u [i] li-[îk] ... (2) ku-ra-du-šu ina ... 
(3) be-li iš-tu ri-š palē 1 2 -ka [ti di] ? 
(4) ša-ab-ru u i-pi-ri ru i-si-nu hi-i-li u ... 
(5) tu-ta-hi-za-an-ti-an na-tu-šes-kun-un te-še-e sa-[a]u (?) ri (?) ... 
(6) ina ti-tu hu-ne-ri-ka dam-ka-ti mu-tu-ta ni-li-li-[ik] 
(7) ina palē 3 šarru-ri-ka ul iš-zi-zi man-ma an na-ma a-na ma-h-ri-[ka] 
(8) ina kiššat nu-a-ti tānu u sadī(i) te-lu-ut ka ša-ak-na-[at] 
(9) ina meiti 4 ši-bir-ri-ka tu-te-es-kun a-na šāri iš-bišti gi-me-ir kibrāti 5 
(10) tu-tir-ri-ri šeš nāti-ka anu mi-š-ri la-a ni-ni pu-lum-gi tuš-šin 
(11) i-ru-ru ka-rar-du-ut-ka šar-ra-ri 6 i-ta-na-da-ru ša-ba-li-kā 
(12) u ki-ma tu-te-la-mad ša arki-ša la-at-tar-ka-su na-šu-ru pu-ul-la-at-a-[a] 
(13) i-na-an na ku-bu-ut anu šar Kašši-i la-an si-ma-ni su-pu-ul be-[ši]-šu 
(14) pur-ri-ri di ki-š-ri ša ut-la-aš-ku-nu šu-mi išši 7 
(15) abi ki-ma marţi 8 šīme 9 iš-li ul-la-a limutta-[ta]-ni šu-te-š [ši (?)]-ul-ma 
(16) šu-ta-šu 8 anu ga-bur-ti-ni gi-na-a i-šu-[š]-u ni-iš-ša 
(17) u-za-an-mar ūmī(m)iš šan mana ulu-šu mištu 10 Aššur šii-ri-ši-ša-at u-ba-an-šu 
(18) ut ta-nam-ta ka-a-na anu šarru-ut Aššur šii-iš ši-tar-ka-ši ši-tu 
(19) i ni-is-ni-ka napša-[la (?)]-šu li (?)-ib (?)-lu-ut a-lik pa-na li-nu-ut la-ia-a-ru 
(20) ina ša-[š]a-ni in-ši-ta-ni ku-bu-ut lu-u ša-ab-lu 
(21) te (?)-e (?) ... il-ša-ša ki-i (?) u-[ak]-ku-la ma-h-ri-u a-sar ta-ha-zī 
(22) u li-š-šin bel-ši eli šar Kašši-i ina su-la 11 Ša-maš šīši ša li-li 

(23) Tar-ša-a-ma ma-za-la-at tak-ru-ub-ši a-sar mi-hu-ši tuḫunni ku-nu-na-at 
(24) ša-ša-[š]-u-ni dan-nu ina be-ri-šu-šu i-ši-il-šu ardū 12 
(25) i-še-e ina ma-h-ri 13 "Aššur ip-pu-ul eli nakri" išši na-at-ka-ti 
(26) i-ša-rum 13 "Bēl ša-ab-la-at a-[š] tuš-a-šu mǔ-nu-ba 
(27) iš-ša-šu 13 "A-nu mi-et-ša la pu-di-o ci-[š]-a 
(28) Na-an-na-ru 13 "Šu u-šu-šu na-mu-u-nu-šu-at 14 kabli

1 "The king of the Kassites a treasure".
2 Cf. King, Records of Tushratta, Ninî, 51, l. 6.
3 This beginning is difficult, but the text seems to be as I have given it.
4 A word used of cedar-pillars, high (Sargon, Khors, 163), and of clouds, swelling (Beold, Glossar), from šitu, "grow, swell", which might well be applied to the Kassite usurper Nazibugash.
5 From šitu (Beold, Glossar, 263, 7).
6 "Maqûšu is 'to press'; and it is possible that the emphasis on the crescent moon indicates the course of battle with the centre drawn back
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(29) u-šar-di-im (or, šar-ri) a-bu-ba di la-ha-zi-su-nu iltu Adad ur-ša-an-nu
(30) u-la-biš e-en um-ma-na-at iltu Šu-me-ri u Akkadiši iltu Šu-šaš bēl di-e-ni
(31) iltu Ninurta šar-du ašarid(id) ilâniš iltu kakkiš šu-nu u-tebi-ir-na
(32) u im-ša-as kip-pa-šaš iltu Ištar ša ku-ra-di-su-nu u-še-e-ni ši-ma

(33) Ar-ki ilâniš ti-kil-šu šar-ru iau pa-ni um-ma-ni u-šer-ri šabi
(34) is-sah-ma (?) G A E iltu Ašur uballit dâp-ru muk-šar-mi ša-lam-da id-âši
(35) iz-zak-ru-ma ku-rad iltu Ašur a-na mi-šu-ši i-pa-an-nu iltu-ta
(36) i-la-al-la-âlu iltu Ištar a-šu-la-ap iau tešee i-na-ad-în be-el-la
(37) la-šu-ma naš (?)-ru ki-ma iltu Zi-ša-nu u na-hi-la
(38) kad-ru iz-zi-i ša a-na tešee ba-lu tah-li-pi
(39) is-sah (?)-lu tu i-ra-âši ut-tak-kî-ru lu-bu-ši
(40) ik-ta-as-ru pi-ri-e-ti uš-si-ir-ra (?) iltu wa-ar-ri-a ah-ri
(41) [?] me-er-ru-ma iau še-šib-likiš iltu kakkiš iltu pi-nu mi-tu ur-ša-an-nu
(42) u i-zi-ša a-na a-šu-miš ki-ma ti-is-bu ut la-bi zu-har-rât umêši
(43) u ša ke-im-ma-at ašam ša-a ti-lešu iš-a-ad i-na šabi
(44) kal êšše(n) ev iltu ku-rad ki-ma ôm(um) šu-mi iš-eš-bu mu u-tu
(45) [iz]-zi-iš i-te-ê-ir i-niš ite-ša
(46) ti-i-tu la-a-ša-ša (47) i-ki (?) ...

COLUMN III

(4) u ... (5) a-di ... (6) u ... (7) u-... (8) iau ša-... (9) še-... (10) sa-... (11) in-nin-... (12) u ana ... (13) ku-rad ... (14) aš-shu-šu-šu ... (15) uši-šu-šu ... (16) iškaku bēl mâtâtâi ... (17) di-še-ša ... (18) ša-šu-mâtâtâi ... (19) ik-... (20) u ... (21) uk-...

COLUMN IV (lost)

COLUMN V (top broken off)

(1) ... ma (?) šar-[ru] ... ša-ri ...
(2) la-a-am muš-šar-[lu] (?)-ti a-la-ki ša ši (?) ši (?) te (?) la mi-il[šar-ru]...
(3) iškaku bēl maššêši bat e-ši-bu-lu ku-[lu] ša-[lu] ki-a-lu é-mi-šêši ki-a-lu é-mi-šêši...
(4) iškaku bēl maššêši bat e-ši-bu-lu ku-[lu] ša-[lu] ki-a-lu é-mi-šêši ki-a-lu é-mi-šêši...
(5) iškaku bēl maššêši bat e-ši-bu-lu ku-[lu] ša-[lu] ki-a-lu é-mi-šêši ki-a-lu é-mi-šêši...
(6) iškaku bēl maššêši bat e-ši-bu-lu ku-[lu] ša-[lu] ki-a-lu é-mi-šêši ki-a-lu é-mi-šêši...
(7) iškaku bēl maššêši bat e-ši-bu-lu ku-[lu] ša-[lu] ki-a-lu é-mi-šêši ki-a-lu é-mi-šêši...

1 Uncertain.
2 Cf. Br. 9759, 9751, kippâ and melûmu ša Ištar for the same group.
3 An unusual word.
4 The reference is to Šu stealing the Books of Fate.
5 Cf. Arabic kal wahid, 'every one'.

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(8) e-pu-uš i-su-a-ti a-na bēl āš ברילギ מיל-תק ש-קנ-ע
(9) ba (?)-la ki (?)... na-a-šu (?) ki-i-su damkaree u-me-eš-sir
(10) uš-zi-iš-su-un ina ma-har āš ברילギ מיל-תק ש-קנ-ע
(11) ta-nur-[a ša ša u-ma]-e-ru tāk ki-nu-nki ki ri-in-mišu
(12) u-kin ina [ni]-šar āš ברילギ מיל-תק ש-קנ-ע... ka-bit (?)-tu (?) ilani im-dah-ha-ar
(13) āš ברילギ מיל-תק ש-קנ-ע ni-iš-ka ap-ta-dur rabû-un-ka aš-šu-ut
(14) ša-la-a (?)... [ša e-ti-iš ma-har [ilu-ti]-ka ši-pa-at-ka aš-sur
(15) e-un-na [ina] ma-har i-lu-ti-ka is [ku]-ni ri-ki-ta ab-šu-u-ni
(16) u-kin-nu ma-nil-la ina be-rišu-nu rabû-un-ka iš-sak-ru
(17) ša iš-tu maš ra daian ab-be-ni la-a muḫ-pi-lu-u šu-ra-du-at-la
(18) u ša i-su... a-me-ir di-na-ti-ni mul-tešir šamē at-ta-ma
(19) an-mi-nim-ma... ša iš-tu maḫ-ra šar Kaš-ši-i e-sur-ta-ka ši-pa-at-ka tas-su-šu
(20) uš-šu-[u] ma-mi-ta e-ti ši-pa-ra-ka ša-bur-la ši-m[š]-iš
(21) uš-šu-[ši] še-[ši]... la gi-lo-tiš muḫ-ra āš ברילギ מיל-תק ש-קנ-ע
(22) u (?)... šar Kaš-ši-i gu-šu-at-ta la-a e-pu-su-an-ni sā-
(23) ... ka raḫi(at) anu-an-sir ma-mi-ti leš ša-ši-ti šu-ru-uk-ma (?)
(24) ... ši-pa-rī-ka ina a-bi-ri-ti ša tuḫunti niššu šu u... ali (?)-[šu]?

(25) ... šu mu-du ta-ši-ma-ati i-su-uš i-te-pa (?)-a (?) na-nur-[rat]...
(26) ... šu tar-gi-ši... ši kal še-mi-šu da-nil-ši-ša(u)...
(27) ... iš-tu pa-na-ša ša ūme(?)-iš na-ak-ra-ut ab-be-ni te-ba-[u]...
(28) ... ma ana a-maḫ litumil[iš]-ni ina ma-har āš ברילギ מיל-תק ש-קנ-ע
(29) ... āš ברילギ מיל-תק ש-קנ-ע ša-an na-m[u]-rat ?...
(30) ... āš ברילギ מיל-תק ש-קנ-ע ša-an na-m[u]-rat ?...
(31) ... āš ברילギ מיל-תק ש-קנ-ע ša-an na-m[u]-rat ?...
(32) ... āš ברילギ מיל-תק ש-קנ-ע ša-an na-m[u]-rat ?...
(33) ... āš ברילギ מיל-תק ש-קנ-ע ša-an na-m[u]-rat ?...
(34) ... āš ברילギ מיל-תק ש-קנ-ע ša-an na-m[u]-rat ?...
(35) ... ša la-šu (?)... ša...
(36) ... dā-ni ša-šu ma-ru ša il-har-mi... (37)... ina be-ri-it maštāti daifnu la-a muḫ-pi-lu-[u]...
(38) ... dam-ma ša ū-ma-[u]-sun a-na-nu...
(39) ... la-ta maḫ-ri ta-am-ma...
(40) ... di-ša ša-at-in-u...

COLUMN VI

(1) ... u...

(2) ... gi-šu āš ברילギ מיל-תק ש-קנ-ע... ilaniššu še di-i-ni (4)... mu-ni-ha ut i-su (5)... i-rū šu ša-aḫ-baḫ-at-kat (6)... ma-mi ša ša-(u)-n-ša ši-ti (7)... e-mī-im na-aš-kat-la (8)... im ilaniššu ša aššu ša-la-ši (9)... ša-šar ša-ši-ti ša ša-kakkiššu

* Mutilated. It might be [Šu]-bediši following, but it is difficult to see what but Shalmaneser can be intended.
(10) ... a-di-ri pa-na u ar-ka (11) ... e še-me-i šu-me-la u in-na (12) ... ina na-ḫab za-ia-
a-ri (13) ... ru-ūš ṣu-ḫur kāl ṣar-rānīš (14) ... it-ta-ra-ra ṣadāš (15) ... ū-lu-na-pa-ša-ka
ka-li-ši kiriššu (16) ... šer iš-shu mi-na-a-šu (17) ... ši-pi-šu i-te-eš-ša (18) ... še-ru ši-
iššu mi-li-kā ša-ši (19) ... u-ša-du-u u ši i tu ina ša-p-ti

(20) ... di ar-ki ap-il bu-uk-ri-šu (21) ... kal (?) ra-ša-ša-šu in-ša-ša (22) ... ti ḫa-bal-šu
ma-am-ma (23) ... ku ga-ša-ra-šu a-šar ta-ha-zi (24) ... ši-lu-ša pa-šu-ša ša-r-ta (25) ... ša (?)
iš ša-liššu ša-ni-ni-šu (26) ... ša-liššu na-ši-ru pi-ris-ti-šu (27) ... it ... ša-šu (?) ū ra-ša (?)-
ḫi-ši arki-šu-šu

(28) ... ša-šar Kaš-ši-i i-ši-ša ma-ni-ta (29) ... ši-lu-ša ša-bur-ta ša-ni (30) ... ū-tak-
ka-ru ... KA (?) šu ku-nu-na-at (31) ... ša-ab-ta an (?)-na-šu ana UD. DA ša-liššu (32) ... ša-
ak-na-šu ša-pa-ša-ša eli-šu (33) ... ar ša ti (?) ū ni-di-šu ar-nu-šu,

(34) ... i (?)-niš ši-pa-ra (35) ... ina nu-kur-ta iš-ši (36) ... Šam (?)-ši ta-kiš-ša (37) ... [lu-]
ku-nu-ta iš-ši-iš (38) ... ša-liššu ta iš-šu-[n] (39) ... ū ū-ma-ni ša-šu-[šu] (40) ... ū ū-ma-ni
ša-šu-[šu] (41) ... e (?) laḫ (?) (42) ... ša-liššu ... 

COLUMN II

[The King came ... His warriors in ... [thus spake]:

'O Lord, [thou knowest] from the beginning of thy reign
That war and rapine have been our holiday; rebellion and [fighting]
5 Thou hast taught us, and hast brought about confusion, destruction (?) ... 
Under the fair standard of thy realm we march'd in valour,
Throughout the years of thy reign none here (?) hath withstood [thee].
Secure hath been thy supremacy o'er hosts of land, sea, and hills,
By the power of thy staff thou hast settled all nations in the four quarters,
10 Thou hast extended the foot of thy land to bounds uncounted, hath strengthened'd the borders,
Kings, knowing thy valour, fear thine onslaught,
And, as thou hast taught from the result of that wherein ye have been bound to each other, they are beset with terror of thee.
Now press hard against the king of the Kassites; bring his ru[le] to an end before (its) due time,
Scatter the forces which have taken to themselves the name of heroes!
15 O father! Like gall are the days of yore—crush out our woe!
The upstart (?) for our hurt continually devises evil,
He plots daily to destroy the land of Ashur, his finger is pointed.
Stay not! Mayst thou knit power continually to the realm of Assyria.
Come, let us press forward, and let him keep his life that goeth forward, let him die that turneth back!
20 In peace where is the end? Our woe (?) is grievous (?)—let there be war!
The... (is) with thee, when (?) it will hearten thee (to be) the foremost in the battlefield,
And may the Sun-god cause our lord to attain in the revolt a glorious name o'er the king
of the Kassites!

Array'd were the hosts of war in the mellay; battle was join'd!
Launch'd was the fierce charge between them, that the slaves trembled.
25 Ashur push'd forward in the van, kindling a devouring fire against the foe,
Bel clave (?) the enemy's midst, rousing the flame to burn,
Ann poised (his) ruthless weapon above the malignants,
The Crescent Moon forced against them the pressure of battle,
Adad, the hero, drove down (a wind (and) ?) a flood against their fighting line,
30 The Sun-god, lord of judgment, dishearten'd (?) the king of the forces of Sumer and
Akkad,
Ninurta, the warrior, leader of the gods, brake their weapons too,
And Ishtar smote her lyre (?), which drove their warriors mad.

Behind the gods, his helpers, the king at the forefront of the army began the fight,
Crying 'I am Ashur-uballit, the destroying giant!', cast down (their) corpses,
35 The warriors of Ashur, eager for the fray, were facing death,
They shouted 'Ishtar—how long will they cast down the Lady in confusion?'
Madden'd and estranged, like Zu they changed Creation,
Attack'd the rabble boldly, without protection,
Baring (their) breasts, they threw aside their clothing,
40 Gathering up (their) flowing hair, they bound (their) shields behind (them).
Worn out with the slaughter of the swords were warrior, hero, (and) giant,
And panted against each other, as when lions seize each other, (in) whirlwinds of the
storm,
And as with the heat of the tempests drove the rabble from the battle,
Every one (?) of the warriors satiating himself with death, as though it were a fast-day.
45 ... angrily (?) push'd forward, driving back . . .

Column V

Before the [entry (?)] of go[ods] whereof . . . was not ac[cepted (?)]...
The [king] made an ordinance not to go forth from the borders of As[syria], a decision (?)
... They came [with (?)] fleeces (?) or any . . ., and produce of the . . .
5 Merchants, who were bringing [the goods] of the king of the Kassites, were arrested,
[going out (?)] by night (?),
They were brought before Tukulti-Ninurta, the lord of hosts of men, bound together.
The king (?) put (them) in w[ard (?)], a place where the sun cast no shadow,
He did a favour to the lord of Babylon, acting kindly,
Without (?) [taking (?)] the contents (?) of a sack (?), he let the merchants go free,
Letting them stand in the sunlight, (and) pouring oil on their heads;
The gift [for] the king of the Kassites, which he sent, was his signet-seal,
He set before the Sun-god . . . the gods, he pray’d:
‘O Sun-god, lord of [judgmen]t, I have fear’d thine oath, have respected thy greatness,
I, who have not transgress’d thine inhibition, before thy [divinity] have guarded thine ordinance.
When our fathers made a covenant in the presence of thy godhead,
They put an oath between them, swearing by thy greatness;
O thou, who from aforesight wast judge of our fathers, unchanging, a warrior,
And who in . . . seeth our cause, art ruler of heaven,
Why from of old . . . the king of the Kassites from thine inhibition, hast thou absolved (him from) thine ordinance?
He hath no respect for thine oath, he hath transgress’d thy command, devising (?) oppres-
sion,
He maketh light of his naughtiness towards thee! Be my judge, O Sun-god!
[Judge if] the king of the Kassites hath not treated me with contempt! Ove]rwhelm (?) him!
[But by] thy great [divinity] unto him who hath kept thine oath grant the fame of multi-
tudes!
[By] thy command, in defeat in war let his people and [his] city (?) [be destroy’d]!'

The rest is mutilated, but he goes on to call to mind the previous hostility between
their fathers and the acts of ‘[Enlil]-nirari, begetting the progenitor of my father’, with
‘[Ku]rigalzu [despised] the oath of the gods’; ‘[Adad]-nirari, who begat my father’, with
Nazimaratush; and Shulman-[asharid (?)] (Shalmaneser), his father, thus mentioning the
Assyrian and Kassite kings of the period immediately preceding him; and, lastly, the Hittites
in l. 40.

These three new fragments, added to the two already known, restore most of the original
text:

(1) "Sarg-ina ša [r kiššati šar] māš As-šurki šakui i̊lù Bēl nisak i̊lù A-šur (2) ri’u [klu n ša
i̊lù] A-šur (?) u i̊lù Marduk (3) ša a-na šarru-ti ib-bu-u-šu ʾilāni šu rabûti a-na-kū-ma (4)
bīt i̊lù Nabû u i̊lù Marduk ša i-na tar-ši abulli eš-ši-ti . . . i (?) na šu i̊lù e-na-ah-ma (5) m̄i̊lù Adad-
nirari apil [Šam] ši-i̊lù Adad šar māš A-šur ki . . . ʾi̊lù LX + XII šanāti i̊lù im-la . . . e-pu-ūš
(6) ša bītu ša-a-tu šur-šu-šu ul i̊lù [i (?)] dan-uu-uu išid-šu ki-ir šišu tu ū šad . . . u ša-i̊lù
ti-ik-ma (7) aš-šu la i̊lù ū šu-tiš ši-i̊lù šu šu i-na ti-i̊lù bīt i̊lù Istar ša i̊nù Ninua ši-i̊lù pi-i
[Šam] ša ma-ha-ši-ik ši-i̊lù ša aš-šu la i̊lù šu-tiš ši-i̊lù šu šu i-na ti-i̊lù bīt i̊lù Istar ša i̊nù Ninua ši-i̊lù pi-i
pu-šu ul-šu ušši-šu a-di taš-[lu-bi-šu] . . . karšaša-ša-a-ti ʾi̊lù

1 Omitted on Winckler 14.
2 So on Winckler 14, but nirari on III R. 3, 12.
3 Thus on tablet in III R. 3, 12: but lu-u (perhaps erasure) on no. 122 F.
4 122 F, Istar.
Sargon, king of the world, king] of Assyria, prefect of Bél, minister of Ashur, [true] shepherd [of (?) Ashur (?) and] Marduk whom the great gods have called to the kingdom am I. The Temple of Nabû and Marduk, which had been built at the time of the new City Gate, decayed, and Adad-nirari, son of [Shamshil-Adad, king of Assyria, (re)-built ... seventy-two years [previously]. Of this temple its grounding was not strong and its foundation-platform was like the earth ... and it had become old; to repair it without the changing of its position opposite the Temple of Ishtar of Nineveh the voice of [Nabû in] the divining-bowl of the craft of the seer answered me. The Temple of Nabû and Marduk, my lords, which he had built opposite the Temple of Ishtar of Nineveh, from its foundation to [its] roof ... my memorial-bowls I deposited, for my life, the welfare of my seed, the destruction of my enemies, the prosperity of the crops of Assyria, [the safety of Assyria], I built.

This text augments the zigaltu long known from III 12, 12. It restores the line which was supposed to give the name of the founder of the Temple of Nabû, but actually gives only the approximate period 'in the time of the new Great Gate'. It was then restored by Adad-nirari (according to the Eponym Canon in 788 B.C.), and this, if my interpretation of the date given above is correct, was seventy-two years before Sargon restored it, i.e. in 716 B.C., which gives us for the first time the actual date, and may indicate the restoration of the passage in the Eponym Canon for 719, 'the foundation of the [Temple of Nabû] was torn up' (for repairs), the work being complete in 716. As has been mentioned on p. 105, the desire to keep the temple 'opposite' that of Ishtar may explain the peculiar repairs of Sargon which left the front at 32° E. of N., but orientated the inner court correctly. It is an important addition to our knowledge of the site of the Temple of Ishtar, hitherto known only in its relative position to Sennacherib's palace. It must thus lie on the central ridge somewhere between them.

No. 122, b.

(1) =Aššur-našir-apli šakū itu Bél šangi Aššur šar ... (2) mār Tukulti-Ninurta šarru rabû šarru dan-šu ... (3) mār itu Adad-nirari šarru rabû šarru dan-nu ...

No. 122, c, e, k, and l apparently add 'prefect of Bél, priest of Ashur' after the name of his father and grandfather.

No. 122, d.

... (1) ... šar mār Aššur (2) ...-a (gap) (3) apil Adad-nirari ...

No. 122, g.

(1) =Aššur-uašir-apli ... (2) apil Tukulti[Ninurta] ... (3) Bit itu[Istar] ...

No. 122, h.

(1) ... šulmanu(ma-nu)-ašarid ša-ak[nu itu Bél] ... (2) [apil (?) itu] Adad-nirari ... (3) id ... (Possibly of Shalmaneser I, son of Adad-nirari I.)
TEMPLE OF NABÛ AT NINEVEH

No. 122, p.

(1) ... ab ... (2) ... u ša u-nu la a ... (3) ... šī-iu u ... (4) ... lu-lu-ma-a ... (5) ... rid a-ni kur sa ... (6) ... luḫ mašša-a ... ku ... (7) ... ma-da-tu ... (8) ... [anā]-ḫu-su ... 

(From a comparison with the texts in King's Records of the reign of Tukulti-Ninurta, it would appear to belong to Shalmaneser I.)

No. 122, m. n. Inscriptions from a piece of bull found in 1904 in Sennacherib's Eastern building (the bit nakkapiti).

(1) [ina sa-pan māša] Am-ma-na-na (2) [u-ša-pi]-ni pa-ni-šu (3) zir kisši-e (4) [šī-ši-nu nu-su]-ku ma-ta a-ban kišša ak-[ru] (5) [a-ban ša-bi-še ma]-ga-ri u ri-iš-ši (6) [šu-ti]-ki mur-šu a-na ameli la šī-še (7) ša ur-tu māša Ni-pur šaši ti-ba-ha-la1 uš-pir-da-ni (8) ... pi kal-mat sa-maš (9) ... hi [in]-hur-ut-lul (?) ... (10) ... ša la ... (11) ... pa-at ... 

(1) ... ša ki-na ... (2) ... bit nakkap-ti nu ... (3) ... ti ma-la šī-bur-si-gal-ti ša la in-nam-ru (4) [ma]-te-ne ina'īn Kap-ri-da-ar gi-la ša pa-a-ši tu Til-bar-ši-bi (5) ... u kal-li mu-nu-nu šī-bur-si-gal tušša ki-na ... (6) ur-lī GI. RIN. ŠAR. GUB. BA ša ki-na inib 'ma'-nu-[UR-MA] ... (7) ba-nu-lu la-lu-u a-na da-ga-li šī-bur-bi (?) ... [mur-šu] (8) a-na ameli la šī-še ... 1 ki-la-lu-ana ab-ni ina ... (9) šādi(i) in-nam-ru rabī-iš-te ašša Ni-[nu-a] in-ir-ši-iš ... (10) [ma]-ša-lu-[a-a]-ši-iš ... (im ili-ma, etc.) 3

The texts are similar in composition to the building-texts of Sennacherib, from which much can be restored. But the description of the stone GI. RIN. ŠAR. GUB. BA (as also in the Esarhaddon passage, prism A, Col. IV, and in the new prism) as being ‘like the fruit of po[mgrante]’ indicates that it is like the little rounded transparent crimson seeds of the fruit, which would surely make it carnelian, so frequently used for beads. How far nīh GUG (sandu, the ‘red stone’), properly ‘cinnabar’, is definitely ‘carnelian’ is a debatable point (see my On the Chemistry, 86 and 113). For the stone, cf. Assy. Med. Texts, 102, 34. Unfortunately, in the case of the alallum-stone, the simile is lost.

(K) The Pottery 4

The pottery from the temple site may be divided into six chronological groups—(i) Prehistoric (3500?–3000 B.C.), (ii) Late Assyrian (900–612 B.C.), (iii) Parthian (200? B.C.–A.D. 226), (iv) Sassanian (A.D. 226–627), (v) Christian (A.D. 627–1380?), and (vi) modern.

Prehistoric. The prehistoric sherds were found at all levels on the temple and palace sites but not in Sennacherib's House. The typical ware was a fine white fabric, sometimes made by hand, sometimes on a wheel, but always bearing traces of the straw that had been used as a dégraissant, and adorned with

1 Nebi Yunus slab, i. r. 43 ff., 73. 2 Bull Inscr., 49 ff. 3 Ibid., 49.
4 The following description of the pottery is by Mr. R. W. Hutchinson, M.A., F.S.A.
stylized geometric designs in a matt or slightly lustrous black paint. This pottery was obviously related to that of the great Copper Age culture of the first period at Susa, but closer parallels to it were found at Bender Bushire in Persia and at Abu Shahrain, Tell al 'Ubaid, Ur, Assur, Farah, and many unexcavated sites in Mesopotamia. These monochrome fabrics appear generally to have been pre-Sumerian, but analogues to the polychrome jars of Tepe Mussian and the second stratum at Susa have been excavated at Farah and at Ur associated with the earliest Sumerian remains. At Jemdet-en-Naṣr both monochrome and polychrome wares were found with tablets inscribed with pictographs that were evidently prototypes of the Sumerian characters.

The sherds from Kouyunjik and from the neighbouring mounds of Hashamiyah, Abbasiyah, Gintarah, and Yarimjah all belonged to the earlier group. The sherds from Kouyunjik resembled those from Sumer except that they lacked the typical greenish hue and there were no naturalistic or polychrome designs. The pottery was usually too fragmentary to afford much idea of what the shapes had been, but they certainly included a pyxis of the Tell al 'Ubaid type, some form of stemmed bowl, and perhaps shapes like the bottles from Farah or the transitional vases from Rhages. The designs included hatched triangles, rows of solid triangles, chequers, chevrons, wavy lines, lattices, dots, basket patterns, and a frieze of stylized birds. The coarse sherds, which were rare, included a moderately coarse white fabric with girding bands of black or red paint, and one or two plain red or buff fragments.

The pottery from Hashamiyah was all prehistoric and resembled the finer examples from Kouyunjik; it was almost entirely hand-made, and the ornaments were net patterns, solid triangles, horizontal chevrons, and wavy lines. We also picked up a little coarse white ware with scratched decoration, one or two plain red sherds, and a few chips of flint and obsidian.

From the mound of Abbasiyah we collected one piece of fine ware (a pyxis rim with concentric triangles), some coarser sherds with girding bands, usually wheel-made, and a large chert blade. The field south of the mound had evidently been occupied during the Christian period.

On Tell Gintarah we found flint and obsidian blades and sherds of the Hashamiyah type, but on the farther side of the wady running north of the mound we picked up one coarse painted sherd, a piece of a saddle-quern, some flint and obsidian blades, and some coarse buff or black ware, apparently hand made, but quite unlike anything from the other sites.

1 Hall, Excavations at Tell al 'Ubaid, pl. iii, type P viii.
2 Frankfort in Ebert's Reallexikon der Vorgeschichte, xiv, 85.
POTTERY FROM THE TEMPLE SITE, AND FROM SENNAHERIB'S HOUSE (nos. 147, 148)
(Palmyran, nos. 125, 126)

Published by the Society of Antiquaries of London, 1929
POTTERY FROM THE TEMPLE SITE, AND FROM SENNACHERIB'S HOUSE (nos. 179, 183, 190, 193)
(Partian, nos. 188, 189; Sassanian, no. 186)

Published by the Society of Antiquaries of London, 1929
At the base of the Yarimjah mound we found one painted sherd, some chips of obsidian, and some plain pottery of uncertain date.

_Late Assyrian._ The Assyrian pottery from the Temple of Nabû was very uniform, and seems to have belonged chiefly to the Sargonid period, although the presence of a few Greek sherds dating from the tenth to the eighth century B.C. and of bricks recording the restoration of the temple by Adadnirari III in 788 B.C. suggests that some of the native pottery may also have been pre-Sargonid. Few sherds, however, could be dated as such by their shape or fabric, and the shapes characteristic of the earlier levels at Assur were conspicuously absent.

The Sargonid vases were divisible into three main groups: (a) fine plain, (b) glazed, and (c) coarse household. The first and most common consisted of a series of fine white or reddish brown vases 'thrown' and 'turned' on the wheel and well baked. The surface was usually the same colour, as the fracture and the black grit employed as a dégraissant were very noticeable. The use of a 'slip' was unknown, but the vases were often coated inside with bitumen to make them watertight. The only decoration consisted of one or two incised lines on the neck or shoulder.

The shapes comprised many varieties of bowls, saucers, jugs, and jars, but perhaps the most characteristic were: (i) a small bowl with incurved rim and flat base,¹ (ii) a saucer with flat rim and raised ring inside,² (iii) a bellying jar with sharply marked shoulder,³ and (iv) an ovoid jug with cylindrical neck.⁴ Other forms were an amphora and another variety of bellying jar, both with out-curved rims. Very characteristic features were the concave handles, the stepped rims of the jars and _pithoi_, and the raised rings inside the saucers. The shapes of the glazed fabric were similar, though less varied, and included, besides the same types of bowls and saucers, a bottle with narrow neck and pointed base. The fabric was more friable than that of the first group, and the glaze, which varied from cream or yellow to blue or green, tended to flake away. (Note that Parthian examples of (i), (ii), and (iii) also occur.)

The household vessels consisted chiefly of large _pithoi_ with pointed bases and a fabric similar to, but coarser than, that of the first group.

The pottery from Ashurnasirpal's Palace and from Sennacherib's House was moderately uniform and may be treated together. All the Sargonid groups were present, although the glazed ware was scarce, but two or three shapes that were rare on the temple site occurred in both of these deposits, including bowls with flat or vertical rims, jars with a moulded ring a little

¹ See pl. LIII, nos. 135-43 (except 137).
² See pl. LIII, no. 149.
³ See pl. LIV, nos. 167-9.
⁴ See pl. LIII, nos. 124, 127, 129.
⁵ We picked up examples of this shape at Assur.
THE EXCAVATIONS ON THE
below the rim,¹ and a deep bowl with a well-marked shoulder,² found in glazed ware in the Palace and unglazed on both sites. A libation vase with wide, cylindrical neck and pointed base recalls an old Sumerian form, but the nearest parallel both in fabric and shape is the series of vases found by Layard in the Upper Chambers at Nimroud and dating from the reign of Shamshi-Adad V. A unique shape, also resembling a Sumerian type, was a pot-stand from Sennacherib's House.³

Foreign. The Greek sherds from the temple site included one sub-Mycenaean, one proto-Geometric sherd, and one fragment of a Rhodian bird-bowl, and there were a few pieces of Roman terra sigillata of the first century A.D. I also picked up one fragment of a Milesian oenochoe on part of the old dump from Ashurbanipal's Palace. I am indebted to Mr. Forstdyke and Professor Beazley for their kindness in checking my identification of these sherds.

Parthian. After the sack of Nineveh in 612 B.C. the site remained deserted until the third century B.C. and probably later. During the Parthian period (200 B.C.-A.D. 226) the glazed and fine plain wares continued without much change, except that a few new shapes appeared such as the amphora with twisted handles,¹ but they were accompanied by a new red-painted fabric consisting almost entirely of small, straight-sided bowls with an occasional pilgrim flask or bottle, or a lamp with a long nozzle and palmette handle. The paint sometimes covered the vase both inside and out, but was often confined to a narrow band just below the rim. The decoration consisted of incised bands and pointillé chevrons and occasionally of shallow grooves or running spirals.

There was no unmixed deposit of Parthian sherds, but they tended to occur along with Assyrian pottery at a depth of from 5 to 7. To this period belonged a Parthian coin, a few pieces of terra sigillata, and a Greek inscription;⁴ a series of shallow saucers completely covered with a thick white glaze, which shows a surface crackling but never flakes away, more probably belonged to the succeeding period.

Sassanian. The only datable find of Sassanian times, apart from two Roman lamps of the third century A.D.,⁵ was a coarse buff-coloured jar with a rudely incised lattice pattern, containing a hoard of Sassanian silver coins of the fifth century A.D. It is, however, quite possible that some of the pottery I have classified as Parthian may really have belonged to this period.

¹ There are plenty of Sumerian and Babylonian parallels for this.
² We found sherds like this at Assur, but the form does occur on the Nabû site.
³ See pl. liv, no. 193.
⁴ For shape and fabric, cf. Fouilles de Doura-Europos, pl. 118, nos. 1 and 2.
⁵ See p. 140.
⁶ We are indebted to Mr. H. B. Walters for his courtesy in checking this date.
GOLD, IRON, BRONZE, LEAD, BONE, GLASS, AND STONE FROM THE TEMPLE SITE, AND FROM SENNACHERIB'S HOUSE

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CHRISTIAN. The earliest Christian pottery from Kouyunjik was a white fabric adorned with stamped medallions containing Christian or Sassanian symbols such as the cross or ram, and other devices such as horses and stags. This ware was first identified in a mound near Eski Kifri by Rich, who very brilliantly classified it as Sassanian. It has also been found at Bagdad, Ctesiphon, Kushaf, Niliyeh, Tekrit (with Pehlevi monograms), in ruins near Samarra, and at Nimroud. The fact that it was found at Ctesiphon (sacked by Omar in A.D. 627) but not on the palace site at Samarra suggests that this fabric probably flourished during the seventh century, though it may have started earlier and lasted into the eighth. The stucco medallions from Mesopotamia, now in Berlin, were presumably contemporary, and the prototype of this form of decoration may have been the medallions on the metal bowls classified as Parthian by Strzygowski, and by Sarre as Sassanian-Hellenistic.

At Kouyunjik this fabric was rare and never occurred in a pure deposit. The next period seems to be represented by a series of jugs, of which the upper part was covered with floral patterns in the barbotine technique. It was principally found in two refuse pits, considerably below the floor level of the temple, but there was a small deposit, possibly still in situ, level with the great south-east pavement of Ashurbanipal. The only stratigraphic evidence for its date is the fact that it was absent from the cement buildings, and indeed never found with any pottery except Assyrian. The same fabric, however, has been found at Shaddadah and in some of the houses at Samarra. Both shapes and ornaments were obviously derived from a group of metal vases classified by Sarre as Late Sassanian or Early Post-Sassanian. A fragment of a jug in the Hermitage Museum has a row of musicians on the shoulder, a typically Sassanian motif. Stylistically this fabric appears to fill the gap between the stamped vases and the glazed pottery of the cement buildings, and may therefore be tentatively assigned to the eighth and ninth centuries A.D.

The latest pottery from the temple area, apart from a few modern sherds, was that from the Syriac-speaking settlement represented by the six cement floors. Wedged between the sixth and fifth floors was a sherd with brown and green spots, and a graffito scroll pattern under a clear lead glaze, a Mesopotamian imitation of the Tang stone wares in China. Professor Sarre dates a similar fragment from Samarra as late as the thirteenth century, though he admits that on grounds of style alone he would have assigned it to the eleventh.

1 Professor Sarre's I b ware in Die Keramik von Samarra, pl. 111.
2 Strzygowski, Altai-Iran und Völker-s wandergung, figs. 124, 125, and 126.
3 Sarre, Die Kunst des alten Persiens, fig. 124.
4 Strzygowski, Altai-Iran und Völker-s wandergung, fig. 124.
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or twelfth; for various reasons, however, I believe that our fragment is not much later than the tenth century.

The Fifth to the Third Cement floors inclusive were associated with a large number of sherds with the following chief varieties: (a) a mottled graffiato like that described above, but varied sometimes by the omission of one or more of the colours; (b) a brown glaze incised after glazing; (c) a little Mesopotamian lustre ware; (d) a fine blue faience known but not common at Rakka; and (e) some unglazed water-jugs with plastic decoration, the so-called Mosul jugs. The shapes consisted chiefly of deep bowls and saucers with out-turned rims. A sherd resembling the blue glaze typical of Sultanabad was found embedded in the Fourth Cement, and a somewhat similar sherd in the suburb south of the Gate of Assur. The plain vases of this period included cylindrical pithoi coated inside with bitumen, and small water-jugs, not unlike the modern variety.

The pottery from the Second Cement building showed no material change except that the Mosul jugs and blue glaze seemed to be more common, and the mottled ware coarser than before. Very few sherds were associated with the First Cement, but the typical ware seems to have been a green graffiato which had already appeared in the earlier strata.

The occupation of our site probably continued till the invasion of Genghiz Khan in 1220 or of Hulagu Khan in 1250, and at latest can hardly have survived the campaign of Timur in A.D. 1380, when all the Christians left alive fled to the hills.

(L) THE GREEK INSCRIPTION

This Greek inscription from the Nabû temple was discovered during the 1904 excavations at a depth of about 4′ above the floor of the central court. The inscription was written on a cylindrical stone, and shows traces of what appear to be an earlier inscription in smaller characters, of which only a few are still visible. The present locality of the stone is unknown, and the provisional text offered here is based on a study of the photograph taken in 1904.

1 Sarre, Die Keramik von Samarra.
2 I am indebted to Mr. A. M. Woodward for the first transcription of the text, to Professor Hunt for the suggestion of two or three words, to Mr. Tod for a reference, and to Mr. E. G. Campbell for criticizing my account.
POTTERY, STONE OBJECTS, BEADS, AND PAINTED BRICKS FROM ABOVE OR NEAR THE TEMPLE SITE

Published by the Society of Antiquaries of London, 1929
Fig. 1. Stone work at Ashur for comparison with the dam

Fig. 2. Dam at the Agammu pool

Fig. 3. Shrine (?)

Fig. 4. Dam at the Agammu pool

Fig. 5. Dam at the Agammu pool

Fig. 6. Sculpture of Sennacherib's campaign in the marshes

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The earlier inscription cannot be recovered, and the information afforded by the letters του above the second line of the later one could hardly be more indefinite. The later text seems to have been a dedication by one Apollonides the son of Asklepiades on behalf of a certain Apollonios to the θεοί ἐπήκοι, and the general sense might be as follows: 'In the year... in honour of the Attentive Gods Apollonides, the son of Asklepiades, on behalf of Apollonios governor and president of the city, in charge also of... benefactor (?) of himself, his children, brothers, and kinsmen (?) and of the city... of himself and of his children... [has set up].'

The letters, which are well cut, are of the usual Ionic type save that the π with equal arms, the straight m and ξ, and especially the Α with broken cross-bar and the extension of the Φ above and below the line imply a date not earlier than the second century B.C. and most probably later. The dialect is the ordinary koine without any local idioms, and the phrasing resembles Parthian examples of the second century A.D. from Doura-Europos. The office of ἐπιστάτης was at Doura and elsewhere a typically Parthian institution, but an inscription from the reign of Antiochos IV Epiphanes from Babylon proves that it was known in Seleucid times. (The ἐπιστάται at Athens performed

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1 Cumont, Fouilles de Doura-Europos, nos. 91 and 118.
quite different functions.) The only clue to the exact date lies in the letters immediately following ἔρως in the first line; if the third letter was a τ we should have the year three hundred and something, presumably of the Seleucid era. There is no certainty, but a date in the middle of the first century A.D. would agree very well with the other evidence.

The θεοί ἐπίκοι of the second line are rather obscure. Ἐπίκοι in the singular was used of many deities and especially of Aphrodite, Apollo, Artemis, and Asklepios; ¹ in the plural form it was applied to Zeus and Hera at Sophai; to Ahuramazda, Mithras, and Verethragna by Antiochos of Commagene; and in a few instances without any names being specified.² It has been suggested to me³ that some vague tradition of sanctity might have persisted on the site of the Nabû temple and that this might be a dedication to the 'unknown gods' of the locality.

The only other⁴ Greek inscription known from Nineveh was a list of Macedonian months (C.I.G. 4672) and dated to the third century A.D. It was found by Dr. Wilson and published by W. R. Hamilton in volume iii of the Transactions of the Royal Society of Literature, but was omitted from the otherwise excellent list of Greek inscriptions from Mesopotamia given in the book on Doura-Europos.

(M) Beads⁵

The beads discovered by Dr. Campbell Thompson were divided between the museum at Bagdad and the British Museum. As the Bagdad portion was not sent to this country I am unable to say anything about them, and can only describe those in the British Museum.

The site has been so turned over that the position where a bead has been found is of very little use for showing its date, several of the earliest beads having been found only a few feet below the surface. Any suggestions of dates given below are, therefore, derived from comparison with beads of known dates from other places.

The more interesting beads are mentioned below, arranged according to their material.

Agate, etc.

A fine specimen of onyx barrel with gold caps (fig. 2a). Such beads were frequently made during the Persian period.

¹ Weinreich, Θεοὶ ἐπίκοι, Ath. Mitt., 1912.
² Weinreich, loc. cit., nos. 92, 93, and 94.
³ By Mr. A. D. Nock.
⁴ Except that on the Herakles Epitrapezios.
⁵ The following description of the beads is by Mr. H. C. Beck, F.S.A.
Plan of the Mound of Kouyunjik

(Begun by Dr. L. W. King in 1904)

Published by the Society of Antiquaries of London, 1929
TEMPLE OF NABŪ AT NINEVEH

An interesting compound eye-bead (fig. 2 b) is made with a white agate back plate, on to which is cemented an obsidian front so as to represent one of the typical onyx eye beads.

Two irregular agate pebbles, perforated, but not otherwise worked.

![Images of beads and artifacts]

Fig. 2 (359). Stone and Faience Beads: a, agate barrel with gold caps; b, composite eye-bead; c, hexagonal barrel of carnelian; d, fluted octagonal barrel of carnelian; e, f, etched carnelians; g, faience duck.

Amazonite, or Microcline Feldspar.

One barrel bead and two elliptical barrel beads.

Amber.

Parts of two faceted amber pendants were found. These are too fragmentary to show their original shape, but they are very similar to the Etruscan amber work.

Amethyst.

The only amethyst bead found is a fine bicone; the angle on the profile is 90°. This is suggestive of the XIIth dynasty Egyptian work, but the angle is unusually acute.

Calcite.

A rough elliptical barrel was found. This bead suggests a very early period.

Carnelian.

The majority of the beads found are of this material. Many are very rough in workmanship, but this does not always mean an early date. The following are of interest:

Two hexagonal bicones of a special type found in considerable numbers at Mycenae (fig. 2 e). These were probably imported from the Aegean about 1200 B.C.

A fluted octagonal barrel (fig. 2 d). In this the surfaces are concave.

Two etched carnelian beads (figs. 2 e, 2 f). The method by which this is done has been described by Mackay in the Asiatic Journal, who says that carbonate of soda and great heat were used. Some doubt has been thrown on his suggestions, but I have myself successfully produced similar patterns in
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this manner. These beads are of great interest as the process was extremely local, being practically confined to Mesopotamia, India, and Russia, although a few rather doubtful specimens are stated to have come from Egypt. Almost all the specimens found in Mesopotamia are definitely associated with a very early period, but the method was continued in India and Russia to at least the middle ages, and I think that these specimens from Nineveh are not early; in fact one specimen was associated with a Roman fibula.

Faience.

Although very few beads of this material were found, they show great variety.

A small faience model of a duck (fig. 2 g) is made of a hard grey faience which has bubbled very much in making.

A large black melon bead (fig. 3 a) has fifteen gadroons; the top of these is rubbed off showing a browny-grey core.

A smaller blue melon bead (fig. 3 b) is made of the pale blue faience found at Ur, which is there associated with the II 1rd dynasty of Ur and earlier periods.

A scarab of soft buff-coloured faience (fig. 3 c). The shape of this suggests Egyptian manufacture, but the material is unusual and the six-pointed star is an Assyrian device.

Frit.

Two blue frit scarabs, one with a design of a double cross (fig. 3 d), and the other with a design which may have represented a figure on horseback (fig. 3 e), were probably made in Egypt, and if so date from 1000 to 600 B.C.

A number of small frit beads, chiefly cylinders, were found.

A very unusual bead (fig. 3 f) is a barrel bead which is apparently made of two kinds of frit, blue and yellow mixed together.

Garnet.

One small spherical and four small oblate garnet beads were found.
Glass.

The soil in Mesopotamia seems to be very bad for the preservation of glass, most of the specimens being in an advanced state of decomposition. There are, however, some notable exceptions, various specimens of widely different dates being well preserved. The following are the more important:

Half a triangular stratified eye-bead of black and white glass (fig. 4 a). This is a typical example of a bead found extensively in the Aegean and South Italy, where it dates from 800 to 600 B.C.

A glass figure, probably Bes (fig. 4 b). This is an amber glass with blue iridescence and may be of Egyptian origin, but as the technique is unlike Egyptian work I think it is more probably Aegean or Phoenician work of from 700 to 400 B.C., as very similar figures are found at Tharros.

A pendant with spiral line round (fig. 4 c). This is of amber-coloured glass with a very beautiful green iridescence. It also is a type of pendant that is found in the Aegean about 600 B.C., but there is not at present any definite information as to its place of manufacture.

Cornerless cube bead imitating onyx (fig. 4 d). This bead is made of very dark blue, almost black, glass with bands of white glass, so as to look like onyx. The glass has been moulded round a rod, and then all the outside surfaces have been ground and polished. A smaller bead (fig. 4 e) without the white band has been made in the same way. These probably date from 600 to 400 B.C.

A large flat eye-bead. This is almost corroded away, but enough remains to show that it was elliptical and perforated at each end so as to form a centrepiece in a necklace. A large circular ring of a different glass was impressed on this so as to form a large eye. Owing to the almost complete corrosion it is not possible to state the original colour of the glass. It was about 1\(\frac{1}{4}\)" long and 1\(\frac{1}{2}\)" wide.
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Two large oblate beads of black glass about 0.8" diameter. These are not very badly corroded and retain a considerable amount of the original polished surface.

**Gypsum.**

Several large buttons were found (fig. 4f). These are made of a form of gypsum which has been made plastic, the articles having been moulded.

![Image of gypsum beads](image)

Fig. 5 (362). **Ivory and Stone Beads:** a, fragment of ivory bead; b, astragalus of lapis; c, quartz fire-polished bead; d, serpentine spacing bead; e, steatite seal; f, steatite mould for ear-ring.

Also there is some evidence of bubbles on the surface. These facts suggest very forcibly that a form of plaster of Paris was made and used. On the other hand, the microscopic structure, whilst corresponding to certain kinds of natural gypsum, does not agree with that of freshly made plaster of Paris. It has been suggested that one explanation is that in the course of thousands of years the structure of plaster of Paris becomes more similar to gypsum formed naturally. Another suggestion is that in early days a different kind of cement was made with gypsum which is not now known. In either case the matter is of great interest.

There are also some very small short cylinder beads of gypsum, which are now in a very fragile condition, and it is not certain whether they are also made from plaster or cut from the stone.

**Ivory.**

Only one half-bead of this material was found (fig. 5a). It is very similar to some of the Aegean beads.

**Lapis Lazuli.**

Several small beads of lapis were found. The most interesting is the small model of an astragalus (fig. 5b). There is no evidence for the date of this, but several of the small beads are very similar to those found by Woolley in the graves of the earliest period at Ur, and may be early Sumerian.
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Limestone.

A very fine limestone bead was found. It is 1.55" long and 0.9" diameter in the middle and 0.65" at the ends. The workmanship is very good.

A red breccia cylinder bead 1.2" long and 0.4" diameter shows great signs of wear. It may date from the neolithic period and has some resemblance to pre-dynastic Egyptian work.

![Shell Beads: a, Cypraea annulus; b, c, Cypraea moneta; d, Pustistoma mendicaria; e, Euthria cornea; f, Trochus turbinatus osilinus.](Fig. 6 (363))

Obsidian.

In addition to the chalcedony bead with obsidian front mentioned before, a barrel bead 0.65" long and a small oblate bead of obsidian were found.

Ostrich Shell.

A number of small disc beads of ostrich egg-shell were found, and one large disc bead which is very chipped both round the perimeter and the perforation. This is very like some of the neolithic beads from the Sahara.

Quartz.

The only quartz bead found was one of the small disc beads with very highly polished but irregular surface (fig. 5c). Many of these beads have been found at Ur, and the technique is the same as the little quartz shield-shaped pieces which date from the IIIrd dynasty of Ur (about 2300 B.C.). Examining the surface shows that some sort of fire polish has been used. I suspected that lime was used. Sir Herbert Jackson, however, settled the matter by a new method of spectroscopic examination which he has perfected. He found that there was no lime in the surface, in fact less than in many pieces of natural quartz; but he discovered that there was a very large quantity of soda in the surface and scarcely any in the inner part of the bead. This definitely shows that some form of soda has been added, possibly by painting soda carbonate and then heating.

Serpentine.

The most interesting serpentine bead found was a small spacing bead (fig. 5d). In this the two holes were only drilled half-way through the stone, and a groove was cut on the other side until it met them.
Steatite.

A steatite lion seal (fig. 5c) is a fine specimen of steatite carving. It is almost certainly of Egyptian manufacture and dates between 1300 and 1000 B.C. A mould for making gold pendants (fig. 5f) was found. Ear-rings of this form were worn for a long period, so the date of the mould might be anywhere between the eighth and third century B.C.

Shells.

Mr. J. R. le B. Tomlin, of the British Museum, South Kensington, very kindly examined the shells found. He states that there are six sorts from the Indian Ocean or Red Sea, Ancilla amphi (Gmellin), Cypraea annulata (L.) (fig. 6a), Cypraea moneta, the money cowry (figs. 6b, 6c), Donax papillus (Reeve), Pusiostra mendicaria (L.) (fig. 6d), and a species of dentalium. There are three species confined to the Mediterranean or Atlantic—Enthria cornnea (fig. 6e), Ocenebra edwardsii, and Trochus turbinatus osilinus (fig. 6f). There were also two species of freshwater shell—Melanopsis costata (Fer.) and Unio sp. (?).

Amongst the odd stone beads is a plano-convex barrel of hard stone with a brilliant yellow vein through it. Dr. Thomas of Jermyn Street Museum and Dr. Campbell Smith at South Kensington are both very puzzled by this specimen: the only suggestion they can make is that it must be some form of yellow chalcedony, although no such material has previously been found.

ERRATA IN THIS ARTICLE

For 'Ajilah' read 'Jilah', and for 'Tell Gintarah' or 'Gintarah' read 'Mound No. 3' passim. Jilah takes its name from the name of a grey clay found locally, which is used for washing clothes. Gintarah (the name of a small hillock not far distant) was incorrectly assigned to 'Mound No. 3'.
THE TEMPLE OF NABU.

SECOND-SIXTH BUILDINGS

Heights above Sargon's Well: 2nd, 10' 3"; 3rd, 9' 1";
4th, 8' 10"; 5th, 8' 6"; 6th, 6' 10".

A = pot burial in 5th, below 4th.
B = receptacle, top 6' 6" above Well.
C = grave, 4' 6" above Well.
D = solid walls of 3rd.
E = pavement of 2nd level.
F = two drain pipes, 7' 0" above Well.
G = burial, 5' 3" above Well.
H = column base.
K = drain of 5th.
L = step up from 6th.
MM = below 3rd level 4 squared stones 3' above Well.
N = pavement of stone and brick.
P = grave, 3' 6" above Well.

SECOND-SIXTH BUILDINGS ABOVE THE TEMPLE OF NABU

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THE TEMPLE OF NABU

Scale:

FIRST BUILDING ABOVE THE TEMPLE OF NABU

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VIII.—The Epigraphy of Medieval English Seals.
By H. S. Kingsford, Esq., M.A., Assistant Secretary.

Read 6th December 1928

It has generally been accepted as an axiom that the date of a seal can be determined within close limits by the style of the lettering of its legend. The late G. Demay, in his Inventaire des sceaux de la Normandie, published in 1881, was the first to give serious attention to the subject, and he naturally drew his material almost entirely from French sources. In 1887 the late Sir William Hope, in his paper on the Seals of English Bishops, offered some suggestions as to the date of the different styles of lettering, basing his conclusions on the fact that a bishop's first seal must be of the same date as his appointment to his see. His classification was as follows:

(1) 1072–1174. Roman capitals.
(2) 1174–1215. Rude Lombardic.
(3) 1200–1345. Good Lombardic.
(4) 1345–c. 1425. Bold black letter.
(5) c. 1425–1500. Fine close black letter.
(6) After 1500. Roman capitals.

In this classification Sir William was under the disadvantage of basing his conclusions on too few examples and perhaps on too restricted a class. In the forty years since his paper was printed the material available for study has increased enormously, and it now seems possible to attempt a corpus of the lettering on datable English medieval seals from the Conquest to the accession of Elizabeth.

At the outset it is necessary to define very clearly the material used. In the first place this inquiry has not been carried back beyond the Conquest, for the reason that, of the pre-Conquest seals known (a dozen at most), several are suspect and few can be dated exactly. Secondly, only those seals have been selected which can be dated either with absolute precision or so nearly as for all practical purposes to be considered absolute. Such dating can be arrived at in the following ways:

(i) By the date being given in the legend. Examples are: St. Austin's Abbey, Canterbury, dated 1199; Winchester Cathedral Priory, second seal,

dated 1204; Reading Abbey, second seal, dated in a rhyming couplet 1328; Thomas Beauchamp, earl of Warwick, dated 1344; and Trinity College, Cambridge, dated 1546.

(ii) By the date being given elsewhere on the matrix. Examples are: Dover Corporation, dated on the back 1305, and Fountains Abbey, dated 1410, although Mr. Clay has recently shown that the date on this matrix may not be that of its manufacture, which was possibly a year or two later. Mr. Hill has also pointed out that in Germany, at all events, these dates may sometimes be assigned to the incorporation of a town or the grant of its arms. So some caution is necessary.

(iii) By entries in accounts or records. Examples of the former are common in the Issue Rolls and in municipal accounts. Examples of the latter are the entry in the Close Roll of 1218, ordering payment to Walter de Ripa for making the first Great Seal of Henry III, and the statement in the Annals of Waverley that the new seal of Merton Priory, Surrey, was taken into use on the eve of the feast of St. Lucy, 1241.

(iv) By an Act or Ordinance authorizing the use of a seal. Examples are the seals provided under the Statute de Mercatoribus of 1282 and its extensions, the Ordinances of the Staple of 1353 and later, and the Statute of Labourers of 1388.

(v) By the beginning of a reign. It is obvious that on his accession the sovereign had to be provided with a Great and other seals, and, unless there is good ground for a contrary opinion, his first seals may be dated in the first year of his reign. A certain amount of caution is, however, necessary. Until his own seal was ready a sovereign generally continued to use his predecessor's. Sometimes he never used any other, or he merely altered the name or made some slight addition by way of difference. Henry III too, as has just been observed, did not have a seal of his own until nearly three years after his accession. But with these provisos the year of the beginning of a reign may be taken as the date of the first seal, and the dates of later seals can generally be fixed by documentary or other evidence.

(vi) By the date of the appointment of a bishop or official. As Sir William Hope observed, the date of a bishop's first seal must be that of his appointment to his see. Here again a little caution is necessary. A bishop sometimes, although rarely, adapted his predecessor's seal to his own use, as Cranmer adapted Wareham's for his first seal; or on his translation he occasionally translated his seal with him, making the necessary alterations. This was done by Fordham on going from Durham to Ely in 1388, when he altered the name of the see, turned SS. Oswald and Cuthbert into SS. Peter and

1 Arch., lxxvii, 17, n. 1.  2 Ibid., lxxviii, 17, n. 1.
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Etheledreda, changed the bearings on one shield of arms and re-cut the other. Barnett too, on being translated from Worcester to Bath and Wells in 1363, used his old seal, but only had to alter the name of the see. This is a particularly instructive seal in the present connexion, as the original legend is in Lombardic capitals and the alteration in black letter. In the British Museum catalogue¹ this seal is referred to Harewell, and this ascription has been followed elsewhere; but Sir William Hope noted² that he had seen an example at Wells appended to a deed of Barnett's dated in the third year of his translation (1366).

Where the date of the appointment of an official such as an archdeacon or admiral is known, this may confidently be taken as the date of the seal.

The lettering used on seals is of three kinds: Roman capitals, Lombardic capitals, and black letter. The term Lombardic is an unfortunate one, but is now so consecrated by usage as to make its disuse difficult if not impossible. Various alternatives have been suggested, such as Uncials or Majuscules, but these all have a special meaning of their own. Professor Minns has suggested to me the term Swelled capitals, but until some such term as this is generally accepted it seems better to retain Lombardic, unsatisfactory though it be.

It will now be necessary to consider each letter of the alphabet in detail and to endeavour to point out the various changes in form which they have undergone. No attempt is made in this paper to trace the origin of the various letters, as that is primarily a matter for the palaeographer. With regard to the diagrams it should be understood that these do not claim to be absolute facsimiles of the originals, but only an attempt to define the characteristics of each letter.

A

The earliest A is on the first Great Seal of William the Conqueror (1066); it is an ordinary Roman capital with no serifs. But in his second seal (1070) the letter approximates much more closely to the Lombardic form, having a long top bar. The letter on William II's seal (1087) is nearer to the Roman, although it has a rudimentary top bar. These two forms continue concurrently for about fifty years. The seal of Alexander, bishop of Lincoln (1123), shows an important change. Not only has the letter the long top bar, but it has also a broken cross-bar, and this peculiarity is also found in the second Great Seal of Stephen (1143), in the seal of Roger, bishop of Worcester (1164), in the first Great Seal of Richard I (1189), in the seal of Hubert Walter, archbishop of Canterbury (1193), in the second Great Seal of Richard I (1198),

¹ B.M. Cat., 1425.
² MS. note in his copy of the British Museum Catalogue now in the possession of the writer.
and in those of Nicholas of Meaux, bishop of Man (1203) and of Stephen Langton, archbishop of Canterbury (1207). The broken cross-bar is thus found for a period of just over eighty years, from the first quarter of the twelfth century to just after the beginning of the thirteenth.

Another important point is the curving of the left leg. This is probably to be seen in the seal of Roger de Pont l’Evêque, archbishop of York (1154), and certainly in that of Richard, archbishop of Canterbury (1174). It is next found on the second Great Seal of Richard I (1198), together with the broken cross-bar type, on the first Great Seal of Henry III (1218) and on that of Richard Grant of Wethershed, archbishop of Canterbury (1229), but is not again found until Henry III’s so-called third seal (1253). After that it continues spasmodically until legends in Lombardic capitals went out of fashion, towards the end of the fourteenth century.

The black letter form is first found on the seal of Thomas Hatfield, bishop of Durham (1345), the earliest seal with a black letter inscription. Its shape is practically invariable and it continues until Laurence Campeggio, bishop of Salisbury (1525), whose seal is the latest to use this style, with the exception of the seal ad causas of John Taylor, bishop of Lincoln (1552), which has no a in its inscription.

Legends in capital letters return with the seal of Peter Courtenay, bishop of Winchester (1487), but there is no A in it, the first being on that of Fox, bishop of Durham (1494). There the letter approximates to the Roman capital, but otherwise the Lombardic form predominates.

B

There is little to be said about this letter, which is not one that admits of much variety. The earliest is on the seal of Osbern, bishop of Exeter (1072), where it is of an almost Lombardic form, with bifurcated terminations to the upright. It is not found again until Theobald, archbishop of Canterbury (1139), where it is of very ordinary form, and it continues so throughout, except that in the seal of Margaret, second wife of Edward I (1299), it approximates, possibly by an error, to an R. The black letter form is first found on the Bretigny seal of Edward III (1360), and thereafter it shows little change. The capital letter reappears on the seal of the Merchant Taylors’ Company (1502) and is but little different from the earlier form, and so it continues.

C

This letter has often been used as a test of date, but without any very real ground. The earliest form, on the second seal of William I (1070), is almost square, and this type is also found on the seal of Flambard, bishop of Durham (1099), although there the corners are somewhat rounded, and between thirty and forty years later on those of Geoffrey Rufus, bishop of Durham (1133), and Theobald, archbishop of Canterbury (1139). It also occurs, with two other types, on the seal of St. Austin’s Abbey, Canterbury (1199), but this is its last appearance. The more usual form is a rounded letter with ceriphs at
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the top and bottom, which gradually get longer and larger until they meet, thus forming the closed C. But although this seems to be the evolution, the closed C is found as early as Gundulf, bishop of Rochester (1077), and the 1166 seal of Henry I. It does not, however, appear again until Richard, archbishop of Canterbury (1174), and it then runs concurrently with the open form, the latter first being predominant, but later giving place entirely to the closed form, the last appearances of the open letter being on the seals of John Halton, bishop of Carlisle (1292), and Anthony Bek, bishop of Norwich (1337).

The black letter form is first found on the seal of Hatfield, bishop of Durham (1345). Its shape is almost invariable, the only differences being in the size of the top stroke. It last appears on the seal ad causas of Taylor, bishop of Lincoln (1552). The capital, except spasmodically as an initial letter, returns with Courtenay, bishop of Winchester (1487). This is not a Roman letter, but a pure Lombardic one, and in fact, during the period under review, the capital C generally has more of the Lombardic than the Roman style about it.

D

The earliest type of this letter, on the second seal of William I (1070), is purely Roman, but with Gundulf, bishop of Rochester (1077), William II (1087), and Anselm, archbishop of Canterbury (1093), it begins to take a Lombardic form, the up-stroke expanding at top and bottom. It reverts to the simple Roman shape in the seal of Flamard, bishop of Durham (1099), 1 and then continues approximating more and more to the Lombardic form, with what may be termed local variations due probably to the eccentricities of the engraver. A peculiar form of the letter is, however, occasionally found. This is somewhat like a reversed G. It appears on the counterseal of Richard, archbishop of Canterbury (1174), on the seal of Nicholas of Meaux, bishop of Man (1203), and on the counterseal of John Climping, bishop of Chichester (1254), but these are the only datable examples I have found, although it also appears on the seal of the town of Haverfordwest, which probably dates from the incorporation of the borough by Edward I in 1291. This form, therefore, has a range of a little over 100 years at least, and it reappears in 1520 on a seal which has been called that of the Crutched Friars of London, but is more probably that of a collegiate.

The black-letter form is first found on Hatfield's seal (1345), and it shows little variation except for an occasional bifurcation of the upper stroke, and for a still more rare rounding of the corners, as in the seal of Henry of Walton, archdeacon of Richmond (1348), where it is almost a counterpart of the second type of capital just referred to. Its last appearance is on the seal ad causas of John Taylor, bishop of Lincoln (1552).

When, apart from its continued use as an initial, the capital letter was revived (the first capital D is on the seal of Fox, bishop of Durham, 1494), there is little difference in form between it and the earlier Lombardic capitals. The simple Roman capital, however, becomes more usual towards the end of the period.

1 Inadvertently omitted from the illustrations.
E

The earliest form is the square or Roman E found on the first seal of William the Conqueror (1066), but on his second seal (1070) both the square and the round, or Lombardic, forms are found. Osbern of Exeter (1072) uses the square form; William II (1087) uses both; Anselm, archbishop of Canterbury (1093), uses the square, while six years later Flambard of Durham has both. The square form is found on the second, third, and fourth seals of Henry I (1101, 1106, and 1107) and both on that of William Warelwast, bishop of Exeter (1107). In fact the square and round forms are used indifferently, but with a preponderance of round, down to Hugh Foliot, bishop of Hereford (1219), on whose seal the square E appears for the last time until the revival of capital letters late in the fifteenth century, Fox, bishop of Durham (1494), being the first to use it again.

The chief point of interest in the Lombardic E is whether it is closed or open. Like C, this closing is really only an extension of the serifs, and it is clear that it is not a criterion of date, at least to the extent generally supposed. The first closed forms of the letter are on the seals of William II (1087) and William Warelwast (1107), both of whom, as already noticed, use the square form as well, while Warelwast, in addition, has the open. The closed form is not found again until Toclive, bishop of Winchester (1173), and after that it steadily predominates over the open, the last instance of which is in 1262 on the seal of John Gervaise, bishop of Winchester. The closed form then continues by itself both in legends wholly in capitals and as an initial in black letter, and the open does not appear again until the seal of the Merchant Taylors' Company in 1502. After that date the square or Roman form becomes invariable.

There is little to be said about the black-letter form. The shape is practically the same throughout from its first use by Hatfield in 1345.

F

Little need be said about this letter. It is not one that lends itself to much variation and also it is a letter that was little used. The simple Roman form is first found, and this is gradually elaborated by thickening and expanding the main stroke and by enlarging the serifs. These are joined by Giles de Braose, bishop of Hereford (1200), and after Boniface, archbishop of Canterbury (1245) the form gradually becomes common. In black letter the form is always the same, but the double f, used as a capital, is found on the Fountains Abbey seal of 1410. Henry VII has an elaborate form on his first Great Seal (1485), but in essentials it does not differ from the earlier examples. The Lombardic reappears on the seal of the Merchant Taylors' Company (1502), and this and the Roman, found on Henry VIII's second seal (1532), alternate to the end of our period.

G

The earliest form of this letter, on the first seal of William the Conqueror (1066), is square. Thereafter, except on the fourth seal of Henry I (1107) and the seal of Richard
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De Beames I, bishop of London (1108), it is more or less rounded, and the chief points for notice are the way in which the upper arm is drawn and the form of the lower arm. The upper arm tends to broaden towards its extremity and to get longer, frequently overlapping the lower part of the letter to a considerable extent. It also frequently develops an elaborate ceriph. The lower part of the letter generally terminates in a curl, large or small according to the taste of the artist. The modern shape of this part of the letter is first found on the counterseal of Eustace, bishop of Ely (1198), but this seems an aberrant form, as it does not appear again until the end of the fifteenth century with the seal of Silvester Gigliis, bishop of Worcester (1498). The black-letter form, which first appears on Hatfield’s seal (1345), does not vary much, the main differences being in the tail, which is sometimes almost non-existent. The latest black-letter is on the seal of Campeggio, bishop of Salisbury, 1525. When the use of capitals returns, Peter Courtenay, bishop of Winchester (1487), reverts to the Lombardic form, but this is soon abandoned for the Roman, although John Salecote, bishop of Bangor (1534), uses the Lombardic capital as well as the Roman.

H

The first example of this letter is on the second seal of William the Conqueror (1070), where two forms are used: the ordinary Roman capital and the Lombardic, consisting of a single upright with a curved right-hand arm. Henry I, on three of his seals (1101, 1106, 1107), uses an ordinary Roman capital except that the uprights are beginning to expand. The cross-bar in these, however, has an upright loop in the middle, resembling a sixteenth-century contraction mark. The Roman capital continues as the only form until 1154, when Roger de Pont l’Evêque, archbishop of York, uses the Lombardic, and this continues to predominate, the only reversions to the Roman being on the seals of Hugh Nonant, bishop of Coventry and Lichfield (1188), Geoffrey, archbishop of York (1191), Giles de Braose, bishop of Hereford (1200), Walter Gray, archbishop of York (1217), and Henry III’s first Great Seal (1218), in which the right-hand upright is shorter than the left. The changes in the Lombardic capital are all in the nature of elaboration, either in the ceriph, in the curl of the right-hand stroke, or in the bifurcation of the top or bottom of the upright. Richard I, in his first Great Seal (1189), has the letter reversed, probably an error on the part of the engraver.

The black-letter form is first found in Hatfield’s seal (1345) and differs but little from the Lombardic capital. Within a few years, however, with Islip, archbishop of Canterbury (1349), it becomes more angular and thereafter continues without much change, such changes as there are being in the evolution of the tail, which sometimes is elaborate (Chicheley, archbishop of Canterbury, 1414) and sometimes tends to disappear altogether (John Holand, 1436). When capitals displace black letter, the letter takes the Roman form, all with the simple cross-bar except the Merchant Taylors’ Company (1502), where the bar is looped as in Henry I’s seals mentioned above.
I

The letter I gives little opportunity for variation. It is always an upright stroke with or without cerifs, which are sometimes very elaborate. The letter also frequently expands at top and bottom, giving it somewhat the shape of an hour-glass. The first black-letter form occurs on the seal of Hatfield, bishop of Durham (1345), and the last on the seal ad causas of John Taylor, bishop of Lincoln (1552). A tailed i, or j, is found in black letter on the seal ad causas of John Stafford, archbishop of Canterbury (1443), and a capital J on those of John Morton, bishop of Ely (1479), and John Coke, archdeacon of Lincoln (1481).

K

This is a letter of which little use appears to have been made in the middle ages, at least to judge from seals. The first example found is on the seal of Silvester Everdon, bishop of Carlisle (1247). There it is much the same as an R except that the loop does not join on to the top of the upright stroke but springs a little below. Other examples are of this form, viz. John Halton, bishop of Carlisle (1292), and the Hull Statute Merchant seal of 1331. It is also found on the seal of Haltemprice Priory (1322), but here it is almost identical with R. The black-letter form first appears on the seal of William of Wykeham, bishop of Winchester (1367), and again on that of John Coke, archdeacon of Lincoln (1481), but these are the only datable examples found so far. On the replacement of black letter by capitals, the capital letter is used by John Kite, bishop of Carlisle (1522), where it is much the same as an R although quite different from the R on the same seal, and by William Burbanke, archdeacon of Carlisle (1524). Here for the first time it has the open top, approximating to the modern form of the letter.

L

This is another letter whose form has changed but little, the only variations being in the elaboration of the cerifs, the expanding of the main stroke, and the increasing height of the arm of the cross-stroke, which sometimes terminates in a curl. The letter is found as early as the first seal of William the Conqueror (1066) and it is hardly necessary to cite examples, beyond drawing attention to the seal of Winchester Cathedral Priory (1294), where the bottom of the main stroke is bifurcated, and to that of Queen Margaret (1299), where the arm is floriated.

The black-letter form, which is first found on Hatfield's seal (1345), consists of a single upright stroke, generally bifurcated at the top and with the bottom sometimes lozenge shaped, but more often prolonged on the right-hand side. The last instance of the black-letter form is on the seal ad causas of John Taylor, bishop of Lincoln (1552).

With the introduction of capitals—the first instance is on the seal of Peter Courtenay, bishop of Winchester (1487)—the form reverts to the Lombardic, but it gradually assumes more of the Roman shape.
There are three varieties of this letter in common use as a capital, and it will perhaps, therefore, be convenient to treat them separately. The first is the ordinary Roman form. The earliest example, on the first seal of William the Conqueror (1066), is quite simple without any serifs, but the letter tends to become bolder and to develop serifs very early. They are rudimentary on William’s second seal (1070) and pronounced in those of Gundulf, bishop of Rochester (1077), and Anselm, archbishop of Canterbury (1093), where the strokes have also become much broader. Flambard, bishop of Durham (1099), reverts to narrow strokes, and in this seal the uprights are set at an angle, a practice which occurs sporadically throughout. From this date the narrow and broad form of the letter are found concurrently, sometimes with small, sometimes with pronounced serifs, and in one instance, the counter of Richard, archbishop of Canterbury (1174), with almost none at all. Attention may also be drawn to the way in which the cross-bars are in some instances made very subordinate and sometimes spring, not from the top of the uprights, but from some little way down their sides. This first type of the letter continues in use down to 1344 on the seals of William Bateman, bishop of Norwich, and Thomas Beauchamp, earl of Warwick, and reappears again, on the resumption of capital letters, on Fox’s seal as bishop of Durham (1494) and thereafter continues in use alone.

The second type of the letter may be described as an O with a curved stroke on the right-hand side. It is first found on the seal of Eustace, bishop of Ely (1198), and, together with the first type and another to be described shortly, on the second Great Seal of Richard I of the same date. It also occurs on the counterseal of Stephen Langton, archbishop of Canterbury (1207), but after that is not found until the third seal of Canterbury Cathedral Priory (1233), where it is much modified. A similar form is on the counterseal of Edmund Rich, archbishop of Canterbury (1234), and on the seals of Merton Priory (1241), Norwich Cathedral Priory (1258), and Henry III (1263). John Peckham, archbishop of Canterbury (1279), reverts to the pure O form on both his seal and counter, as do David Martyn, bishop of St. Davids (1296) and Simon Meopham, archbishop of Canterbury (1328), while a much modified form is on Edward III’s 1338 seal. A variant of this second type with both sides closed is to be seen on the seals of William Vere, bishop of Hereford (1186), Richard I (1198), Richard of Wendover, bishop of Rochester (1238), Michael of Northburgh, bishop of London (1354), and the North Stowe Labourers’ Passes seal of 1388.

The third type of the capital appears to be a direct development from the preceding, as it is made by opening the bottom part of the letter. The earliest example is on the seal of Philip of Poitou, bishop of Durham (1197), where the two arms end in curves, the usual form. After that it is not found until the seal of Leeds Priory, Kent (1293). It also occurs on the Dover Corporation seal (1305), where the ends curve upwards, and in a simpler shape on that of William Melton, archbishop of York (1317). Richard of Bury, bishop of Durham, on his first seal (1333), shortens the arms in a peculiar manner, so that the letter looks almost like a T with a rounded top. This third type continues until Simon Langham, bishop of Ely (1362), which is its last occurrence.
There is little to say about the black-letter form. It is first found on Hatfield’s seal (1345) and invariably consists of three minims, generally, but not always, joined at the top and bottom. In one instance, Shrewsbury town (1425), the right-hand stroke is brought down below the line, but that is the only important variant to be noted. The last seal on which the black-letter form is found is that of William Atwater, bishop of Lincoln (1514).

The Roman form of the capital letter is first found on the first seal of William the Conqueror (1066), where it has no ceriphis and is broader than it is high. The stroke starts at the top of the left-hand upright and ends at the very bottom of the right-hand one. Ceriphis first appear on his second seal (1070). In that of Osbern, bishop of Exeter (1072), the cross-bar terminates about a third above the bottom of the right upright, a practice which becomes common although by no means universal. In some instances it starts about a third below the top of the left upright as well, as in William II’s seal (1087), while in that of Theobald, archbishop of Canterbury (1139), this tendency becomes so exaggerated as to make the letter look almost like an H. Occasionally the crossing is reversed, as on the seal of Flambard, bishop of Durham (1099). Beyond these variations the letter develops in the usual way with the uprights becoming broader and spreading at the ends, although the thin form of the letter continues pari passu.

The Lombardic capital, made by an upright with a curve added on the right, first occurs on the seal of Philip of Poitou, bishop of Durham (1197), and six years later on that of Nicholas of Meaux, bishop of Man. It is not again found until the third Canterbury seal of 1233. Rich uses it on his counter in 1234, as also do Wendover, bishop of Rochester (1238), Fulk Bassett, bishop of London (1244), Roger of Wescam, bishop of Coventry and Lichfield (1245) and Walter Kirkham, bishop of Durham (1249). After that date it is more generally used than the Roman and continues as an initial when the black-letter style has become established. The letter also reappears in this form on the reintroduction of capitals, Courtenay, bishop of Winchester, using it in 1487. But this is its last occurrence, the Roman capital displacing it with Silvester Giffin, bishop of Worcester (1498), and continuing in use thenceforward.

The black-letter form, which consists of two minims sometimes open at the top and bottom but more often closed, is first found in 1345 on Hatfield’s seal, and shows little or no variation until its final disappearance with John Taylor, bishop of Lincoln (1552).

On William I’s two seals (1066-70) this letter is shaped like a lozenge, but on the second the round form also appears. This, at first, is generally narrow and of the same width all round, but even in William’s second seal (1070) it shows a tendency to widen at each side, and this tendency steadily develops. The letter generally is rather oval than round, but a complete circle is found on the seal of Hugh Puiset, bishop of Durham (1153). Occasionally, too, the letter is pointed at the top and bottom, as on
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the seals of Henry II (1154), Walter Gray, archbishop of York (1217), and William Middleton, bishop of Norwich (1278). Sometimes, especially later, the widening of the sides makes the space enclosed almost rectangular, as for example the seals of Aymer de Valence, bishop elect of Winchester (1250), and Hugh Balsham, bishop of Ely (1257), while sometimes, as on the seal of Leeds Priory (1293), the enclosed space almost entirely disappears. Another, later, characteristic is to make the sides pointed, as with Walter Reynolds, archbishop of Canterbury (1313), and Canterbury city (1318). The capital reappears with Peter Courtenay, bishop of Winchester (1487), where the left-hand side is almost cusped. With the Merchant Taylors' Company (1502) this cusping is extended to the right side, and on the so-called Crutched Friars' seal of 1526 the cusings meet, giving the enclosed space a figure-of-eight form. Otherwise, the letter remains normal, except that John Kite, bishop of Carlisle (1522), and to a less extent Nicholas Heath, bishop of Worcester (1543), thicken what may be called the NE. and SW. sides.

Of the black-letter form there is little to be said. It is first found on Hatfield's seal of 1345, and continues with almost no variation until its disappearance, the last occurrence being on the seal ad causas of John Taylor, bishop of Lincoln (1552).

P

This is another letter which admits of little variation, such variations as there are being all in the direction of a thickening or elaboration of the upstroke and loop. The earliest, on William I's first seal (1066), is a very simple form, but with Osbern (1072) the upright begins to thicken and to expand at the ends. On Anselm's seal (1093) the top of the loop is higher than the top of the upright, and with Flambard (1099) there are distinct ceriphs. The simplest form is reverted to on Richard, archbishop of Canterbury's counter (1174), and a very narrow and elongated form is found on the seal of Walter Gray, archbishop of York (1217), but otherwise there is little variation to be noted. Occasionally the base is bifurcated, as on the seals of Langton, archbishop of Canterbury (1207), and Silvester Everdon, bishop of Carlisle (1247), and sometimes the right-hand bottom ceriphs is lengthened out as far as the end of the loop, as on that of Kellawe, bishop of Durham (1311). There are bifurcations at both top and bottom, with the bottom of the loop nearly reaching to the base, on the seal of Simon Langham, bishop of Ely (1362). The form is revived by Courtenay in 1487 and continues much the same thereafter.

The black-letter form first appears on Hatfield's seal (1345) and shows little change throughout, the main variations being in the length of the tail and in the extension of the bottom stroke of the loop to the left of the upright. The black letter form is last found on the seal ad causas of Taylor, bishop of Lincoln (1552).

Q

This letter occurs but rarely and follows the evolution of the O with variations in the tail. The earliest example found is on the first Great Seal of Henry II (1154), where it is represented as an O with a slightly rising tail. Sometimes the tail is short
and pointed as on Richard I's first seal (1189), and sometimes short and curled as on his second seal (1198). More elaborate forms of the tail are to be seen on the seals of Canterbury city (1318) and Haltemprice Priory (1322), while a very truncated form is on Edward III's seal of 1338.

The black-letter form is made by an O with a prolongation of the right-hand stroke below the line. The only examples found are on Edward III's Bretigny seal (1360) and on that of John Holand as admiral of England (1436).

R

The capital of this letter is fairly constant in form throughout, and, as usual, the variations are in the nature of a broadening and expansion of the upright and an elaboration of the tail. On William I's seals (1066, 1070) the letter is of a very simple form, but with Anselm (1093) it becomes more elaborate with a distinctly ornamental tail. A peculiar form is found on the seal of Theobald, archbishop of Canterbury (1139), and one which is practically a K on the counter of Archbishop Richard (1174). The bottom of the upstroke is bifurcated by Longchamp of Ely (1189), and on the seal of St. Austin's, Canterbury (1199), the top is bifurcated in one example and the tail elaborately curled in the other. An unusual form is on the seal of Walter Gray, archbishop of York (1217); here the tail springs from the loop with a short vertical bar parallel with the upright and then branches off at an angle. The tail on Bishop Hugh Balsham's seal (1257) is cut off vertically and this is not uncommon afterwards, but is probably due as a rule to exigencies of space. The tail of the letter on the seal of Dover (1305) is cut off at an angle. The capital is found as an initial right through the period of black letter and is used as such in a pure Lombardic form by Henry VII on his Great Seal (1485). Peter Courtenay has an equally pure Lombardic form in 1487, when the use of capitals comes in again, and this form with occasional reversions to the Roman, as in that of Fox, bishop of Durham (1494), continues thenceforward.

The black-letter form, of which the earliest example is on Hatfield's seal (1345), shows two styles. The more usual is a minuscule with a tail coming out at the top on the right. This tail is generally lozenge-shaped, but a variety is seen on the secret of Elyngton, bishop of Winchester (1346). The other form is the short r first found on the seals of Nevill, archbishop of York (1374), and Ralph Ergham, bishop of Salisbury (1375). Two forms of the short r are to be seen on Henry VIII's Great Seal (1485), one hardly distinguishable from an i and the other similar to Nevill's. The last example of the black-letter form is on the seal of Campeggio, bishop of Salisbury (1525).

S

The earliest form of this letter is like a reversed Z and is found on the two seals of William the Conqueror (1066, 1070). It is also found on the seal of Ralph, archbishop of Canterbury (1114). On his second seal (1070) William also uses a form like an Arabic 2 reversed or a reversed Z with the top arm curved. Osburn, however, in 1072, uses the ordinary Roman form and thereafter this form subsists, becoming more and more Lombardic by enlarging the serifs and widening the centre, although a very
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thin form is also found in use alongside of it for a good many years, as in the seal of Selfrid of Chichester (1123), Stephen's second seal (1143), Richard of Canterbury's counter (1174), and Longchamp of Ely's counter (1187). Occasionally, presumably in error, the letter is reversed, as by Henry of Blois, bishop of Winchester (1129), and Fox, bishop of Durham (1494). It appears in a very degenerate form in the North Stowe Labourers' Passes seal of 1388 and is used regularly as an initial in black-letter legends.

The ordinary black-letter form varies very little, chiefly in an elaboration of the crossing stroke. The long s, which is like an elongated c, first appears on the secret of Edyngton, bishop of Winchester (1346), and is found regularly wherever the needs of the engraver required it. The last example of the black letter, and then in its long form, is on the seal ad causas of Taylor, bishop of Lincoln (1552).

On the revival of capitals Peter Courtenay (1487) uses a rather attenuated Lombardic form, but although this form continues there is a marked tendency to revert to the Roman type by the end of the period under review.

On the first seal of William I (1066) this letter is of the ordinary Roman form with cerivhs at the end of each arm. It is not found again until William of Corbeille, archbishop of Canterbury (1123), where it has become much thicker, with the stem widened and bifurcated at the bottom. Stephen, on his second seal (1143), Hugh Puiset (1153), Henry II, on his first seal (1154), and Bartholomew, bishop of Exeter (1161), use thin forms more like those of William I, but Theobald of Canterbury (1139) and Hilary of Chichester (1148) have a broader and more spreading form. From the time of Toclive of Winchester (1173) this becomes the regular type of this form of letter, with variations in the size of the cerivhs and of the cross-bar, that on Rich's seal (1234) being almost reduced to a single stroke with short cerivhs.

The rounded form of the letter, what may be called the true Lombardic form, is first found in the counterseal of Richard, archbishop of Canterbury (1174), and it next appears on the seal of St. Austin's, Canterbury (1199), where there is a short neck between the cross-bar and the curve. It is also found, among others, on the Norwich seal of 1258, on that of Edward I (1272), on the second and third of Edward III (1323, 1340), on the counter of Simon Langham, bishop of Ely (1362), and in a debased form on the North Stowe Labourers' Passes seal of 1388. It will thus be seen that this form of the letter has a currency of just over 200 years, but it is never common, and the other form is far more usual. It also occurs as an initial in the black-letter inscription on the counter of Simon Islip, archbishop of Canterbury (1349), and is revived by Peter Courtenay in 1487, but after that the Roman type is invariable.

The black-letter form is first found on Hatfield's seal of 1345. It varies but little and then mainly in the length of the upright above the crossing and in the shape of the top, which is either straight, pointed, or bifurcated. Occasionally, as in the seals of Shrewsbury (1425) and Morton of Ely (1479), the cross-bar is thin and has a tail attached to its front. It is last found on Wareham's seal of 1503.
V

The earliest form, on William I's seal of 1066, is an ordinary Roman V slightly spreading towards the top of the strokes. Henceforward this form remains constant, with the usual variations of a thickening of the strokes and an enlargement of the serifs. The strokes usually taper towards the base, but occasionally, as with Anselm (1093), they are of the same width throughout. The tops are sometimes cut off at an angle—for example, by Peter des Roches, bishop of Winchester (1205)—or are bifurcated, as by Jocelin, bishop of Bath and Wells (1206), but generally there is little variation. A peculiar form is to be seen on the seal of Leeds Priory, Kent (1293). With the revival of capitals, Peter Courtenay (1487) uses a form with bifurcated ends, as does Fox as bishop of Winchester (1501), but afterwards the type is purely Roman. Attention may be drawn to the form used by Rugge of Norwich (1536), which has a kind of foot.

The U form first occurs in the seal of Philip of Poitou, bishop of Durham (1197) where it is reversed, and on that of Eustace, bishop of Ely (1198), and on both the V is found as well. It also occurs ligatured with M on the seal of St. Austin's, Canterbury (1199). It is next found, together with the V form, on the third Canterbury seal (1233) and on the counter of Edmund Rich, archbishop of Canterbury (1234), the V form being on his seal of dignity. It is found on the counter of Richard of Wendover, bishop of Rochester (1238), on the seal of Richard of Wyche, bishop of Chichester (1245), and reversed on those of Merton Priory (1241) and Walter Kirkham of Durham (1249). It also occurs, together with the V, on the seal of Norwich Cathedral Priory (1258), reversed on the second seal of Henry III (1259) and on that of Kilwardby, archbishop of Canterbury (1273), and without the V on those of Robert Burnell of Bath and Wells (1275), John Peckham of Canterbury (1279), and (reversed) Walter Reynolds of Worcester (1308), but that is its last occurrence, as it is not used with the revival of capitals until well after the end of our period, when it assumes the modern shape. This form, therefore, has a range of just over a century, from 1197 to 1308, but it is used but sparingly and the V is far the more common.

The black-letter form first occurs on Hatfield's seal of 1345, where it consists of two minims and is almost indistinguishable from n. This remains the constant form, but a true v is found on the seals of Shrewsbury (1425), Edward IV (1462), and John Morton of Ely (1479). The black-letter form is last found on the seal ad causas of Atwater, bishop of Lincoln (1514).

W

The origin of this letter is well seen in the first example, William I's second seal (1070), where it is represented by two V's side by side. The evolution of each V follows that of the single letter, so need not detain us; but the evolution of the double letter requires consideration. The practice was to superimpose one V upon the other, as is seen in William II's seal (1087) and thereafter the main point for notice is the manner in which the two inner strokes tend to unify above the crossing. This amalgamation is not found for nearly 200 years, unless Toclive of Winchester's seal (1173) is an example;
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but the impression is much worn and it is difficult to be certain. It is, however, clearly evident on the seals of Walter de la Wyle of Salisbury (1263), Giffard of York (1266), William Bitton II of Bath and Wells (1267), his successor, Robert Burnell (1275) and Middleton of Norwich (1278). In all these examples the upper part of the left upright of the right V has disappeared. A few years later the union of the upper parts of the middle strokes is complete and symmetrical as in the following: Gloucester Statute Merchant (1283), Louth, archdeacon of Durham (1284), Corner of Salisbury (1288), Redeswelle, archdeacon of Chester (1290), Louth of Ely (1290), Merewall of Winchester (1305), Reynolds of Worcester (1308), and Hull Statute Merchant (1331).

A very modern and pure Roman form is found on the seal of Greenfield of York (1304), where the inner top strokes end in a point; but this appears to be the only instance.

With the reintroduction of capitals, Courtenay (1487) uses a letter with the unified middle strokes, like the Gloucester Statute Merchant group mentioned above, but afterwards the superimposed form is predominant, except that, strangely enough, Clarke of Bath and Wells (1523) and Rugge of Norwich (1536) revert to the most primitive type of all, the two V’s side by side.

The black-letter form consists of two minims, often set at an angle with the base line, with a third stroke on the right something like the short r, although occasionally another and shorter minim takes its place, as in Courtenay of Canterbury (1381) and Skirlaw of Durham (1388). Beyond this the letter shows practically no variation. The black-letter form first occurs on Hatfield’s seal of 1345 and its last appearance is on the seal ad causas of Atwater, bishop of Lincoln (1514).

X

This letter is first found on the seal of William II (1087) where it is an ordinary saltire with short ceriphs, one stroke being clearly shown as superimposed on the other, although this does not show in the drawing. William Warelwast, bishop of Exeter (1107) has an equiangular saltire with the strokes conjoined at the centre, not superimposed, while in Stephen’s first seal (1135) one stroke is considerably thinner than the other. On his second seal (1143) the strokes are of the same width superimposed, but the upper and lower angles are much more obtuse than the side ones, making the letter broader than it is high, and the same peculiarity is seen on Henry II’s first seal (1154). After this the letter follows one or other of these patterns until John (1199), where one of the strokes is curved, and this curving afterwards on the whole becomes the predominant form, although that with two straight strokes is still found, as on Edward I (1272), Exeter Statute Merchant (1292), and the counter of Stratford of Canterbury (1333). Black letter is first found on Edward III’s Bretigny seal (1360), where the letter consists of a minim with a diagonal cross-stroke. Other forms are found on Henry IV’s Great Seal (1399) and Edward IV’s first seal (1461), where the letter is practically an r with a horizontal cross-stroke, and on that of Shrewsbury (1425), where both the diagonal and horizontal cross-strokes appear together.
Y

This letter is rarely found, the first example being on the seal of Ipswich (1200), where it resembles a claw-hammer, and this form continues, with modifications, throughout. Hugh of Northwold, bishop of Ely (1229), curls the top of the left-hand stroke; William of Louth, bishop of Ely (1296), makes the letter much more square, Queen Margaret (1299) bifurcates the right-hand stroke, William Aymain, bishop of Norwich (1325), curls the tail upwards, and Anthony Bek, bishop of Norwich (1337), curls it downwards. In not a single instance does the letter take the modern form of an upright with a fork on the top, not even after the revival of capitals, the only example of the use of the capital letter in the early sixteenth century being on Wolsey's seal as bishop of Winchester (1528). There, as in the earlier examples, the tail is a downward extension of the right-hand arm of the fork. A grotesque form of the letter is found on the North Stowe Labourers' Passes seal of 1388, which has two tails crossed.

In essentials with slight variations the black-letter form is the capital on a smaller scale. There are but few examples. The first is on Edynston, bishop of Winchester's seal (1346), and the last datable one on Gray, bishop of Ely's seal of 1454.

Z

The only example found at present which can be dated is on the seal of Haltemprice Priory (1322). Here the letter is exactly like a Roman Z but without any serifs and with the lower stroke slightly curved. This Haltemprice seal, peculiar in many ways, is peculiar also in this: that its legend contains every letter of the alphabet.

The ampersand is occasionally represented by a Z, as on Henry VIII's golden bulla (1527).

Ligatures

Ligatures are not as common as might be expected considering the restricted space allowed for the legends. The most common are DE, OR, and AN. The earliest DE is on the St. Austin's seal of 1199, which also has OR and UM, and the latest on Archbishop Warham's (1503). The earliest ligatures of all are AN and ARD on the counter of Richard of Canterbury (1174). OR in some instances, both Lombardic and black letter, is scarcely to be distinguished from M. Ligatures of CA, ET, and TI are found on Cardinal Pole's seal of 1556, and TR on Wescaham of Lichfield's seal (1245), which also ligatures ER.

The result of this inquiry shows that the styles of lettering cannot be so differentiated as to form a safe basis for deductions as to date. Indeed, it shows conclusively that no such clear-cut divisions can be substantiated. The nearest approach to such a division is in the adoption of the black letter, which is first found in 1345 on the seal of Hatfield, bishop of Durham. But even in
this there is a very considerable overlap both at the beginning and the end, capitals still being used alone down to 1388 and the black letter continuing well into the sixteenth century, long after the use of capitals had been revived. What too seems as certainly to be disproved is that any division can properly be made between the two styles of capital letter. It is impossible to assert that Roman capitals were the first used when William I in 1070 uses a Lombardic A, E, and H, and when Osbern, bishop of Exeter, two years later, has a perfectly good Lombardic B and G. Nor is it possible to consider that a kind of rude Lombardic came in with Richard, archbishop of Canterbury, in 1174. Most of the letters on his seal are of good Lombardic form, and some, especially his counterseal, can be matched earlier. The change, in fact, was a continuous process, and the evidence tends to show that, although the Lombardic developed from the Roman, the development was slow and gradual, beginning almost at once and the style not reaching perfection until well into the thirteenth century. Neither can it be asserted that Lombardic capitals disappeared about 1350, when they are used alone in 1376 by Swaffham, bishop of Bangor, and in 1388 on the North Stowe seal, and continue to be used as initials in black-letter inscriptions. It also cannot be correct to say that it was the Roman capital which was revived about 1500, when Courtenay, bishop of Winchester, uses Lombardic capitals alone in 1487 and when most of the capital letters retained a Lombardic form until long after the beginning of the sixteenth century.

Lastly, it may be of interest to emphasize the extraordinary diversity of the letters, for no two are identical. This goes to prove that the medieval engraver did not use stamps or puncheons for his letters. In fact, the first English seals where their use seems to be certain are the Ecclesiastical Causes seals of Edward VI, where not only the letters but also the charges and accessories of the shield appear to have been produced in this way.
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<td>1327</td>
<td>Edward III, 2nd Great Seal.</td>
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<tr>
<td>1328a</td>
<td>Reading Abbey, Berks., 2nd seal: dated on matrix.</td>
<td></td>
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<tr>
<td>1328b</td>
<td>Simon Meopham, archbishop of Canterbury.</td>
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<tr>
<td>1330a</td>
<td>Robert Wyville, bishop-elect of Salisbury.</td>
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<tr>
<td>1330b</td>
<td>Robert Wyville, bishop of Salisbury.</td>
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<tr>
<td>1331</td>
<td>Hull Statute Merchant.</td>
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<tr>
<td>1333a</td>
<td>Robert Graystones, bishop of Durham.</td>
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<tr>
<td>1333b</td>
<td>Richard of Bury, bishop of Durham.</td>
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<tr>
<td>1333c</td>
<td>John Stratford, archbishop of Canterbury.</td>
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<td>1333d</td>
<td></td>
<td>counter.</td>
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<tr>
<td>1336</td>
<td>Canterbury Statute Merchant.</td>
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<tr>
<td>1337a</td>
<td>Simon Montague, bishop of Ely.</td>
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<tr>
<td>1337b</td>
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<td>counter.</td>
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<tr>
<td>1337c</td>
<td>Anthony Bek, bishop of Norwich.</td>
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<tr>
<td>1338</td>
<td>Edward III, 1st seal of absence.</td>
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<tr>
<td>1340a</td>
<td>Queen's College, Oxford.</td>
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<tr>
<td>1340b</td>
<td>Ralph Stratford, bishop of London.</td>
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<tr>
<td>1340c</td>
<td>Edward III, 3rd Great Seal.</td>
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<td>1340d</td>
<td>Edward III, 2nd seal of absence.</td>
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<tr>
<td>1341</td>
<td>Edward III, 4th Great Seal.</td>
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<tr>
<td>1342a</td>
<td>William de la Zouch, archbishop of York.</td>
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<td>1342b</td>
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<td>counter.</td>
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<tr>
<td>1344a</td>
<td>William Bateman, bishop of Norwich.</td>
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<tr>
<td>1344b</td>
<td>Thomas Beauchamp, earl of Warwick: dated on matrix.</td>
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<td>1345</td>
<td>Thomas Hatfield, bishop of Durham.</td>
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<td>1346</td>
<td>William Edyngton, bishop of Winchester, secret.</td>
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<td>1348</td>
<td>Henry of Walton, archdeacon of Richmond.</td>
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<td>1349a</td>
<td>Simon Islip, archbishop of Canterbury.</td>
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<td>1349b</td>
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<td>counter.</td>
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<tr>
<td>1352</td>
<td>John Thoresby, archbishop of York.</td>
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<td>1353</td>
<td>Staple of Lincoln.</td>
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<td>1354</td>
<td>Michael of Northburgh, bishop of London.</td>
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<td>1360</td>
<td>Edward III, 5th Great Seal.</td>
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<td>1361</td>
<td>Adam of Houghton, bishop of St. Davids.</td>
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<tr>
<td>1362</td>
<td>Simon Langham, bishop of Ely, counter.</td>
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<tr>
<td>1366</td>
<td>Simon Langham, archbishop of Canterbury.</td>
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<td>1367</td>
<td>William of Wykeham, bishop of Winchester.</td>
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<td>1368</td>
<td>Richard of Ravenser, archdeacon of Lincoln.</td>
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<td>1369</td>
<td>John Harewell, bishop of Bath and Wells, seal ad causas.</td>
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<tr>
<td>1370</td>
<td>Henry Despencer, bishop of Norwich.</td>
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<tr>
<td>1374a</td>
<td>Thomas Arundel, bishop of Ely.</td>
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<td>1374b</td>
<td>Alexander Nevill, archbishop of York.</td>
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<td>1375</td>
<td>Ralph Ergham, bishop of Salisbury.</td>
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<td>1376</td>
<td>John Swaffham, bishop of Dangor.</td>
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<tr>
<td>1381a</td>
<td>William Courtenay, bishop of Canterbury.</td>
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<td>1381b</td>
<td>London, 2nd mayoralty seal: dated by accounts.</td>
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<tr>
<td>1382</td>
<td>John Fordham, bishop of Durham.</td>
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<tr>
<td>1388a</td>
<td>Lothingland Hundred, Labourers' passes.</td>
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<td>1388b</td>
<td>North Stowe Hundred, Labourers' passes.</td>
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<tr>
<td>1388c</td>
<td>Walter Skirlaw, bishop of Durham.</td>
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<tr>
<td>1391</td>
<td>Edward, earl of Rutland, as admiral of England.</td>
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<td>1393</td>
<td>Staple of Westminster.</td>
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<td>1395</td>
<td>Thomas Arundel, archbishop of Canterbury.</td>
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<td>1397</td>
<td>John Campden, archdeacon of Surrey.</td>
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<td>1399</td>
<td>Henry IV, the Gold Seal.</td>
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<tr>
<td>1405</td>
<td>Henry Beaufort, bishop of Winchester.</td>
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</table>
1407 a William of Westacre, archdeacon of Norwich.
1407 b Henry Bowet, archbishop of York.
1407 c \[\text{ad causas.}\]
1407 d Thomas Peverell, bishop of Worcester.
1410 Fountains Abbey, 2nd seal: dated on matrix (but see Archaeologia, lxxviii, 17, n. 1).
1414 Henry Chicheley, archbishop of Canterbury.
1425 Shrewsbury town: dated on matrix.
1426 a Philip Morgan, bishop of Ely.
1426 b William Gray, bishop of London.
1436 John Holand, as admiral of England.
1438 William Ascough, bishop of Salisbury.
1443 a John Stafford, archbishop of Canterbury, seal \[\text{ad causas.}\]
1443 b Thomas Beckington, bishop of Bath and Wells.
1444 Thomas Bourchier, bishop of Ely.
1447 William of Waynflete, bishop of Winchester.
1452 John Kemp, archbishop of Canterbury.
1454 William Gray, bishop of Ely.
1455 Thomas Burton, bishop of Man.
1461 Edward IV, 1st Great Seal.
1462 Edward IV, 2nd Great Seal.
1478 John Morton, bishop of Ely.
1481 John Coke, archdeacon of Lincoln.
1485 Henry VII, Great Seal.
1487 Peter Courtenay, bishop of Winchester.
1494 Richard Fox, bishop of Durham.
1496 Silvester Gigliis, bishop of Worcester.
1501 Richard Fox, bishop of Winchester.
1502 a William Senhouse, bishop of Durham.
1514 William Atwater, bishop of Lincoln, seal \[\text{ad causas.}\]
1522 John Kite, bishop of Carlisle.
1523 John Clarke, bishop of Bath and Wells.
1524 William Burbank, archdeacon of Carlisle.
1525 Laurence Campeggio, bishop of Salisbury.
1526 Crutched Friars, London (so-called, but probably a fraternity): dated on matrix.
1527 Henry VIII, Golden bulla.
1528 Thomas Wolsey, bishop of Winchester.
1530 Cuthbert Tunstall, bishop of Durham.
1531 Stephen Gardiner, bishop of Winchester.
1532 Henry VIII, 2nd Great Seal.
1534 a Thomas Cranmer, archbishop of Canterbury, 2nd seal.
1534 b John Salcote, bishop of Bangor.
1536 William Rugge, bishop of Norwich.
1539 John Salcote, bishop of Salisbury.
1543 Nicholas Heath, bishop of Worcester.
1546 Trinity College, Cambridge: dated on matrix.
1547 a Edward VI, Great Seal.
1547 b Henry Holbeach, bishop of Lincoln.
1550 John Taylor, bishop of Lincoln, seal \[\text{ad causas.}\]
1556 Reginald Pole, archbishop of Canterbury.
Letter of Fraternity from the Brigittines of Syon to the Prior and Convent of Durham, 1516 (f)

Read 11th April 1929

Since the publication in *Archaeologia*¹ of the paper read by me before the Society on 12th February 1925, I have come across a considerable number, nearly one hundred in all, of Letters of Fraternity, in addition to the one hundred and seventy-eight which I was able to include in the Appendix to my paper. I owe the knowledge of most of these to the kindness of the same correspondents whose help I acknowledged at the end of my article, notably to our Fellows Dr. Rose Graham and Dr. H. H. E. Craster, Mr. R. C. Fowler, whose recent loss we have to deplore, and Dr. A. G. Little, F.B.A. My thanks are also due to the Duke of Rutland, F.S.A., for kindly allowing me to examine the Cluniac letter of fraternity from Lenton Priory, now at Belvoir Castle; to T. Bruce Dilks, Esq., of Bridgwater, for bringing to my notice the nine fraternity letters preserved among the Borough archives there, and for lending me his transcripts of them; and to the Dean and Chapter of Durham, for permitting the reproduction of the Brigettine letter from Syon to Durham which is illustrated in pl. LXXVI.²

The item of principal interest perhaps in my new material is the example of a Cluniac letter which enables us to fill a rather puzzling gap in the list of examples. It is among the MSS. of the Duke of Rutland at Belvoir Castle and is calendared in the Report of the Historical Manuscripts Commission on that collection (vol. iv, p. 26).

A fresh Cistercian example has come to light among the Greenwell Deeds in Newcastle-on-Tyne Public Library (no. 68). It is issued by Theobald, Abbot of Citeaux, and the General Chapter, to William de Kellow, in 1292. This corresponds almost exactly with those issued to Lacock (1253), Sir John Hesketh (1329) and Sir Geoffrey Staunton (1436), and shows how stereotyped the Cistercian formula became.

The Lincoln Charters in the Bodleian Library have furnished three interesting examples, all issued to Robert Hussey between 1507 and 1532. In the former year Robert Hussey, described as ‘Magister’, is admitted to fraternity

¹ *Archaeologia*, lxxvi, 19-60.
² To our Fellow Canon Foster I am obliged for pointing out that the Stixwold charters, which I quoted in my paper, and described as unpublished, have been printed in Prof. Stenton’s *Danelew Charters*, nos. 380 and 381.
in Belvoir Priory; and this discovery enables us to add one more name to the scanty number of English Benedictine houses of which letters of fraternity are extant. It is issued by Robert Prior of Belvoir and his convent in December 1507, and follows the usual Benedictine pattern, but as is natural in a late example is more prolix than those of earlier date in the list of 'good works', in which Robert Hussey is given a share. It affords also an additional proof that 'fraternity' and 'participation' amounted to the same thing; for it runs 'In fraternitatem nostrorum loci et prioratus vos recipimus in vita vestra pariter et in morte plenam participationem omnium bonorum... vobis plenariter concedendo pariter et largiando'.

The second of the Hussey letters is especially interesting as furnishing the only example which has yet come to light of a fraternity letter issued by the one order of English origin, the Gilbertine Canons or Order of Sempringham; and the third, dated 1532, adds one more to the letters issued by the Prior of the Grande Chartreuse, and the 'difinitores' of the Carthusian order.

The result of my further investigations, with the kindly help of my correspondents, has been to swell the number of Benedictine houses, of which Letters of Fraternity, so far as we know, have survived, from nine to ten, and the letters themselves from twenty to forty-four. We have further an interesting entry in the Literae Cantuarienses (Rolls Ser., i, 10–12) where specimens are given of Letters of Fraternity from Christ Church, Canterbury, in three forms varying in length and in prolixity of diction. There is also in the same collection, p. 9, the model of a deed establishing mutual fraternity with another monastery; the house in question is Waltham Holy Cross, but the deed was evidently copied into the register as a pattern for agreements of this kind. Bury St. Edmunds gives us the formula of admission to fraternity in French (Harl. MS. 631, fo. 271) and, again, no doubt, to serve as a pattern, a letter in French from the earl of March and Ulster, asking that he may be admitted to the fraternity of the house, as divers of his ancestors had been. French is also the language of the letter by which Elizabeth de Burgh is admitted to fraternity at Ely in 1335 (B.M. Add. 41612). This is the only example I know of an actual letter of fraternity couched in that language, and may be an instance of consideration of the lady's probable ignorance of Latin.

Lists of those admitted to fraternity in divers Benedictine houses, but not the actual letters of admission, are given in the following:

St. Albans. Cotton MS. Nero. D. vii is a 'catalogus benefactorum et omnium corum qui in plenam fraternitatem monasterii S. Albani usque ad an. 1463 recepti sunt: cum compendiosis historii eorum et picturis'.

Bury St. Edmunds. The Curteys Register (B.M. Add. 14848) gives an
account of the reception of Henry VI, the duke of Gloucester, and others into fraternity in 1433. See Archaeologia, xv, 70, where a note gives the names of those admitted on 6th March 1440, being evidently the relations and retinue of Humphrey, earl of Buckingham; viz. Anne his wife; Humphrey and Henry his sons, Anne de Vere, his daughter; Henry Bourchier, count of Eu; John Bourchier his son; Isabella Verney; Elizabeth Drury; Elizabeth Culpeper; John Savyn; Henry Drury; William Wistowe; Walter Percyvale; followed by a feast to the convent by the earl of Buckingham.

St. Benet Holme, Norfolk. 'Memorandum quod isti nobiles sequentes fuerunt recepti in fraternitatem monasterii S. Benedicti, ut examinavi per eorum registra'. Simeonis et Willelmi de Worcestra Itineraria, ed. Nasmith. A list of nineteen names, ranging in date from 1339 to 1366.

The Martilogia of other Benedictine houses also contain lists of those admitted to the fraternity of the monastery, e.g. Lambeth MS. 20 (= B.M. Arundel 68) for Christ Church, Canterbury, and for Belvoir priory, MS. O. g. 25 in the library of Trinity College, Cambridge (no. 1437 in M. R. James's Catalogue).

When we take a general view of the information thus afforded, together with such Benedictine letters as seem to have survived, we are led to conclude that, in conformity with the general spirit of Benedictine autonomy, there was no fixed model for a Letter of Fraternity in the order, though each house had one or more forms of its own, and the general outline of all followed the same main pattern. The abbot (or prior) and convent send greetings to the persons to be admitted, recite that though Christian charity bids us pray for all alike, yet there is a special obligation in the case of our friends and benefactors. Knowing therefore the devotion that they bear to the order and to the house of X., and wishing to repay this according to their power, the convent, acceding to the earnest request made to them, admit the petitioners to full participation in all masses, prayers, fasts, vigils, etc. (the list varies somewhat, becoming fuller in the later examples) performed by the house and its dependencies, and promise that on their death being reported in Chapter, they shall then be absolved, and all those things shall be done for them, which are customarily done for brethren or sisters departed. Sometimes, especially in the earlier examples, these services are specified; e.g. so many masses by each priest, so many recitations of the Psalter by each lay-person; and it is often provided that their names shall be recorded in the martilogium of the house, and sent round at the accustomed times for the prayers of associated houses. The formula varies in the different houses; some express the word 'fraternitas', others omit it; but even those that do not use the word in the letter of admission frequently employ it in their record of the transaction.
The *Liber Albus* of Worcester supplies us also with an interesting instance of a cathedral *confraternitas* designed for a special purpose, and of limited duration. In 1302, the prior John de Wyke, who had previously complained that the bishop, Godfrey Gifford, to whom the first fruits in the diocese had been granted for three years for the purpose of the repair of the cathedral church, had done nothing in the matter, and indeed used the money for other purposes, got his chance to set things right. In January of that year the bishop died and the prior found himself able to administer the diocese *sede vacante*. He was not slow to use his opportunity, and did so by reviving the *confraria*, which former bishops had employed for the purpose of raising funds. He accordingly exhorts all officials, archdeacons, deans, abbots, priors, rector, vicars, chaplains, and all ecclesiastical persons, and the faithful generally, to receive with all friendliness the messengers (*muniores*—the same as the *procurationes* or *proctors*) when they come to request the alms of the faithful in aid of the work of building of our church. He requests the parish clergy, by their sermons, and by their example to induce their people to join the *confraria* and both to give and to bequeath for the good of their souls, some share of their wealth for this purpose. Whoever, after confession and true penitence thus charitably gives of his means is released from one-third of his penance, and receives from the pope, the archbishop, and bishops 1028 days of indulgence, and a share in all the prayers and benefits of the cathedral and of the whole diocese for ever. If the parish is under an interdict, on the day that the messengers are received the interdict is withdrawn. All whose names are inscribed in the *confraria* will be buried in consecrated ground *nisi alius rationabile obstitas*. He orders them to receive the messengers with all reverence, and to admit no other collectors for any purpose, at least from Advent till after Easter, and to give these messengers the preference' (J. M. Wilson, *Liber Albus* of Worcester, p. liv).

A document of somewhat similar import is preserved among the muniments of Westminster Abbey, whereby the Abbot William (1214–22) grants to all who contribute to the construction of the new work there in honour of the Virgin Mother, participation in the spiritual benefits done (*que fient*) in the abbey and the monasteries which are in *confraternity* therewith, to wit: Malmesbury and its cells, Malvern and its cells, Hurley and the cell of St. Bartholomew in Sudbury; also participation in certain specified services, a relaxation of two hundred days of penance, twenty-one days' indulgence, and, by special arrangement with the abbot of Citeaux, participation in the spiritual benefits of the Cistercian order.

I may here take the opportunity of correcting a mistake and a misreading of which I was guilty, with regard to the letter issued by the abbot of Abing-
SOME FURTHER LETTERS OF FRATERNITY

don in 1476 (P.R.O. Chancery Misc. bdle. 15, file 6, no. 12). The name of the grantee is not Jane Jode, but Joan Darell, widow, of the diocese of Salisbury, and the letter is issued by the abbot as Papal Commissary in England, giving her leave to choose her own confessors, and certifying that inasmuch as she is a sister admitted of St. Thomas's Hospital, Rome, she is a sharer in the indulgences granted to that house. It is therefore not to be reckoned as an admission to fraternity at Abingdon Abbey, but should be grouped with admissions to St. Thomas's, Rome, since though it does not actually admit her to that fellowship, it states explicitly that she has been so admitted. I have therefore removed it from the category of Benedictine letters, and added it at the end of those belonging to St. Thomas's, which are thereby increased to nineteen.

Of the one Cluniac letter which has as yet come to light, one can only say that it follows in the main the general Benedictine outline. It is not indeed a fraternity letter pure and simple, for it specifies the particular benefaction made to Lenton Priory by the recipient, William de Vernun, in return for which he is admitted to their prayers; but it is obviously to be placed in the same category as the more formal admissions. It varies, however, from the genius of the Benedictine rule, in that it is issued, not by the particular house (Lenton, Notts.) which has received the benefaction, but by the abbot of Cluny, in conformity with the Cluniac principle of the subordination of all their foundations to the one mother-abbey of Cluny. We know that the abbot visited England in the year 1237, in which the document was issued; and we learn incidentally from the complementary certificate (if it may so be called) issued simultaneously by the prior of Lenton, that Abbot Hugh laid an injunction ‘in pleno conventu’ against any variation in the terms of the convent’s obligation, thus showing that he was present in person. The documents are of sufficient interest, I think, to be given in full.

Belvoir Castle Muniments. Haddon 353.

Omnibus Christi fidelibus ad quos presens scriptum pervenerit Frater Hugo Cluniaecensis ecclesie humilis minister et insignis eternam in domino salutem Cum nobilis vir Willelmus de Vernun pia ductus voluntate pro salute anime sue et Alicie uxoris sue et omnium antecessorum et successorum suorum totam terram quam habuit in Stanton Priori et conventui de Lenton cum corpore suo ibidem iuxta patrem suum sepeliendo, nos eundem W. et A. uxorum suam in participacionem omnium bonorum tocius ordinis cluniaecensis Scilicet in ieiunii dieclinis et vigilis oracionibus missis matutinis et in omnibus aliis bonis que flunt vel fieri possunt tam in capite quam in membris recepimus Prohibentes in virtute obediencie ne quis in posterum sive Prior seu conventus vel aliquis alius ballivus dictam terram dare vendere invadiare vel aliquo alio modo a dicta domo alienare presumat Retentis tamen dictis W. et A. viginti solidis quoad xixerint ad duas pitancias faciendas die videlicet sancti Nicholai decem solidis et
SOME FURTHER LETTERS OF FRATERNITY

die sancti Marci evangeliiste decem solidis. Quibus quidem diebus celebrabit conventus missas de saneto spiritu. Et insuper una dimidia marca singulis annis retenta ad opus infirorum de infirmaria Dictis vero W. et A. de medio sublatis diebus anniversariorum suorum fient cedem pitancia in perpetuam eorum memoriam, ut devocius et alacrisus conventus officium exequatur Et ut hec donacio perpetuam robur obtineat presens scriptum sigilli nostri apposizione duximus roborandum Actum anno gracie m° ccc. xxx° viij apud Lentonam

Portion of Seal. Abbot vested and standing . . . CLVNIAC . . .

Belvoir Castle Muniments. Haddon 354.

Omnibus Christi fidelibus ad quos presens scriptum pervenerit Frater R. Prior de Lenton et eiusdem loci conventus humilis eternam in domino salutem. Noverit universitas vestra nos unanimit et pari voluntate ad petitionem domini Willelmi de Vernun et domine Alicie uxoris sue concessisse cisdem pro bonis que nobis antecessores sui et ipsi contulerint ut quicunque fuerit suprior istius domus recipiat singulis annis viginti solidos ad duas piticas faciendas et dimidiam marcam ad infirmarium in perpetuum per manus illius qui terram de Stanton custodiet. Quam terram dictus W. cum corpore suo nobis donavit. Scilicet decem solidos die sancti Nicholai et decem solidos die sancti Marci evangeliiste. Quibus diebus duas missas de sancto spiritu pro eis et eorum libebris et amicis suis in conventu quoad vixerint celebrabimus. Sublatis vero eis de medio diebus anniversariorum suorum celebrabimus missas in conventu pro animabus suis et animabus antecessorum et successorum suorum in perpetuum. Et ut devocius et alacrisus conventus hoc faciat, diebus anniversariorum suorum fient due pitanciae de predictis viginti solidis. Ramanente semper dimidia marca ad opus infirorum fratrum de infirmaria. Ut autem hec mea concessio perpetuam robur obtineat huic scripto sigillum nostrum duximus apponendum. Prohibitur insuper dominus Hugo Abbas cluniacensis in pleno conventu in virtute obedientie ne quis imposterum sive Prior vel aliquis alius ballivus hanc nostram concessionem mutare vel aliquo alio modo ad alios usus transferre presumat.

In the Cistercian order the subordination of the daughter-houses was as thorough as among the Cluniacs; but it was not to the abbot of Citeaux that obedience was due, but to the Chapter-general of the abbots of the whole order. The abbot of Citeaux presided in virtue of his office, but in theory at least every member of the chapter was co-abbot, and the peer of Citeaux or Clairvaux. We find this reflected in the Cistercian letters of fraternity which are issued by the abbot of Citeaux and the whole assembly of the General Chapter, and by them alone; individual abbots do not grant them. The exceptions which I have recorded are more apparent than real, for the Pelham letter of 1450, by the prior of St. Anastasius, Rome, is an admission to membership in the brotherhood of Scala Celi in that monastery, not to fraternity with the whole body; and the Bitiesden document of 1379 is really a charter issued by the Corbets, father and son, since it bears their seal, and runs in their
name, conferring on the abbey certain lands, in return for which gift they are to be admitted to the prayers, etc., of the house; while the document of 1183–4 among Lord de L’Isle’s MSS. runs in the name of the abbots of the two leading houses, Citeaux and Clairvaux, though it deals with benefactions to the house of Robertsbridge. It seems thus to indicate an early form of the later practice, embodying the principle of acting only in the name of the whole body, but not yet crystallized into the stereotyped form of the abbot of Citeaux and Chapter-general. When once established, however, this was so rigidly adhered to that the formula of the grant of participation among the Cistercians varied by hardly a word for three hundred years.

It will be noticed that it was the Cistercian practice that requests for participation, whether by individuals, or religious houses, should be brought forward in chapter by one of the abbots attending. When we turn to the consideration of the Carthusian examples we find the same feature in the four letters which are issued by the prior of the Grande Chartreuse. As I did not give a specimen of a Carthusian letter in my earlier paper, I here subjoin a transcript of the earliest, that issued in 1437 to Henry Kerspe [Kershope] and Margaret his wife. Though issued so late, the names of the recipients have not been inserted later, as is so often the case; and I believe the same thing to hold good of the letters of 1493 to Thomas Pilborough and others, and of 1532 to Robert Hussey.


Frater guill’ humilis prior cartusie ceterique diffinitores capituli generalis ordinis cartusiensis dilectis nobis in Christo henrico de Kerspe et margarete uxor eius parentibus quoque et libere corum saltem in domino [sempiternam et oracionum] sufragium salutare. Cum nemo sine crimine vivit nec sit homo qui semper faciat bonum aut non pecet, cuilibet desideranti anime sue saltem semper querendum est remedium quocius ... vel emundetur vel protegatur. Propret quod pe devocionis vestre affectum quem vos habere [ad ordinem nostrum in]tendentes amore dei et ad supplices preces humilemque instantiam dilecti fratris nostri ... de kerspe, concedimus vobis tenore presencium locius ordinis nostri participacionem, vosque ... amus tam in vita quam in morte omnium bonorum spiritualium que dominus in ordine [nostro ... fici ... con]cesserit. Videlicet missarum oracionum psalmorum vigilierum ieiuniorum elemosiniarum ce[terorumque bonorum] exerciciorum quatenus auxilliante deo eo magis bonitas vestra pliique devocio ... melius quo largius atque copiosius divina gracia super eos choruscaverit. Hoc [eiiam addentes] de gracia speciali ut cum obitus cuiuslibet vestrum quem deus faciem faciat [fuerit in nostro pro]vinciali capitulo denunciatus, pro animarum vestrarum remedio missas et oraciones per totum [ordinem nostrum] celebrandas institucemus, prout pro amicus et participibus nostris fici ... consuetum ... apposizione sigilli domus cartusie Anno domini mo cccco xxxvii sedente capitulo.

Seal gone.
The general scheme of the Carthusian fraternity letter, it will be observed, is very similar to the Benedictine; but it is noteworthy that they are issued by the prior of the Grande Chartreuse, and the diffinitorum of the General Chapter. The association of these diffinitorum, or Standing Committee of the General Chapter, seems to be the Carthusian equivalent of the association of the whole body of abbots with the abbot of Citeaux among the Cisterians. It is, with one exception, the only case in which the diffinitorum are mentioned in connexion with these grants, though they existed, of course, in all the orders. The solitary exception is the Austin Friars' letter of 1279 to Sir Brian de Brompton, which will be dealt with in its place. For the rest, the Carthusian letters seem to follow more or less closely the Benedictine type; i.e. after the salutation comes the statement that though the universal law of charity bids us pray for all men, yet we are specially bound to do so for our benefactors and friends: therefore knowing the devotion which A. B. bears to our Order, we admit him, etc. The Cistercians, as the Lacock and other letters show, omit this preamble, and go straight from the salutation to the recognition of the affection that A. B. bears to the whole Order.

The letters issued by the Austin Canons present fewer features of special interest than the monastic examples we have been last considering, and the few additional examples which have been brought to my notice do not seem to modify the general impression made by those already published; there is, however, an example, issued in 1506 by the Provincial Chapter of the Austin Canons of England, which stands as parallel to the Benedictine letter of 1298. The Austin Canons seem to have had a general scheme in their letters of even less fixity than the Benedictine pattern; but as we have only seven examples to reason from it is obviously impossible to speak with any confidence on the point.

The Premonstratensian or White Canons were much influenced in many respects by the Cistercian movement, and we find this influence reflected to some extent in their practice with regard to the issue of letters of participation or of fraternity. Like the Cistercian examples, the three letters I mentioned in my earlier paper run in the name of the abbot of Prémontré, and the General Chapter; but, unlike them, they differ widely from one another in their phraseology.

As, however, they are all addressed to personages of importance, the king of England, the bishop of Worcester, and Dame Hawyne Neville, who had done great things for the house at Maldon, Essex, it is natural to suppose that they were specially composed for each recipient; and we cannot therefore argue from them as to the Premonstratensian practice in the case of less important persons. There remain for consideration the letter issued by Amblardus the
abbot of Newhouse, the earliest foundation of the order in England, to Peter de Gousa in 1185, and the participation given by the house of Titchfield to R. St. John in 1258. Though these are in a sense to be reckoned as letters of fraternity, inasmuch as they announce to the world in general, or to the recipients of the letters, that they have been received into the fraternity of the house, yet they are not to be taken as representing the norm of a Premonstratensian letter. The Titchfield example confers the privilege in return for the advowson of Corhampton, and that from Newhouse, after certifying the fact of Gousa's admission, goes on to say that the writer would have given his messenger a more explicit answer concerning the things that he had written about, but since he was going on farther, and the abbot did not wish the whole countryside to know, he had not done so.

Frater Ambbardus sancti Martialis servus indignus omnisque loci ipsius conventus karissimo fratri nostro domino Petro de Gousa salutem et fideles oraciones Suscepta legacione vestra et perfecta descriptione letificati omnipotenti dei gracias agimus qui dilectum suum beatissimum Marcialem per miracula apud vos clarificare fidem vestram ac vicinorum per eadem confirmare dignatur. Dominum quoque R. fratrem vestrum qui beati Marcialis aecclesiam primus construxit, in conventu sicut fratrem nostrum absoluimus, et pro eius anima debitas deo oraciones, psalmos et missas obtulimus Vos quoque quam olim in aecclesia nostra beneficio susceperamus, amodo non beneficii tantum participem, sed sicut unum ex nobis tam in vita quam in morte fatemur. Omnis etiam qui aecclesie vestre vel servierint vel benefecerint, tocius aecclesie nostre beneficii socios esse concessimus. Preterea, de eo quod ad beati Marcialis et aecclesie ipsius claritutinem postulastis, pro cetero ad presens satisficimur nisi vester nuncius longius esset prorectus. Quod enim directuri eramus vel cum locus fuerit dirigemus, nec tractari indecenter nec portari per provincias oportebat (Brit. Mus. M.S. Harl. 43. B. 14).

The occurrence of a Gilbertine Letter of Fraternity has already alluded to; and it is satisfactory to know that the one order of purely English origin is at last represented in the list, although only by a late example. It is issued to Robert Hussey on 17th April, 1512, by Thomas, chief prior or master of the Order of Sempringham, and gives in considerable detail the services to be used on the announcement of the death of Robert or his wife Anne, and on their 'anniversaries'; and has this additional interest, that it bears a note at the end, added in a later hand, that Anne, wife of Robert Husye, Esquire, died on the fourth of the Nones of September. This is evidently an 'endorsement', if one may call it so, added, perhaps at the General Chapter, when Anne Hussey's death was reported. The letter would be returned to Robert, and preserved by him; and if his death had occurred before the dissolution of the order it would have been once more presented at the chapter, and afterwards kept at Sempringham, or destroyed, as being no longer needed. ¹

¹ In the case of the letter issued by Durham to John Partington (Durham Obituary Rolls, Surtees
The letters issued by the orders of friars have increased from seventy-seven to just over one hundred, the largest increase being among the Trinitarians. The Dominican examples furnish little fresh material; a letter of 1444 from Bartholomew, the master of the order, is couched in the language of extravagant compliment, and neither it, nor the examples previously recorded, one addressed to King Henry III, and two to monastic houses, can be taken as giving the normal form in which the letters from the master were cast, if indeed any definite form existed. We are on surer ground with the provincial letters of the order, of which that to Henry Langley and Katherine his wife, reproduced on plate vii of my paper, may be taken as a typical example. Here the bulk of the letter is written out beforehand, and the names of the recipients inserted later. The word ‘fraternitas’ is not used, but ‘participationem concedo’, though in this particular instance the word has been blundered by the scribe, and corrected later. The participation is in all the masses, prayers, preachings, fastings, abstinences, watchings, labours, and other good works which the Lord shall grant to be done (‘que ... dominus fieri dederit’) by the brethren of the order throughout the province of England. Further it is ordered that on the announcement of their deaths in the provincial chapter their souls shall be commended to the prayers of the whole province, and those masses and prayers shall be enjoined for them which are customary for brethren departed (‘pro fratribus nostris defunctis’).

The letters issued by the local priors of the Dominican convents have received one addition of some little importance, in the shape of the admission of John Kendale and Elizabeth his wife to the prayers of the Black Friars of Ilchester, by Stephen Assche the prior in 1485, now preserved among the municipal records of Bridgewater. The opening part of the letter is exactly the same as that of, e.g., the letter of 1484 from Robert Elsmere, prior of Shrewsbury to Thomas Wittecombe and Elizabeth his wife, but it then goes on: ‘Insuper ...’, and details the indulgence granted by Innocent VIII (1484-92) giving permission to the confratres and consorores of the order to choose a confessor, who shall be able to give them once in their lives absolution, even in those cases which were properly ‘reserved’ for the decision of the Holy See (with certain exceptions) and the same at the hour of death. For this they are to fast every Friday (‘singulis sextis feris’) for the space of a year following the publication of Society, xxxi, 110) it is noted that it has been surrendered to the house that granted it, upon the death of the recipient. It is possible that in the case of a very poor or thrifty-minded house, the letter might be re-issued to a fresh person; and this may be the explanation of the curious fact that the letter issued in 1517 by Muchelney, Somerset, to Sir John Theke and his wife Elizabeth, was afterwards adapted to serve for ‘dominus [?Johannes] Popylayke’ (Somerset Record Society, xlii, 62) and the names of John Spenlove and Mary met in the 1487 letter from the Shrewsbury Austin Friars, now in the Shrewsbury Museum, have been altered to that of ‘Hew Lety’. 
the indulgence. The letter then declares the Kendales to be sharers in this indulgence, and ends without the usual clause providing for the notification of their deaths. The letter might therefore be considered only as declaratory of the share of the Kendales, already admitted to fraternity in the order, in the fresh privileges given by the indulgence: but the precedent grant of participation precludes this supposition, and we must look upon the absence of the notification clause as exceptional and perhaps fortuitous.

The Franciscans remain, as they were before, the order of which the largest number of fraternity-letters remain, owing in great measure to the nine examples (now increased to fourteen) of the year 1479, which are couched in practically identical terms, and purport to be issued by the gardiani of local convents, in consequence of the permission granted by Sixtus IV that the brethren and sisters of the order, and the confratres and consorores, should have power to choose a confessor who might absolve them once in the year following the publication of his papal letters, and once at the moment of death. This was evidently a special form of letter, composed for this occasion only, and it is more epistolary in form than is usually the case, e.g. it begins: ‘In Christo sibi karissimo (is) ...’ and ends: ‘Vale(te) in Christo Iesu et ora(te) pro me’. It is also more explicit than is usually the case in letters issued by monks or friars, in admitting the recipients to fraternity, ‘te in confratrem (vos in confratrem et consororem) et ad universa et singula fratrum administracionis anglicane suffragia recipio’, thus varying from the usual practice, by which the general admits to the prayers of the order, the provincial to those of the province, and the local head of a convent to those of that house only.

We may further note that in the letters issued by the Friars Minors of the Holy Land, of which Dr. Little has furnished me with a fresh example, the same express mention of ‘fraternity’ is made.

‘te una cum tua consortae tuisque liberis natis et nascituris (’te una cum tuis parentibus’ in the form for priests) ad in nostram [sanctam] fraternitatem ac ad universa et singula suffragia fratrum in terra sancta habitancium ... recipio in vita pariter et in morte plenam vobis missarum ... omniumque honorum que per fratres dite terre sancte operari dignabitur clemencia salvatoris participacionem tribuendo.’

The letters, too, which are issued by the Cismontane Observants, whether by the Vicar-General (Angelus de Clauasio to Luca dei Ugolini in 1475) or by his deputy in England (Francis Faber to prior and convent of Durham in 1533) expressly admit to confraternity, not mere participation; ‘vos omnes pre-

1 The Rev. E. R. O. Bridgeman’s transcript of the letter to Laurence Roche, priest, has a clause, evidently misplaced by the original scribe or by the copyist, referring to the plenary character of the indulgences in which he is given a share.
nominatos ad confraternitatem nostram et universa et singula nostrae religionis suffragia in vita recipio pariter et in morte'. Francis Faber (? Smith), who was Provincial of the English Observants, as well as commissary of the Vicar-General, admits in a slightly varying form:

'ex speciali gratia prelati reverendi patris commissarii non solum ad specialem confraternitatem spiritualium bonorum nostre provincie anglicane verum etiam ad generalem totius nostre familie observantia cismontane vos et parentes vestros vivos et defunctos recipio in vita pariter et in morte plenam vobis et eisdem participationem omnium... bonorum spiritualium tenore presentium liberaliter conferendo que per fratres nostros, sores sancte Clare, sores beate Marie annunciate ac de conceptione, neconon per fratres et sores tertii ordinis... in partibus cismontanis operari dignabitur clementia salvatoris.'

If these exceptional varieties are removed from consideration for the present, we have a residuum of some nineteen Franciscan letters which may be taken to represent the ordinary form of issue, and it is found to be, as in the case of the other orders, a grant of participation without specific mention of 'fraternitas'. It is, however, cast in more epistolary form, and concludes with some such phrase as 'Valete feliciter in domino nostro Iesu Christo matreque eius virgene gloriosa'.

To the four examples of letters issued by the Franciscan Minister-General or his deputy I am now inclined to add the mutilated letter to Beatrice Ros (Bodl. MS. Rawl. C. 72), and to associate its issue with those of 1407 and 1412 by Antonio da Pareto. Though at this latter date there was a rival General, countenanced by the Antipope, these letters are evidence that his authority was not recognized in England.

For an example of a Franciscan provincial letter of fraternity we may take that of 1475 to the Fellows of Pembroke College, Cambridge, reproduced on pl. vi of Archaeologia, vol. lxxv.

Of the local Franciscan letter, the following example from Bridgwater, which is the earliest I have come across, may serve as a specimen. It will be noted that the gardianus admits William Dyst and his wife Joan to fellowship by the authority of the provincial minister and chapter, an unusual feature.

_Bridgewater Borough Records, no. 110._

In Christo si bi karissimis Willemo Dyst et Johanne consorti sue frater Willemus fratrum minorum Bruggewalteri Gardianus salutem [et] per presentis vite merita gaudia percipere sempiterna. Denucionem vestram quam ob dei reverenciam ad ordinem nostrum habetis et specialiter ad conventum nostrum multiplici beneficiorum exhibicione demonstratam spiritualibus beneficiis compensari desiderans Auctoritate patris nostri Ministri totiusque capituli provincialis et de assensu unanimiti supradicti conventus nostri

\[1\] The Observants, the Sisters of St. Clare, and the Third Order _in partibus cismontanis._
SOME FURTHER LETTERS OF FRATERNITY

vos ad universa et singula fratrum conventus memorati suffragia recipio tenore prescencium in vita pariter et in morte. Plenam vobis participacionem bonorum omnium concedendo que per eodem fratres operari dignabitur clemencia salvatoris Adiciens insuper de gracia speciali ut cum obitus vestri [nostro innotuerint capitulo idem pro vobis fiat quod pro fratribus nostris] defunctis recommendatis ibidem fieri consueuerit.

Valete feliciter in domino Iesu Christo Materque eius virgine gloria.

Datum Brugg in nostro locali capitolo x. die Mensis Ianuarii Anno domini Millesimo ccce. nono.

For the Austin Friars there is but little new evidence, the only additional specimen being a provincial letter (printed) issued in 1526 by William Aller, provincial prior, to the members of St. John's Gild in Wakering Church, Essex. I have found two copies of this, one in the Society's collection of broadsides, vol. i, no. 2 B, the other in the British Museum (Dept Printed Books, c. 18, e. 2. (16)). It might be questioned whether this ought not to be reckoned as a gild-letter rather than a friars', since the benefits of participation in the prayers of the friars are in this instance to be obtained through membership of the gild, and it would be the proctors of the gild, not those of the order, that would carry the letters round for sale; but in strict form it is an admission to the prayers and privileges of the order of Austin Friars in England 'vos ad universa et singula nostro religionis in vita pariter et in morte recipimus suffragia plenam vobis tenore prescencium participacionem omnium bonorum concedendo que per fratres dicti ordinis per provinciam Anglie diffusos operari dignabitur clemencia salvatoris'. Here we may notice, as commonly in Austin Friars' letters, the phrase 'clementia salvatoris' with which we are already familiar from the Franciscan examples. The phrase, however, which is specially characteristic of the Austin Friars is the salutation which begins their letters: 'Frater N. prior provincialis (or localis) . . . diletis sibi in Christo M. et N. oraciones et quicquid hauriri valeat dulcis de latere crucifi. This formula recurs steadily in every Austin Friars' letter which I have been able to examine personally, with the one exception of the printed letter of 1526 to the gild at Wakering; and this, as I have indicated, is not quite a normal example.

Opportunity may be taken here to modify an opinion which I expressed at the time of the reading of my paper, with regard to the letter issued by the diffinitores of the provincial chapter of the Austin Friars at Yarmouth in 1279, admitting Brian de Brompton to participation in the good works, etc., of the province. I then hazarded the conjecture that the diffinitores might have acted in this case during a vacancy in the office of the provincial prior; but the fact that there exists a seal of the English provincial chapter of the Augustinians, with four diffinitores (so named) represented on it, seems to show that in the
thirteenth century, at any rate, the authority of the provincial chapter was
exercised through its diffinatores, not the provincial prior. The Carthusian
examples, spoken of above, show that even the prior of the Grande Chartreuse
did not act apart from the diffinatores of his chapter, and thus the 1279 letter
may be evidence of an attempt to ‘democratize’ the order; but if so, by 1369,
the date of the next provincial letter, the experiment had been abandoned,
and the letters run like the rest in the name of the provincial prior.

The letters issued by the Carmelite order show an increase from five to
ten, and we have at last an example granted by the general of the order
(Bodl. MS. Top. Glouc. c. 5, p. 655, to prior, etc. of Lanthony). There are
five provincial and four ‘local’ letters, most of which appear to owe their
preservation to the fact that they have been used as fly-leaves in binding.
They are consequently more or less injured by cropping; but what remains
is quite enough to show that they conform rigidly to a common pattern, and
are all grants of participation, ‘fraternitas’ not being mentioned. They open
thus: ‘Frater N. fratrum ordinis beate Marie genetricis dei de monte Carmeli
in provincia Anglie commorancium prior provincialis’ (for a provincial letter:
the local formula is ‘in conventu N. prior localis’). The devotion of the
recipient to the order is described as being ‘ob Christi reverenciam et gloriose
virginis Marie matris eius cuius titulo ordo noster specialiter insignitur’ instead
of ‘ob dei reverenciam’ of the other orders. The rest of the letter follows the
usual friar’s model, using the phrase ‘operari dignabitur clemencia salvatoris’,
except that the provincial letters are described as being sealed with the
‘sigillum nostri provincialatus officii’, the local letters with the seal ‘mei
prioratus officii’, an expression which I have not met with in the others.

If we now take a general view of the letters issued by the four orders of
friars, disregarding for the reason given above the exceptional Franciscan
issues, and leaving the Trinitarians for future consideration, we get the figures
following:

<table>
<thead>
<tr>
<th>Issued by</th>
<th>Dominicans</th>
<th>Franciscans</th>
<th>Augustinians</th>
<th>Carmelites</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
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<td>5</td>
<td>1</td>
<td>1</td>
<td>11</td>
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<td>8</td>
<td>9</td>
<td>13</td>
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<td>35</td>
</tr>
<tr>
<td>Local</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>20</td>
<td>17</td>
<td>10</td>
<td>66</td>
</tr>
</tbody>
</table>

It is not unreasonable to suppose that the proportion among those that
survive of general, provincial, and local letters corresponds roughly to the
proportionate number among those issued; and to gather that in each of
the four great orders the provincial letter was the most widely circulated, and
regarded as the typical letter of fraternity.

The Trinitarians present an altogether different system of issue, as they
also present many points of difference from the four great orders. They are usually reckoned with the Friars, but there were many points, such as the holding of landed property, benefices, etc., on which they differed fundamentally from the ideals of Dominic and Francis. Pending a more accurate investigation of their precise status, I have continued to reckon them with the friars in this paper; but we must note that there are no general letters of this order, and no provincial; all are issued by the 'minister' of individual houses, and the extant letters bear a far higher proportion to the number of issuing houses, indeed to the whole number of houses in England than is the case with any other monastic order. Their number has increased from fourteen to twenty-seven, but there is not much fresh light thrown thereby on the status of the order. The opening formula runs with unvarying regularity: 'Frater N. minister domus sancti N. de N. ordinis sancte Trinitatis et redemptionis captivorum qui sunt incarcerati pro fide Iesu Christi a paganis ... dilecto (or dilectis) A. B.,' etc. Then follows a recital of the privileges granted by successive popes to the members and combrethren of the order, a list which increases in length from a mere general mention in 1438 (Walknoll, Newcastle-on-Tyne, to Robert and Anne Claxton) to the specification of letters apostolic from Julius II, Clement V, Alexander VI, Innocent III, Gregory IX, Pius II, and Innocent VIII in that issued in 1508 by the minister of Hounslo to Henry Prince of Wales. The document usually ends with the formula of admission 'vos in confratrem et consorem nostris ordinis tenore presentium auctoritate nobis indulta admissimus' or 'per presentes in nostram sanctam fraternitatem vos devote recipimus'. In some cases this formula is not employed, but a statement that the recipient is entitled to share in such-and-such an indulgence. This we may take as evidence that the person addressed has already been admitted to fraternity, and is consequently included in the scope of an indulgence subsequently obtained; and though these are not technically letters of admission to fraternity, it is clear that they are very closely connected with them.

It will be observed that the admission is to 'fraternity', not merely to participation; and in this and in the recital of the benefits accruing to the combrethren there is a marked resemblance between these Trinitarian letters and the Franciscan issue of 1479. We may say, indeed, that the Franciscan letters constitute an approximation to the Trinitarian form, and that this, in turn, is a sort of half-way house between the normal Friars' letters and those issued by hospitals and gilds, which we shall next consider. The title of 'Hospital' was in fact occasionally given to some houses of this order, such as Thelisford in Warwickshire, which is consistently styled 'Hospital' whenever it is mentioned in the Hereford Registers.
SOME FURTHER LETTERS OF FRATERNITY

To the kindness of our Fellow Dr. Craster I owe the knowledge of a printed letter of fraternity from the Crutched Friars of London, dated 1528, among the broadsides of the Bodleian Library. This is the only instance of a letter issued by these friars that I have any notice of. There are two copies in the collection, both of them imperfect, and in their general character they approximate more closely to the gild and hospital type than to the normal Friars' letter.

Before we pass to the consideration of the letters of hospitals and gilds, I should like to say a word on those issued by Secular Clerks, whether in colleges at the Universities or elsewhere. I have found no fresh letters from colleges, though one may feel reasonably certain that a good many were granted to persons with whom the college wished to stand well; and some of these we hope may yet come to light. I owe to the kindness of the dean of Lichfield notice of the admission of certain notables to the fraternity of the chapter there; and in all probability a search in the records of the cathedrals of the old foundation would reveal the same elsewhere, showing that they too granted their fellowship to important people, very much after the fashion of a big Benedictine house.

We may, in fact, compare the admission of a distinguished visitor to fraternity in a great Benedictine monastery or a cathedral chapter to the modern practice of conferring the honorary freedom of a borough upon a notable benefactor or a distinguished public character.

We come now to the letters issued by hospitals proper and by gilds; and it is in this section that the additional examples I have found are those which shed the most light on the methods used by those who exploited the letter of confraternity frankly as a means of raising money. The number of examples has risen from thirty-four to seventy-eight. The fourteen examples from Burton Lazars Hospital, Leicestershire, are now fifteen, by the addition of a late (printed) letter in the Department of Printed Books in the British Museum; and the Walsoken letters have risen from six to ten, and likewise conclude with a printed example, also in the British Museum. The date has been cut off, but it is granted by John Whetham, master or warden, who evidently bore office later than Thomas Honey, who issued the letter of 1505 to John Willoughby, and earlier than Ralph Stanmore, who surrendered the hospital in 1545.

The thirteen letters of St. Thomas's Hospital, Rome, are increased to nineteen, and we must add the letter, very closely allied to the fraternity proper, from the abbot of Abingdon, as papal commissary, to Joan Darell in 1470, in which he notifies her that she shares, as a sister of the hospital, in the indulgences granted to it. The letters are all grants of fraternity, and recite at
greater or less length the privileges enjoyed through papal indulgences by the members of the brotherhood. A large proportion (one-third) of the fifteen date from the *trexium* 1459-61, in consequence of the grant made in 1458 by Pius II, that the members might choose a confessor on the usual terms, and with the usual powers, within the three years immediately following the publication of his letters apostolic.

Next after the letters of St. Thomas at Rome we may mention those issued by the hospital of the Holy Spirit 'de Saxia', in the same city. These two hospitals have sometimes been regarded as identical, with a supposed change of name at the end of the fourteenth century; but they were really quite distinct, and the examples of the letters of the hospital 'de Saxia', which are all very late (1519-20) and printed, show that the original name persisted till at least that date. Mr. Albert Way in his article in the *Archaeological Journal*, vol. xvii, states that the hospital 'de Saxia' was said by tradition to have been founded by King Æna of Wessex in 727, and augmented by Offa of Mercia in 794. It is described as 'Hospitale apud ecclesiam S. Mariae in Saxia in urbe Romana—quod Hospitale S. Spiritus communiter nuncupatur, et quod quidem Hospitale Anglorum dicitur, et Anglorum fuit hospicio deputatum'. In 1477 Sixtus IV confirmed numerous indulgences to this hospital under the name of 'Hospitale S. Spiritus in Saxia alme urbis'.

On the other hand, the hospital of the Holy Trinity and St. Thomas the Martyr, generally known as St. Thomas's, Rome, owes its origin to the distinguished soldier Sir Robert Knolles, who also founded the hospital called Knollesalmeshous, Pontefract, a letter of which figures in our list, of the date 1447. With his wife Constance he built and endowed one of the cells in the London Charterhouse (Hope, *History of the London Charterhouse*, p. 71). He joined with Sir John Hawkwood and Sir Guy Calveley in the foundation of an English hospital at Rome (*D.N.B.*, xxxi, 283) which is no doubt that of which so many letters survive. See B.M. Harl. MS. 2111, p. 99. He died in 1407.

An illustration of the widespread activity of the agents of such institutions as St. Thomas's Hospital in Rome is given by the existence of a number of matrices of the seals of that house. In the *Archaeological Journal*, vol. xvii, pp. 250 ff., Mr. Albert Way prints among other indulgences a letter of fraternity from the hospital, and records the existence of six matrices of its seal, apparently all different. One of these bears the legend: *S. AD CANVAS HOSPITALIS S. THOME MART. IN ROMA*, and is probably unconnected with this side of the hospital's work; but the other legends run: 'S. fraternitatis hospitalis sci thome martiris in roma' in four cases, and in the fifth it is even more explicit: 'S. procurator' hospitalis sci thome martiris in roma'. We may therefore imagine these proctors, armed with a bundle of blank forms of fraternity and the seal of
the house, going each throughout his district, selling the forms when he could, collecting the annual subscriptions of the members, and any donations which he could secure. There are also a large number of variant seals of Burton Lazars hospital (seven in the Society's collection) testifying to a similar state of things there also, and the same may be said of Holy Trinity hospital, Walsoken, though the examples are not so numerous.

In the section of Hospitals (various) there are considerable additions, all of late date. When my paper was published, I knew only of two, St. Bartholomew's at Gloucester and 'Knollesalmeshous' at Pontefract. I am now able to include letters from St. Anthony's (of Vienne), St. Mary of Bethlehem, and St. Thomas Acon, all in the city of London, and all, except the first, printed letters of the sixteenth century. The most fruitful source of these late printed letters has been the department of printed books in the British Museum, but it is run close by the Bodleian Library, and there are others in the Public Record Office and in the Society's collection of broadsides.

Of letters issued by gilds, those of St. Mary-in-the-Sea, at Newton, near Ely, remain seven as before, but the Boston pardons have increased from seven to thirteen, including one example, the only one I have come across, which is written, not printed; I shall have occasion to refer to some of these new examples later. The only new gilds whose letters I have to chronicle are those of St. Margaret, Uxbridge, of which the Society possesses an example, dated 1527, and of the chapel of St. John Baptist at North Newington, in the parish of Broughton near Banbury, of which I found two examples both dated 1521, but not quite identical, in the Bodleian Library, A. iv. 43 (1). All these examples are printed. Possibly also one might more appropriately place here the Austin Friars' letter to the Gild of St. John, in Watchingham church.

It is of course certain that the letters of fraternity which survive constitute only a very small proportion of those which were issued. Their value ceased after the death of the recipients, hence there was no reason for their preservation any longer; and it is often only through their use for other purposes, such as bookbinding, that they remain to us at all. It may also be taken as reasonably certain that some of the gilds or hospitals, as of the monasteries which issued fraternity letters, are unrepresented in our list; St. Mary Rouncival, for instance, issued many such letters, at the price of fourpence each, but none remains to us, so far as my knowledge goes. It is not without interest, therefore, to see if we can gain some idea as to what proportion of the issuing bodies, whether monks, friars, hospitals, or gilds, have letters still extant, and how many are wholly unrepresented.

To begin, we may take it as certain that every Benedictine house had power to issue such letters, and that, at any rate, most of the larger houses did
so; that the like liberty belonged to the houses of Austin Canons, though they seem to have availed themselves of it to a less extent; that the Reformed orders, Cluniacs, Cistercians, Carthusians, and Premonstratensians issued them chiefly, though not exclusively, through their central authority. It is also evident that the four great orders of friars issued principally indeed through the provincial, but that any friary might admit to participation in the prayers of that house. The Trinitarians, on the other hand, who are in proportion the most abundantly represented of all the orders in our list, issued by single houses only.

The real difficulty comes when we pass to hospitals and gilds. These were very numerous in England; did they all issue fraternity letters?

A partial answer to this question may be found by comparing the licences to collect the alms of the faithful issued to the proctors of these bodies by the bishop of each diocese, with the names of those of which letters are still extant, and I have selected for the purpose the registers of the last three bishops of Hereford before the Reformation, whose registers are extant, Mylling (1474–92), Mayew (1504–16), and Bothe (1516–35) since they are easy to consult in printed form and cover a period when the issue of these letters was very active.

The result can of course only be approximate, since it is not always stated whether the proctors to whom licences are granted are selling fraternities, or simply collecting alms without offering anything in return; and it is evident that licences given to individuals to solicit the alms of the faithful for some purely local and temporary object, such as the repair of a church, or of a bridge, usually within the diocese, ought to be excluded from consideration, even when an indulgence is promised to those who contribute. Still, as one reads the list, it becomes pretty clear which were the bodies whose proctors, in all probability, offered letters of fraternity; and these were, during the period, twenty-three in number, as given in the following list, the licences being in most cases granted for a year only, and renewed again and again. Where this is so the number of grants is added after the name; and an asterisk is prefixed to those of whom one or more letters of fraternity are known to exist:

*Hospital of St. Thomas in Rome 31 grants in 49 years
*Hospital of St. Anthony of Vienne, London 25 " "
*Thelisford Hospital, Warwickshire* 23 " "
*Burton Lazars Hospital, Leics. 17 " "
Jesus Gild in St. Paul’s Crypt 12 " "
Rouncival Hospital, Charing Cross 10 " "

1 Published by the Canterbury and York, and Cantilupe Societies.
2 A house of Trinitarians, but consistently styled ‘Hospital’ in the Register.
 SOME FURTHER LETTERS OF FRATERNITY

*Hospital of St. Mary, Bedlam 10 grants in 49 years
Gild of St. Clement in St. Clement Danes 8 “ “
Hospital of St. Sepulchre, Lincoln 4 “ “
*Gild of B. V. Mary of Newton, dio. Ely 4 “ “
*Hospital of St. Thomas Acon, London 4 “ “

The following have two or less:

Fraternity of St. Cornelius in St. Margaret's Westminster; Austin Friars of Ludlow 1; Bonhommes of Ashridge; two each.

*Hospital S. Spiritus de Saxia, Rome; Gild of St. Christopher and St. George at York; Battlefield College, Shrewsbury; *St. Margaret's Chapel, Uxbridge; *Crutched Friars, London; Fraternity of Frome Vowchurch, dio. Sarum; St. Cross near Tower of London; Gild of B.V.M. and St. George, Southwark; Gild of St. John of Beverley; one each.

This is, of course, only a rough-and-ready method of inquiry, and not all the gilds and hospitals that we know to have issued letters of fraternity are represented in the list, the most obvious omissions being perhaps Walsoken Hospital, Norfolk, and the Gild of St. Mary at Boston; still, out of the twenty-three bodies whose proctors were working for a longer or shorter period in Hereford diocese, ten, or approximately 44 per cent., have letters still extant; moreover, of these ten seven are found among those which have four licences or more issued to them during the half-century under consideration. Other dioceses would no doubt show somewhat variant figures; a diocese in the East of England, for instance, would almost certainly have licences to Boston and Walsoken, and omit some of those found in Hereford; but the general conclusion would seem to be that the majority of those hospitals and gilds which were busiest in the issue of letters of fraternity are represented by specimens still extant. No doubt there are many more still to be discovered and recorded, which will help to fill some of the gaps: letters, for instance, of the hospital of St. Mary Rouncival, Charing Cross, or of the gild of the name of Jesus in the Crypt of St. Paul's Cathedral; but enough has been said to show that the number of gilds and hospitals actively engaged in the issue of these letters was not so very large after all. We may not unreasonably conjecture that some of the institutions which receive a licence from the bishop on one occasion only were making a special appeal for some particular object, and that they did not make it a constant practice to collect alms in this way year after year, as did for instance the hospital of the Holy Trinity and St. Thomas the Martyr in Rome, whose income must have come largely from this source.

One rather neat piece of cross-illustration may be noted in the licence

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1 As agents for the rebuilding of St. Peter's Rome.
granted by Bishop Bothe of Hereford on 15th April 1519 to Philip Mulert, doctor of decrees, vicar-general in England and Ireland of Alexander Neronibus, preceptor and master of the Holy Spirit in Saxia in Rome, and his proctors John More and William Thurlwyn, priests, to gather the aims of the faithful, for the support of the poor and other charitable purposes, when we bring it into connexion with the letters of fraternity printed in 1519 and 1520, of which I know of five (three of 1519), which were issued by Philip Mulert, commissary general for England and Ireland of the hospital Sancti Spiritus de Saxia, Rome. In the British Museum (Dept. Printed Books, c. 18, e. 1, 48) is an imperfect broadside, which sets forth the conditions and advantages of fraternity in the hospital.

These proctors were not exclusively engaged in selling fraternities of the hospitals and gilds which they represented; they also gathered the yearly contributions of those who had already been admitted as 'combrethren'. Several of the indulgences quoted in the letters lay down, as a condition on which their benefit is to be obtained, that they shall contribute a sum yearly to the funds of the gild or hospital. The sum is not specified, and probably varied according to the means and disposition of the confrater. In the case of the letter from St. Thomas's, Rome, to William Kyrmond and his wife Elizabeth, printed in the Archaeological Journal, xvii, p. 252, the words 'per annum' are inserted in one corner; this we may take to be the annual contribution in this particular instance. On the other hand, the very high price (for so late a date) of 26s. 8d. for a Boston letter of 1521, of which 25 was paid as an instalment, leads one to conjecture that in the case of Boston the payment of this sum secured life membership in the gild, and that there was no question here of an annual contribution; and this conjecture finds support from the note written at the foot of the Boston letter, preserved among Lord Middleton's deeds, which was issued to Thomas Willoughby in 1519: 'admissus per Willemum Temper Camerarium et soluit vjs. viijd. et sic debet solvere annuatim quosque xxvjs. viijd. sunt plenarie persoluti, et sic esse quietum sine ulteriori solutione' (Hist. MSS. Comm. Report, 1911, p. 136).

The explanation of these sums appears to be given in a passage quoted from Fox's Acts and Monuments in Pishey Thompson's Hist. and Antiquities of Boston (1856), p. 137, which states that in the 'pardon' granted to the Boston gild by Popes Innocent VIII and Julius II it is laid down that 'every person, man or woman, entering into the same Gilde, at his first entering should give to the finding of seven priests, twelve ministers, and thirteen bedmen, and to the lights of the same brotherhood, and a grammar school, five shillings and eightpence, and for every yeare after, twelvepence'.

Now if we take twenty-one years' purchase (the usual calculation at the
period) of the annual subscription, we get 21s., which, added to the 5s. 8d. mentioned above, gives precisely the 26s. 8d. specified in the letters of Thomas Willoughby and Sir John Rodcliff; we may take this sum then as representing a life-composition on the part of the member admitted.

Whether it was the usual practice of hospitals to have a low price for their fraternities, combined with an annual subscription, and no composition fee, while gilds set their price of admission, in the shape of life composition, fairly high, and thereafter demanded no further contribution, there is not at present evidence enough to determine; we need to find yet more examples. Indeed it is not always easy to distinguish between gild and hospital; St. Mary Rouncivall, for instance, is described by Westlake as a 'Gild Hospital'; but it is not without interest to observe that in the list of licences given above there are nine institutions described as hospitals and two gilds, among those which find most frequent mention (four licences and upwards), while among those which occur more rarely (once or twice only) there is one hospital and at least nine gilds, as though a hospital applied for a licence more often than a gild. For it is obvious that an institution which had to collect yearly contributions would need to send its agents more frequently than one which confined itself to enrolling new members, who would pay their contributions either in one sum or in three or four instalments.

I have put together here such evidence as I have been able to gather from notes on the letters themselves, as to the payments made by those admitted to confraternity.

I have found no evidence at all of any payment in the monastic letters. Confraternity is often given to the donor of a manor or advowson in consideration of the relinquishing of a claim against the house, or to a distinguished visitor, who no doubt was expected to make a handsome donation, but that is not quite the same as paying for the letter of admission. Nor is there anything forthcoming from the four great orders of friars; whatever may have been the real nature of the transaction, it is always stated that the admission to fraternity or 'participation' is in consideration of the devotion of the recipient to the order; but the Trinitarians as usual range themselves rather with the gilds and hospitals than with the friars proper. I mentioned in my earlier paper the note 'pro ordine iiiijd' on a Mottenden letter of 1487, which I was then inclined to regard merely as a fee for the bearer, but which I now think to be the purchase-price of membership. Another Trinitarian letter (P.R.O. Court of Wards, Deeds, 239/2) issued by Thelisford in 1494 is more explicit: 'ji\nannuatim Thomas Wood proctur' and that granted by Mottenden to J. Prense and others in 1477 mentions the like sum, 'per annum ijd.'

For Holy Trinity Hospital, Rome, we have the Pelham letter of 1476
with 'precium xijd' and one to Sir Thomas Garway, chaplain, in 1497, on which is noted 'per Willelmum Barker yerly ijd.' W. Kyrmonds's i^d per annum I have already mentioned. The price of admission to fraternity in the hospital of S. Spirito de Saxia, Rome, is given in the broadside mentioned above as 'xxx^d of Sylvor of Turyn.' No annual subscription is named. The evidence of the Boston letters I have already spoken of; we may add to the examples given a letter dated 1522 which was included in Messrs. Sotheby's sale of 19th December last. This has a badly written note at the foot which I read with some hesitation as 'per me Robertum Tallboys camerarium' and then 'xx^d lett' iiiijd.' Without speaking with any certainty on the point, I think that this is another reference to a payment of two shillings on account for the privilege of incorporation in the gild, of which fourpence is paid for the actual copy of the letter (compare the similar price of a letter of St. Mary Rouncival) and the balance makes up the first instalment of the full sum.

The cheapest fraternity which I have found is that of our Lady of Pity (de Mercede), an Italian institution, but circulating letters in England and printed in English, of which a specimen is in the Bodleian Library. In this the usual privileges could be obtained for a single payment of one penny, husband and wife being reckoned as one person!

But if the price of a fraternity letter in a hospital or gild was, as a rule, low, the number sold must have been prodigious, at any rate in the sixteenth century, when printed editions were issued. It is unfortunate that we have no letters surviving either of the hospital of our Lady of Rouncival, near Charing Cross, or of the Jesus Gild in the crypt of St. Paul's Cathedral, since some light is thrown by their accounts\(^1\) on the income received from this source. Both institutions seem to have leased out, as Thelisford hospital also did, their right to gather alms to proctors who undertook the collection in different parts of England, and it may be presumed that their business was not only to gather alms, but to sell fraternities. The Jesus Gild in 1506 leased out 'all the devotions of England' to 'Maister Smyth Doctour of Phesyk' for £28 a year for seven years; but evidently the collection was worth far more than this, for in 1514-15, after the lease had fallen in, the income had swelled to £144 6s. 8d., in 1533-4 it was £385, and in the year following more than £406. This was practically all obtained through the proctors, and though it included general alms, it must have represented the sale of thousands of fraternity letters. The Rouncival hospital was on a more modest scale. The accounts of 1520-4 show an income of £10 15s. 2d. from 'quarterage', which seems to represent the subscriptions of the members, while the 'proctors' money' comes to £19 9s. 4d. There are also among the casual receipts small sums for the

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\(^1\) See Westlake, Parish Gilds of Mediaeval England, pp. 77-9, 96-100.
sale of 'letters of pardon', i.e. fraternity, at fourpence each; but these are hardly numerous enough to account by themselves for the printing of these letters by the hundred, as the accounts show them to have been. Probably these small sums represent direct sales only, and the bulk of the letters were normally sold by the proctors in addition to collecting alms pure and simple; and the money from this source was either paid over with the rest of the proctor's money, or went to swell the profit that he made.

By the courtesy of Miss R. Graham, I am enabled to incorporate here the following information from her forthcoming paper on the hospital of St. Anthony of Vienne, London:

In 1441, John Carpenter (afterwards made Bishop of Worcester) revived a confraternity of the house of St. Anthony for men and women, lay, secular, and religious. The pope granted them the privilege of choosing their own confessors, who could commune vows of abstinence, and vows of pilgrimage, except the Holy Land, Rome, and St. James of Compostella, and absolve them when under sentence of excommunication. Under these circumstances it was very attractive to join the confraternity of St. Anthony's —and St. Anthony's profited accordingly. The matter might however be regarded from another point of view, which the Abbot of St. Augustine's, Canterbury, put before Pope Calixtus III. In his petition he told the pope that certain of his monks had made themselves members of the confraternity of St. Anthony in London, without his permission. They paid a yearly subscription to the hospital, and chose as their confessors, even secular priests, and so were no longer on an equality with the other monks, and refused to obey their Abbot. The pope obligingly ruled, that the privilege granted thirteen years before did not extend to monks.

It is perhaps worth noticing, in this connexion, that in the only letter of St. Anthony's, London, that I have come across (MS. Bodl. 692. fo. 111 b, printed in Correspondence of Bekynton, Rolls Series, ii, 3578) fraternity is granted in 1442 by John Carpenter, as Master, to W. B. M. of Worcester. The most natural interpretation of the 'M' is that it stands for 'Monachus', and this raises the presumption that John Carpenter's efforts on behalf of his hospital may have caused trouble in other Benedictine houses also, and that he himself may have had experience of this when he came to Worcester as bishop; for the MS. volume in which this letter is transcribed draws emphatic attention in marginal notes to the fact that the privilege was only to last for five years, though it may be doubted whether the conclusion was correct.

To resume from Miss Graham's paper:

The confraternity thus founded, or rather revived with special privileges, by Master John Carpenter, was extraordinarily successful in raising revenue for the hospital. Among the Chapter Archives at Windsor, to the Dean and Canons of which the Hospital was granted by Edward IV, there are several deeds issued to collectors in different dioceses by the last Master, Peter Courtenay. In 1476, all property, alms,
Some Further Letters of Fraternity

Legacies, pigs, and other animals were leased to the collector for the diocese of Worcester, for £23. 13s. 4d. a year. A roll of the receipts of the hospital, not dated, but about this time, shows that collectors were working in every diocese in England and Wales, and the total net receipts were £549. 13s. 4d., a sum which represents over £6,000 at the present value of money.

These methods are a remarkable testimony to medieval organization, and they were continued until the Reformation, as is shown by the following letter, written in 1537 to Thomas Cromwell from Charles Wingfield at Kimbolton.

On Palm Sunday last, Harry Clewepulle brought letters under the king's broad seal, to gather for the relief and sustentation of the house of St. Anthony in London. After declaration of the same to the people, he opened to them a cross, and certain hallowed bells, they thinking the king content therewith, on hands and knees offered to the said cross and bought of his bells to preserve their cattle. This makes the people scorn the sermons of the Vicar, so I have detained him here, and I send his letters, cross, and bells by bearer, awaiting further instructions.

The analysis of the licences granted by the bishops of Hereford, which I mentioned before, reveals also the fact that not only did the same man act year after year as proctor for the same hospital or gild, but that the same man was frequently licensed to act for several such institutions at the same time; in fact, that there must have been professional proctors, just as nowadays the same man might act as agent for several insurance offices. It is also frankly recognized that the proctors come as a matter of business to sell their wares: since the usual phrase used in granting the licence is 'licenciam exponendi indulgencias suas', the same as would be used of exposing goods for sale in the market. Such traffic in spiritual privileges must of course seem a very improper thing; but it should be remembered that after all the effect of most of the indulgences conveyed by letters of fraternity was not very far-reaching, being commonly such privileges as the right to choose one's own confessor, who could give plenary absolution once in the grantee's lifetime, sometimes once within a given year, and again at the hour of death. Even then, the crimes, or some of them, normally 'reserved' for reference to the Holy See, are usually excepted. The right to claim Christian burial is also sometimes conceded (as among the Trinitarians) unless the confrater has been 'nominaliter excommunicatus', excommunicated by name, not merely involved in a general excommunication. This privilege would also ensure them Christian burial in a time of interdict. But I have not found, even in the later instances, any general tendency to multiply long series of years, for which the pains of purgatory are remitted, such as most of us associate with the name of 'indulgence'. The most conspicuous instance of a promise of a long series of years which

1 It might be rendered 'expound', but such exposition was always with a view to sale.
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I have met with, is to be found in the letter which I have doubtfully ascribed to the Franciscans, wherein Richard Erle, in being made a 'confrater' of the Holy Sepulchre, receives a remission in all of eight thousand years and as many Lents besides thirty thousand masses and the same number of psalters (Archaeological Journal, xvii, 255). This is indeed an exception to the general tenor of the indulgences quoted in letters of fraternity; but it must be confessed that as time goes on the indulgence part of the letter tends to become more and more prominent, to the obscuration of the participation in the prayers and good works of the fellowship or order, which is the leading feature in the earlier examples, just as this is in turn something more systematized, more stereotyped than the spontaneous affection of the letters of the earliest stage of all. And this obscuration, or development, whichever we may prefer to call it, is marked by the use of the name 'pardon' which originally applied only to indulgence-bearing letters, but came to be applied to them all, so that a testator could direct that the pardon which I have from the Black or Grey Friars of X shall be taken there, although we can be reasonably certain that the document made no reference to indulgences, but admitted only to participation in the good deeds of the community and a solemn commendation, and masses after death.

The issue of all letters of fraternity would, of course, cease, at any rate with the accession of Edward VI, but it is of interest to note that Queen Mary renewed the Letters Patent for the sale of indulgences to St. Anthony's Hospital in September 1554 and must have done the same to Boston, as one of their pardons is dated 1555.

One may perhaps conclude this paper by quoting two descriptions of the system of fraternities roughly contemporaneous, in the latter part of the sixteenth century, but dealing with different aspects thereof: the one with the system as it remained in a great Benedictine house with a great deal of the original feeling and purpose yet surviving.

We will let the author of the Rites of Durham speak for himself:

'There did lye on the high altar an excellent fine booke verye richly covered with gold and siluer conteininge the names of all the benefactors towards St. Cuthberts church from the first originall foundation thereof, the verye letters for the most part beinge all gilded as is apparent in the said booke till this day the laying that booke on the high altar did show how highly they esteemed their founders and benefactors, and the dayly and quotidian remembrance they had of them in the time of masse and diuine service did argue not onely their gratitude, but also a most diuine and charitable affection to the soules of theire benefactors as well dead as liuinge, which booke is as yett extant declaring the s^4 use in the inscripion thereof.'

This was, of course, the famous Liber Vitae, now in the British Museum.
SOME FURTHER LETTERS OF FRATERNITY

(Domitian VII) which corresponded as it seems to the Liber fraternitatum in other Benedictine houses, such as Cott. Nero D. vii, for St. Albans, and Arundel 68 and Lambeth MS. 20 for Christ Church, Canterbury. It was the entering of the name in the book such as this which seems to be implied in the promise of inscription in the martilogium of the house, found so frequently in Benedictine letters of fraternity, and, so far as my information goes, in them alone.

The other quotation deals with the system of fraternities as it was exploited (it is difficult to use any other word) for the purpose of raising funds for the gild of St. Mary, in the church of St. Botolph at Boston. If the monk of Durham saw everything through the softening mist of a tender regret, John Foxe contemplated the system of pardons through Genevan spectacles, and this is what he says; we need not, however, take every detail as strictly accurate: he was probably only repeating with relish the ale-house gossip of his native town.

Pishey Thompson's History and Antiquities of Boston (1856), p. 136 f.


'It happened the same time that the towne of Boston thought good to send up to Rome for renewing of their two pardons, one called the great pardon, and the other the lesser pardon. Which thing, although it should stand them in great expenses of money (for the Pope's merchandise is always deare ware) yet notwithstanding such sweetnesse they had felt thereof, and such gain to come to their towne by that Romish merchandize (as all superstition is commonly gainfull) that they like good catholique merchants, and the Pope's good customers, thought to spare for no cost to have their leave again of pardons renewed, whatsoever they paid for the fine; and yet was all this good religion then, such was the lamentable blindnesse of that time!

'This then being so determined and decreed among my countrimen of Boston, to have their pardons sued, repaired, and renewed from Rome, one Geoffrey Chambers, with another champion, were sent for the messengers with writings and money, no small quantity, well furnished, and with all other things appointed, necessary for so chargeable and costly an exploit; who coming to Antwerp, and misdoubting to be too weak for the compassing of such a weightie peice of worke, conferred and persuaded with Thomas Cromwell to associate him in that legacy, and to assist him in the contriving thereof. Cromwell, although perceiving the enterprise to be of no small difficulty to traverse the Pope's court, for the unreasonable expences of those greedy cormorants, yet having some skill in the Italian tongue, and as yet not grounded in the judgment of religion in those his youthful daies, was at length obtained, and content to give the adventure, and so took his journey towards Rome.

'Cromwell, loth to spend much time, and more loth to spend his money, and again perceiving that the Pope's greedy humour must needs be served with some present or other (for without rewards there is no doing at Rome) began to cast with himself what thing best to devise, wherein he might best serve the Pope's devotion. At length,
having knowledge that the Pope's holy tooth greatly delighted in new fangled strange delicacies, and dainty dishes, it came into his minde to prepare certaine fine dishes of gelly after the best fashion, made after our country manner here in England, which to them of Rome was not known or seen before. This done, Cromwell observing his time accordingly, as the Pope was newly come from hunting into his pavilion, he, with his companions, approached with his English presents, brought in with a three man's song (as we call it) in the English tongue, and all after the English fashion. The Pope, suddenly marvelling at the strangeness of the song, and understanding that they were Englishmen, and that they came not emptie-handed, willed them to be called in. Cromwell there shewing his obedience, and offering his gelly junkets, such as kings and princes only said he, in the realme of England vic to feed upon, desired the same to be accepted in benevolent part, which he and his companions, as poor suiters unto his Holinesse, had there brought and presented as novelties meet for his recreation, etc. Pope Iulius, seeing the strangenesse of the dishes, commanded by and by his Cardinall to take the assay, who, in tasting thereof, liked it so well, and so likewise the Pope after him, that knowing of them what their suiter were, and requiring of them to make knowne the making of that meat, he incontinent, without any more ado, stamped both their pardons, as well the greater as the lesser.

'And thus were the jolly pardons of the towne of Boston obtained, as you have heard, for the maintenance of their decayed port . . .'

APPENDIX

CLASSIFIED LIST OF LETTERS OF FRATERNITY

I. ISSUED BY MONASTIC HOUSES

(a) BENEDICTINES.
   (ii) General Chapter of Province of Canterbury.
    (ii) St. Albans.
    (ii) Belvoir Priory, cell to St. Albans.
    (ii) Hatfield Regis, cell to St. Albans.
    1327. To Roger de Wautham, canon of St. Paul's. B.M. Harl. MS. 60, f. 95.
    1434. To John Derham, late prior. B.M. Add. Ch. 28615.
    (iii) Bury St. Edmunds.
    Admission of Duke of Lancaster. B.M. Harl. MS. 638, f. 256 b.
    (iv) Canterbury, Christ Church.
    c. 1200. To Pope Innocent III. B.M. Arundel 68, f. 34 b.
SOME FURTHER LETTERS OF FRATERNITY

1263. To John de Wymburne, clerk. Literae Cantuarienses (Rolls Ser.), ii, 457.
1415. To Wytfried of Iceland. Ibid., iii, 137.
1429. To Thomas Chaucer. Ibid., iii, 152.
1471. To the Bishop of Bayeux. Ibid., iii, 255.
1479. To Thomas Bulkeley. Ibid., iii, 288.
1491. To Agnes, wid. of William Tylle. Ibid., iii, 315.
(Undated) To Dame Katherine Luvel. MS. Lambeth 20, f. 166.
(v) Durham.

(vi) Ely.

1335. To Elizabeth de Burgh (in French). B.M. MS. Add. 41612.
(vii) Hyde.

(viii) Muchelney (Somerset).

(ix) Westminster.

1486. To Cecilia Radclyff and Agnes Clifford. Ibid., f. 10 b.
1490. To Sir Thomas Thwaytes. Ibid., f. 46 b.
1497. To Dame Elizabeth Sholdham, abbess of Barking. Ibid., f. 93.
1497. To Dame Elizabeth Fitzlews, abbess of Minoresses by Aldgate. Ibid., f. 93.
1497. To Master Henry Hornby. Ibid., f. 93.
1512. To Thomas Stanley, earl of Derby. Ibid., Bk. 2, f. 33.
1515. To Philip Underwood, monk of the Charterhouse. Ibid., f. 75.
1515. To Richard Brooks, serjeant-at-law. Ibid., f. 75 b.

(x) Worcester.

1295. To Henry de Blantesdone and John Grundwell. B.M. Cott. Ch. viii. 2.
1309. To Richard, bishop of Hereford. Ibid., no. 434.
[1309]. To Master John de Bitterley. Ibid., no. 435.
1316. To John de Lacy and family. Ibid., no. 675.
[1316]. To [Thomas], earl of Lancaster and John de Holandia. Ibid., no. 685.
1316. To John Lovet. Ibid., no. 688.
1318. William de Thorntoft, R. of Dodderhill. Ibid., no. 780.
1325. To William de Sereshall. Ibid., no. 1052.

(4) CLUNIACS.


(c) CISTERCIANS.

i. By the order.

SOME FURTHER LETTERS OF FRATERNITY

   ii. By individual houses.
1380. Peter, abbot of Bittlesden, to Robert Corbet, father and son. B.M. Harl. Ch. 84. F. 5
   (counterpart of indenture).

(d) CARThUSIANS.
   i. By Prior of Grande Chartreuse.
1390. To monks of Christ Church, Canterbury. Lambeth, MS. 20, f. 5 b.
1437. To Henry de Kerske and Margaret. B.M. Add. Ch. 39025.
   ii. By individual houses.
1397. Beauvale Charterhouse to Thomas Isle, monk of Durham. Durham Treasury, Loc. i. 44.
1430. London Charterhouse to St. John's Hospital, Clerkenwell. Hope, Hist. of London Charterhouse, pp. 135, 139.
1459. Coventry Charterhouse to King Henry VI. Westminster Abbey Muniments, 650.
1462. London Charterhouse to Thomas Langley and Anne. P.R.O. Chancery Misc., Bdle. 15,
   File 6, no. 10.
1515. Mount Grace Charterhouse to prior and convent of Durham. Surtees Soc., vol. xxxi,
   p. 118.

(e) AUSTIN CANONS.
   i. By provincial chapter.
1506. To Sir Robert Throckmorton and others. Hearne's Collections, viii. 272.
   ii. By individual houses.
   Printed in Sverry Arch. Coll. ix, p. 120.
2. 1250. Same to Sir John Hunsard and Gwendreda. Ibid., f. 137 b.
13th cent. Maiden Bradley to William de Plessis, deceased. Madox, Formulare Anglicanum,
   div (counterpart of indenture).
1359. Dunstable to Sir Gervase de Wilforde. B.M. Stowe Ch. 602.

(f) PREMONSTRATENSIAN CANONS.
   i. By general chapter.
   ii. By individual houses.
SOME FURTHER LETTERS OF FRATERNITY

(g) GILBERTINE CANONS.

(h) HOUSES OF NUNS.
1516. Same to same (pl. lxvi). Durham Treasury, Loc. 1. 27; see also Surtees Soc., vol. xxxi, p. 118.

(i) BLACK FRIARS.
A. By master or general.

B. By provincial prior.
1504. . . . , p. p., to Sir Gilbert Talbot (abstract only). See Collins's Peerage, iii. 30.

C. By local prior.
SOME FURTHER LETTERS OF FRATERNITY


(2) GREY FRIARS.

A. By minister general and his vicar.

1497. Anthony de Pereto, m. g., to Ralph Nevyll, earl of Westmoreland, and Joan. P.R.O. Exch. K.R., Eccles. Docs. 21/49.


1499. The same (?) to Beatrice Ros. Bodl. MS. Rawl. C. 72 (fly-leaf at end).

1520. Thomas, vicar of m. g., to Thomas Cumpston and Joan (admits to prayers of province). Collectanea Anglo-Minoritiae, p. 196.

1524. Francis de Angelis, m. g., to Sir John Kirkham and family. Ibid., p. 225.


1475. Angelus de Clavasio, vicar-general, to Luca dei Ugolini. Dr. A. G. Little.


1473. Franciscus Placentinus, gardianus et rector, to John Ungelarde and Agnes. Dr. A. G. Little.


B. By provincial minister.


1454. Thomas, pr. min., to John Baly and Katherine. B.M. Sloane MS. 1617, 76 b (fly-leaf at end).


1467. Thomas, pr. min., to Roger at Wynde and Isabella. B.M. Sloane MS. 1617, 1 b (fly-leaf at beginning).

1469. Thomas, pr. min., to John Wormley and Cecilia. Archaeologia Æliana, new ser. iii, p. 146.

1470. William, pr. min., to Thomas Bucke and wife. B.M. Add. Ch. 37078.


C. By local head or gardianus.

SOME FURTHER LETTERS OF FRATERNITY

1479. Same to Marmaduke Lumley, ordinis sci Johannis baptiste. Ibid., 478.
1479. Same to William Kendale. Ibid., 879.
1479. John, guardian of F. M. of Bristol, to William Spicer and Agnes. Ibid., 880.
1479. The same to John Denton and Christina. Preserved among Lord Allendale's Documents.
1479. R., guardian of F. M. of Salop, to Thomas Mytton and Elizabeth. Printed in Owen and Blakeway, Hist. of Shrewsbury, ii, p. 462 n.
1479. John, guardian of F. M. of Nottingham, to Thomas Hede and Margery. Lord Middleton's MSS. (Hist. MSS. Comm.), p. 117.
1479. The same to Richard Hede. Ibid., p. 118.
1479. Lewis, guardian of F. M. of Chester, to Sir Nicholas Kerke. Chester Arch. Soc. MSS.

(3) AUSTIN FRIARS.

A. Issued by general, or his vicar.
1357. By David, vicar of prior-general, to Helen Beaufo... (admits to prayers of province). P.R.O. Chancery Misc., Bde. 15, File 6, no. 4.

B. By provincial prior or chapter.
SOME FURTHER LETTERS OF FRATERNITY

ante 1409. By Thomas, p. p., to John Lowe and Margery (fragment only). Lord De L'Isle's MSS.

C. By local priors and convents.

1481. Thomas, l. p. of Salop, to John Spenlove and Margaret. Shrewsbury Museum.
1482. Thomas, l. p. of Woodhouse, to John Cleberi and Alice. Shakenhurst, Salop.

(4) Carmelite Friars.

A. Issued by prior-general.


B. By provincial prior.


C. By local priors.

1376. Henry, l. p. of Sutton [by Plymouth], to William Forneaux and Joan. 'The Walrond Papers'.

(5) Trinitarian Friars.

(a) Knaresborough (York's).

1449. Richard, min., to Sir William Bakerston (in form for priests) (cross of the order). In possession of Edmund Starkie, Esq., Huntroyde, Padiham. Ibid., xix, 64.
SOME FURTHER LETTERS OF FRATERNITY

1493. Robert, mintr., to the St. Quintin family. At Scampston, near Malton, Yorks.
1495. Robert, mintr., to Henry Rychmond (afterwards King Henry VII). Westminster
    Abbey Muniments, 6558*.
1490. Robert, mintr., to Robert Plompton and Agnes. In possession of Rev. C. S. Slingsby
1501. Robert, mintr., to John Nethgatt and Margaret. In possession of J. Lister, Esq.,
1512. Robert, mintr., to Richard Gilybrand, Chaplain (in form for priests). In possession of
    Edmund Starkie, Esq. (as above). Ibid., xix, 64.
1527. Oswald, mintr., to Richard Cornay and Halison. In possession of Rev. C. S. Slingsby
    (as above). Ibid., xvi, 420.

(b) Hounslow (Middlesex).
1466. John, mintr., to Thomas Stoner, Esq., and Joan. P.R.O. Chancery Misc., Bdle. 15,
    File 6, no. 29.
1479. William, mintr., to Master William Chaddeworth and Joan. P.R.O. Chancery Misc.,
    Bdle. 15, File 6, no. 14.
1508. Ralph Bekwith, mintr., to Henry Prince of Wales. B.M. Stowe Ch. 617.

(c) Moddenden (Kent).
1477. Richard, mintr., to J. Preese and others (cross of order). In possession of W. S.
    P.R.O. Chancery Misc., Bdle. 15, File 6, no. 16.
1487. Richard, mintr., and provincial, to [blank]. B.M. Stowe Ch. 613.

(d) Ingham (Norfolk).
1506. Thomas, mintr., to William Fette and wife (recital of benefits). B.M. Stowe Ch. 616.
1506. Thomas, mintr., to John Smith and Agnes (recital of benefits) (cross of order). P.R.O.
    Chancery Misc., Bdle. 15, File 6, no. 19.

(e) Thelisford (Warwick).
1529. J. Brooden, mintr., to [blank]. Block of four printed impressions never used. Lambeth
    Pal. Library, frg. 4.

(f) Walknoll (Newcastle-on-Tyne).
146- (?) [blank] to Sir John Langhorne (imperfect copy). In possession of Northumberland
1480. Richard, mintr., to Ralph Wederington and Felicia. Ibid., 45, f. 91.

(6) CRUTCHED FRIARS.
    657 (6).
    Another copy. Ibid. (9).
III. ISSUED BY HOSPITALS

(1) BURTON LAZARS, LEICESTERSHIRE.

1463. William, master, to parishioners of East and West Hagbourne. P.R.O. Chancery Misc., Bde. 15, File 6, no. 27.
1492. Geo. George, master, to John Lane and Joan. Bodl. MS. Top. gen. c. 23, f. 22.
1510. T. Norton, kt., master, to Thomas West and Joan. B.M. c. 18, e. 2 (7).

(2) BY CHAMBERLAINS, WARDENS, AND PROCTOR OF THE HOSPITAL OF HOLY TRINITY AND ST. THOMAS THE MARTYR, ROME.

1389. To John Budde and Alice his wife, Philip and Joan, his parents. B.M. Add. Ch. 58271.
1447. To John Pelham, sen., kt., and dame Joan. B.M. Add. Ch. 29263.
1449. To [blank]. Chester Arch. Soc. MSS.
1449. To John Wheler, Elizabeth his wife, and John his son. P.R.O. Chancery Misc., Bde. 15, File 6, no. 7.
1459. To John Pelham, kt., and Joan. B.M. Add. Ch. 29264.
1459. To Thomas Jeffre and Joan. B.M. Stowe Ch. 609.
1459. To William Hozi and Joan. P.R.O. Chancery Misc., Bde. 15, File 6, no. 9.
1474. To Thomas Walton, Alice, and children. The Ancestor, vi, p. 45, no. cc.
1475. To Henry Langley and Katharine. P.R.O. Chancery Misc., Bde. 15, File 6, no. 11.
1476. To J. Key. B.M. Add. Ch. 34269.
1477. To Edmund Paston. B.M. Stowe Ch. 611.
1476. Certificate by Abbot of Abingdon, papal commissary, to Joan Darell; that she is a sharer in the indulgences granted to the Hospital. P.R.O. Chancery Misc., Bde. 15, File 6, no. 12.
(3) Walsoken.
By warden or master of Hospital of Holy Trinity.

1491. Eborardus, custos, to Thomas Hutton and ... Dekkys. Parkin, Hist. Norfolk, ix, 129.
1495. ... to John Vingland and Agnes. P.R.O. Exch. K.R., Eccl. Docs. 21/49.
1498. ... to Morris ap Jenkin and Margaret. Parkin, Hist. Norfolk, ix, 130.
1496. Edward Hanyter, magister et custos, to George Catesby and Elizabeth. B.M. Cotton Ch. xxi. 42.
1505. Thomas Honyter, master or warden, to Mr. John Willoughby and Anne (printed on parchment). Lord Middleton's MSS. (Hist. MSS. Comm.), p. 125.

(date) John Whetlam, magister sive custos, to [blank] (printed). B.M. Dept. Printed Books, cut off) c. 18. e. 2 (9).

(4) Various Hospitals.
1442. John Carpenter, master of St. Anthony's Hospital, London, to W. B. M[onk] of Worchester. MS. Bodl. 692, p. 111 d (printed in Correspondence of Bekynton (Rolls Ser.), ii, 357, 8).

Another copy. Rylands Library, Manchester.
Four copies, two imperfect. B.M. Dept. Printed Books, e. 18 e. 2 (12, 12*, 13, 14).
Another copy. B.M. Dept. Printed Books, c. 18. e. 2 (123).


IV. ISSUED BY GILDS

(1) GILD OF ST. MARV-IN-THE-SEA (Newton, near Ely, Cambs).
1408. Thomas Blowyk, master, to Margaret Heryng and John her son. B.M. Stowe Ch. 604.
SOME FURTHER LETTERS OF FRATERNITY


(2) GILD OF ST. MARY IN THE CHURCH OF ST. BOTOLOPH, BOSTON (all printed except the first).
1492. Admission of Thomas Haryson, rector of Brisley. B.M. Stowe Ch. 614.
1507. Admission of Thomas Case and Margaret (month, day, and year of century filled in). P.R.O. Chancery Misc., Bde. 15, File 6, no. 18.
1508. Admission of Richard Woolman (on vellum by W. Fakes). Watt, Bibliotheca Britannica (as above).
15—. Admission of Katherine Langley. P.R.O. Chancery Misc., Bde. 15, File 6, no. 31.
15—. Admission of [blank] (R. Pynson). Westminster Abbey Muniments, 6655.
1521. Admission of John Rodcliff and Margaret (R. Pynson) Bernard Quaritch, London.
1531. Admission of William Richardson and Margaret (R. Fakes). Downside Abbey, Bath.

(3) Other Guilds.
Fraternity of the chapel of St. John Baptist at Northewington in the parish of Broughton, near Banbury.
1521. Two copies, not quite identical, both blank. Bodl. Libr. A. iv, 43 (1).

Gild of the chapel of St. Margaret, Uxbridge.

V. ISSUED BY BODIES OF SECULAR CLERKS

(1) Colleges.
All Souls College, Oxford.
1536. Robert Woodward, warden, and college to abbes and convent of Syon. Ibid., ii, 268 (a further list of eight beneficiaries mentioned).

(2) Cathedral Chapters.
1512. The same to earl and countess of Derby and others. Ibid., f. 106.
X.—Notes on the Armour of the Maximilian Period and the Italian Wars.
By J. G. Mann, Esq., M.A., B.Litt., F.S.A.

Read 18th April 1929

The term ‘Maximilian’ as applied to armour of a fairly clearly defined style and date is one of those names, found in all branches of archaeology, which in spite of their admitted inaccuracy contrive to obtain a general currency as a terse and convenient label. It is at all events nearer the mark than the name ‘Gothic’, as used to describe the style immediately preceding it, for it marks a period which coincided with the latter half of the Emperor’s reign and endured for some fifteen years after his death.

The present use of the term does not go back much farther than the middle of the nineteenth century. It appears to have been adopted by F. Gille in his introduction to the large lithographic work on the collection in the Imperial Hermitage, the first ten parts of which had come out by 1840,1 where he writes Nous croyons donner le nom de ‘maximilien’ à cette espèce d’armure de bataille, la plus pratique que nous connaissions. Another term applied more particularly to the fluted armours of this period was ‘Milanese’, but it was inevitable that it should not survive when it was found that the great majority of existing armours of this kind are of German design and manufacture. Yet we shall have occasion to note that the influence of Milan was not inconsiderable in forming the style in its earlier years. The Maximilian label, on the other hand, has received support from the Emperor’s known interest in the devising of new armours, as described in a much quoted passage in the Weisskunig, and from the assumption therefrom that any new style which came into existence in his reign must have been due to the inventive genius of the Emperor himself.

As a familiar feature of our armours the Maximilian style has been rather taken for granted. The writers of text-books have usually been content to represent it by one or two instances of German fluted armours, as though this fashion were universal. Sir Noel Paton has represented the battle of Flodden with the combatants of both sides clad in fluted armours of the German style, such as he possessed in his own collection, but which we imagine were very few and far between on the border battlefield. The system of dating armour on evolutionary grounds must be frequently checked by

1 Musée de Tsarskoe-Selo, ou Collection d’Armes de S. M. l’Empereur de toutes les Russies, St. Petersburg and Karlsruhe, 1835-53.
contemporary data, otherwise it tends to get out of scale, and every allowance
must be made for the individual types favoured by different centres of manu-
facture. Sir Guy Laking 1 was the first to draw attention to the separate
character of the Italian armours of this period, but unfortunately lack of space
prevented him from examining the material in detail. That it is worthy of the
closest study is evident when we turn to the history of the time and note the
influence which these years had upon the art of war.

For nearly two hundred years Italy had been left alone by the northern
nations when in 1494 Charles VIII made his sudden descent upon the king-
dom of Naples, and opened a new era in which Italy became for thirty years
the battleground of the rival powers of Europe. The long succession of
battles, Fornovo, Cerignola, Agnadello, Ravenna, Novara, Marignano, and
Pavia, fill a crowded page of history. Those who believe that the liberal arts
cannot flourish in the atmosphere of war may be surprised to remember that
during this time Michelangelo was painting the roof of the Sistine Chapel for
a pope who conducted his campaigns in person, and Aldus Manutius was
printing his editions of the classics when the very existence of Venice was
being threatened by the League of Cambrai. How close was the contact
between the arts of war and peace is shown by the life of the sculptor
Torrigiano, who came over to England to make the tomb of Henry VII in
Westminster Abbey, but who spent a great part of his life as a professional
soldier.

When Charles VIII entered Italy he led an army of the medieval
fashion, its knights still clad in Gothic armour and with heavy cavalry as the
dominating feature of its composition. Within a very few years the meeting
of north and south had produced a change. The deadly Swiss infantry and
their rivals the German landsknechts, the Spanish light horse, and the stradiots
made their presence felt. The enthusiasm of the day in all matters of science
rapidly improved on the clumsy experiments of the middle ages in the matter
of fire-arms, and the troops engaged became for the first time trained and
organized armies of the modern type. We need not be surprised if this period
of intense military activity was accompanied by new developments in armour
and an enormous output from the workshops of Nürnberg, Augsburg, and
Milan. The Italian wars provide the spectacle of the old and the new
theories of warfare existing side by side. The Chevalier Bayard was a staunch
supporter of the old school, and Maximilian called himself Der letzte Ritter;
while on the other side we find Machiavelli writing his Arte della Guerra and
pressing the case for a national militia.

I do not propose to deal with armour for the tournament, especially at

1 Record of European Arms and Armour through seven centuries, 1920–2, vol. iii, chapter xxiv.
PERIOD AND THE ITALIAN WARS

this date when it has become a large subject in itself, nor with the purely parade-armours, except to disentangle them from the field-armours with which they are so often confused. This period is important as being the last in which full armour was worn in the field as a matter of course, and the first of which we have an abundance of material to hand. In spite of the increased efficiency and tactical handling of light cavalry, pikemen, and arquebusiers, the heavy-armoured man-at-arms still remained an important factor. His prestige was as yet undiminished. His was still the only arm in the ranks of which a gentleman could decently serve, and the younger sons of Europe who flocked to the Italian wars were legion. Although historians tell us that the death-blow to heavy cavalry was dealt by the battle of Courtrai in 1302, and repeat the assertion anew for each successive war down to the time of Pappenheim’s Reiters and Colonel Haselrigge’s ‘lobsters’, we cannot fail to observe that the armoured horseman took a long time to die. The reason for this was the simple one that he still had his uses. His armour gave him something of the invulnerability of the modern tank, and the force and impact of his charge were tremendous. One has only to turn over the pages of the Weisskunig or look at any of the engaging battle-pictures of the day to see that the mounted man-at-arms still held the imagination of the artist in his conception of what a battle should be.

The evolution of the ‘Maximilian’ fashion of armour with its round contours and channelled surfaces, which appeared shortly after the beginning of the Italian wars, must be traced to a coalescing of the previous Italian and German styles. It arrived so suddenly, without any marked period of transition, that we have to look closely to discover signs of the coming change.

Throughout the fifteenth century the Missaglias of Milan had been regularly turning out Gothic armours of rounded build with plain surfaces, of which no better instance exists than the well-known armour of Frederick the Victorious at Vienna, while in Germany armour had followed the northern Gothic fashion and lent itself to slender, pointed forms and attenuated lines. In its later stages this effect was further enhanced by shell-like flutings.

1 Excluding the armours of the monarchs, there are twenty-three suits at Vienna ascribed to persons who took an active part in the Italian wars, 1494-1529. Most of them are clearly of later date, but eight come within our province, viz. no. 11 G. M. Fregoso, no. 124 Fr. Gonzaga, m. of Mantua, no. 146 Matthias Lang, no. 149 Marx Sittich v. Hohenems, no. 175 A. v. Sonnenburg, no. 178 Ch. de Bourbon, no. 207 G. v. Freundsberg, no. 225 C. v. Bemelberg. We mention below the armours at Paris ascribed to Galliot de Genouillac, Robert Comte de la March, and others who fought in Italy. The 1849 catalogue of the R. Armeria at Madrid attributes armours to Antonio de Leyva, the marquis of Pescara, and Juan de Aldana, but these titles are omitted from the later catalogue as unfounded. It is believed that Lautricc’s sword was until recently preserved in a country church in N. Italy.
and rippled surfaces, and it is interesting to contrast the armour made at Nürnberg for Maximilian himself in his younger years, also at Vienna (no. 43), with contemporary Italian fashion. At Nürnberg by the end of the fifteenth century the Gothic style had reached its most fanciful elaboration, delighting in spires and pinnacles, whether in wood-, stone-, or metal-work, while in Milan the return to horizontal composition which characterized the Italian Renaissance was already well established. We look, therefore, for the first signs of coalescing between the two styles, the German and the Italian, somewhere midway between Nürnberg and Milan, and we find an equidistant point at Innsbruck, where Maximilian held his court. The forms of his own armours now preserved in the Kunsthistorisches Museum at Vienna present an interesting series and provide fuller data for observing the change from Gothic to 'Maximilian' styles than we can find elsewhere. The superseding of the long pointed Gothic toes by the broad round-toed sabatons of the Maximilian fashion came in at the turn of the century and must have been a welcome change from the point of view of comfort. The adoption of the Italian pauldron with modifications, the use of laminated tassets of numerous plates in place of 'tuiles' of one, and mitten gauntlets with short round cuffs in place of pointed ones with separate fingers, are also signs of the new fashion.

If we compare two effigies by Tilman Riemenschneider, apparently executed within a short time of each other, as the composition and treatment is the same in both cases, these changes are clearly discernible. That of Konrad von Schaumburg, †1499, in the Marienkapelle at Würzburg (pl. lxvii, fig. 2), shows an armour of pure German Gothic form: that of Johann Bibra, who died in 1473 but whose tomb must have been executed thirty years later, at Bibra, shows a rounded armour of early Maximilian form (pl. lxvii, fig. 3). The last tomb to show pure German Gothic armour is that of Hans von Rodenstein, †1526, at Krumbach, but so belated is it that we imagine that it must have been set up

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1 There are five armours attributed to Maximilian himself in the K. H. Museum, Vienna: No. 43 in the guide of 1869 is a Gothic armour similar to the Archduke Sigismund's and bears the Nürnberg mark. No. 62, believed to have been made in 1493, is still Gothic in outline and bears the Augsburg fin-cone and a mark attributed to Lorenz Colman. No. 67 is a composite suit, part Gothic, part of later style; its gauntlets are dated 1511. No. 7, the 'saltire' suit, is 'Maximilian' in outline with laminated tassets and mitten gauntlets in the new style. It has no armourer's mark. Compare also the armours of his son Philip (no. 9), G. Maria Fregoso (no. 11), Francesco Gonzaga (no. 124), and the anonymous armour (no. 60).

2 Tomb of Leonhard Count von Görz, †1500, at Lienz, K. H. Atlas, 1892, Pt. X, pl. lxvii. English brasses begin to show this feature about 1490, e.g. John Evans, †1488, at Murston, Kent; Henry Covert, †1488, at North Mims, Herts.; Sir W. Pecche, †1487, Lullingstone, Kent. These three might belong to the early sixteenth century, except that they all carry the sword slung in front like the earlier Gothic examples.

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Hefner-Altenbeck, Trachten, 1840–54, vol. iii, pl. xxii. There is an interesting example of
Fig. 1. Armour, c. 1500. Wallace collection (No. 316)

Figs. 2 and 3. North Italian etched breast-plates in the armoury of the Castle of Churburg, c. 1500-10

Published by the Society of Antiquaries of London, 1929
in his lifetime. This is an instance of the constant danger attendant on dating armour by tombs, when one knows the date of decease but not necessarily the date of execution. But whereas tombs and brasses are the main documents for dating armour of the fourteenth and fifteenth centuries, the Maximilian era provides us with a wealth of new data in the form of woodcuts and engravings and portraits on panel, of which the exact date of execution is often known. The well-known drawing by Albrecht Dürer in the Albertina, representing a study for his print of the Knight, Death, and the Devil, bears the remark 'This is the armour worn in Germany at this time' and the date 1498. The armour represented is of late Gothic type, but with large pauldrons with upstanding neck-guards foreshadowing the new fashion.

The coalescing of the German and Italian styles, which we have advanced as the cause of the evolution of the Maximilian fashion, did not mean that all national features disappeared, or that the German and Italian armours of this period are indistinguishable from one another. Far from it; in fact it might be better to say that the two styles exchanged certain features. The Italians borrowed the idea of a fluted surface from the German Gothic armours, developed it in a more rigid style, and left the Germans to exploit it further in the form of the heavy fluting which is so characteristic of their armour of this period. The Germans in their turn borrowed the rounded outline and massive build of the Italian Gothic, which one thinks of as being more suitable to their burly Teutonic figures than the slim and pointed forms that they had developed with such skill in the previous generation. Let us therefore examine the products of these two schools in turn, starting with the Italian armours.

The armour illustrated on pl. LXXIII, fig. 1, no. 316 in the Wallace collection, is commonly accepted as one of the earliest existing armours to show no Gothic feeling in its outline or details. Although it has been compared with the von Barfus armour formerly in the Morgan Williams collection (lot 38 in the sale of 1921, Starkie Gardner, *Foreign Armour in England*, fig. 10), a comparison with the next armours to be described points to the presence of North Italian influence in its make. The very globose breast-plate with triangular turn-over, and the form of the tassets are typical, but the etching upon it is more likely by a German hand, and it is safer to suggest that it comes from one of the Teutonic castles in the valleys of the Alps. Two breast-plates of almost the same form with similar tassets, but without arms, are preserved in the armoury a transitional armour on a tomb in the Franziskaner Kirche at Würzburg, dated 1513. The effigy wears a Gothic sallet with laminated tassets and high neck-guards of early Maximilian style.

1 'Der ist die Rüstung zu der Zeit im Teutenschafft gewevert.'
2 'Un' armatura bianca fatta a canelini all'Eletanna,' Inventory of the Ducal Armoury at Mantua, 1602.
of the castle of Churburg (pl. lxviii, figs. 2 and 3), and here we have indisputable evidence of their Italian origin in the style of their etched decoration, which is so conspicuous a feature. It enables us to group round them a whole series of breast-plates similarly ornamented. No. 69 in Count Trapp's catalogue shows a frieze of three medallions containing the Virgin and Child in the centre, St. Francis on the left, and St. Sebastian on the right, and below the protective text OS NON CHOMINUETIS EX EO. No. 70 shows the Virgin and Child between St. Sebastian and St. Barbara. The style of this etching is strongly Italian and may be compared with that on some of the cinquelettes of the period (pl. lxix, figs. c and d), though from the absence of certain characteristic traits it cannot be ascribed to Ecorche dei Fideli. The background of close diagonal shading, the loose, free line lightly indicating the limbs of his subject, are very different from the German style (contrast the etching on the German breast-plate in the Zouche Sale, 1920, lot 201), and the form of the arabesques are typical of Italian Renaissance ornament. The same shaded backgrounds of close-set diagonal lines are found in the prints of the artist-goldsmiths of North Italy at this date, as for instance in 'the Battle of Naked Men' by Antonio Pollaiuolo (1432–98) and in the engravings of Mantegna.

The date when etched ornament was introduced to decorate the polished surface of armour is not certain. The first use of an incised decoration, apart from applied borders of brass, seems to have taken the form of patterns of punched dots, as found on the gauntlets of the late fourteenth-century Italian armour no. 13, and the pauldrons of no. 18, in Count Trapp's catalogue of the Churburg armour, and M. Pauilhac possesses a Gothic back-plate with Milanese marks enriched with a faint pointillé pattern running along the borders of the lames. The first example to be etched with acid appears to be the breast-plate attributed by Schrenck to Bartolommeo Colleoni at Vienna (pl. lxxxiii, fig. 4). It is decorated with a lunette of Abraham's sacrifice and foliated arabesques of a type which we shall have frequent occasion to describe. The form of the breast-plate is quite compatible with the date of Colleoni's later years (he died in 1475), and if the etching is contemporary and not a later addition, it is, we believe, the earliest instance that has come down to us. Although the quality of the etched decoration employed on North Italian armour and weapons of the close of the fifteenth and early years of the sixteenth

1 The Armoury of the Castle of Churburg, by Oswald Graf Trapp, 1929, nos. 69 and 70.
2 For an examination of Fideli's style see Ch. Buttin, La Cinqueudea de la Collection de Mme Goldschmidt, 1906. The date of his birth is unknown, but he was working as a goldsmith at Ferrara in 1487, and about 1500 transferred himself to the Court of Mantua. He died in 1518 or 1519. The signed cinqueudea of Cesare Borgia in the possession of the Duke of Sermoneta is inscribed with Cesare's title CAR. VALEN (Cardinal of Valencia) which enables us to date it between 1492 and 1498, as in the latter year he left the Church to be free to make a political marriage.
SPECIMENS OF ETCHING

d. Cinque de etched by an unknown artist. Wallace collection.  
f. Detail of etching on German half suit. Wallace collection, no. 239

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Fig. 1. Armour attributed to Charles de Bourbon, Grand Connétable de France, c. 1510-20. Metropolitan Museum, New York

Fig. 2. Etched Italian fluted armour, c. 1510-20. Museo Civico, Bologna

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century varies considerably, revealing the work of several hands, the general style is the same and the repetition of certain ornamental motifs makes it easily recognizable.

An incomplete armour in the Historical Museum at Dresden (pl. lxxi, fig. 2), formerly in the Zschille collection, shows a breast-plate and tassets of precisely similar form to those at Churburg. Across the upper part of the breast runs a frieze containing three compartments divided by Renaissance pillars: in the centre the Annunciation, on the right St. John the Evangelist, and on the left St. John the Baptist, with a scroll inscribed Ecce Agnus Dei, and below in Roman letters the same text as on the Churburg breast-plate hos non cominuetis ex heo (sic). Five bands of ornament run from the frieze to the waistline; in the upper part of the three principal ones are panels representing classical personages: Cleopatra, Mucius Scaevola, and Lucretia, with inscriptions in Italian. The rest of the bands are filled with arabesques and strap-work ornament. The same forms of ornament are engraved in bands along the gussets and the borders of all the fifteen plates of the skirt and tassets. From the length of the latter we imagine that the suit was not furnished with pieces for the legs, and was intended to correspond to the light Trabaharnisch or corselet worn by officers of landsknechts or light horse in Germany.

There is another breast and tassets of this type in the arsenal of Solothurn (Wegeli Cat., no. 2). The etched frieze in this case shows the Virgin and Child between St. Sebastian and St. Barbara, and below, the text hos non cominuetis ex eo, as at Churburg. Lower down on the breast is a representation of the Crucifixion on a vertical band of arabesques. The arms shown with it do not belong, and it lacks the very unusual leaf-shaped culet which survives on the Dresden example. Another early Maximilian half-armour of the Italian type is no. 3 in the same armoury. It shows the Virgin and Child between St. Sebastian and St. Vincent, and the tassets have traces of arabesque ornament, but the lower part of the breast-plate is relieved with fluting, which places it in the next category which we describe.

There are some important fragments of an armour of this kind in the Museo Stibbert (no. 3146), consisting of the front of a gorget, breast- and back-plate, and a rere-brace with elbow cop. All of them are ornamented with etching (in the catalogue they are described as ornati di finissime incisioni a bulino, but the blunt ending of the lines more resembles etching than engraving). On the gorget is the motto un bel morir tutta la vita onora and a representation of Marcus Curtius plunging into the gulf (a favourite subject on cinquecentas) and the customary arabesques. The breast-plate has a frieze now sadly obliterated, which shows traces of saints (St. Barbara is just discernible) in compartments
divided by Renaissance pillars and the text [os] NON [COMMUNIETIS EX] EO. The lower part of the breast is decorated with two crossed torches and a scroll, the inscription on which is now illegible, but the letters NO. D...O... are discernible. The borders of the armpits are etched with arabesques on a shaded background. The back-plate is also decorated with torches and a scroll inscribed NON...D...O... The elbow cop, which is well preserved, has a large side-wing, of which the edges and middle ridge are loosely roped, and on either side set upon platforms are nude horsemen, one of whom is overthrowing an opponent on foot. What is particularly interesting is that these horsemen are directly based on two of Leonardo’s designs for the equestrian statue of Francesco Sforza, the model for which was destroyed by the French in 1499. They appear in one of the six engravings which were at one time believed to have been executed by Leonardo himself (Passavant, v. p. 181, no. 3), but are now attributed to his school. The eire-brace is decorated with floral arabesques, an astrolabe, and an open book, and an escutcheon inscribed with what appears to be the name NICOLAE ... (Nicodemus), but whether this signifies the owner, the artist, or a patron saint, we cannot say. The bold roping inclines one to place it a little later than the other examples. In the same collection under no. 1031 is an etched pauldron which has belonged to this or a similar suit.

There is a very much obliterated breast-plate of this style in the Burges bequest at the British Museum, and one appeared in the Seymour Lucas sale of 1903 (lot 47). There is, too, a much corroded breast-plate with roped borders in the Zeughaus at Berlin, which also shows faint traces of a frieze of etched medallions across the top, and another in the Tower of London (iii, 76–7) with its back-plate and gorget.

All those that we have described above, with the exception of the second Solothurn one, have smooth, round surfaces devoid of fluting, and in most cases plain angular turn-overs. The breasts are very globose, a feature which a photograph taken from the front does not demonstrate very clearly (fig. 1).

The armour ornamented with diamante embroidery in the Bargello (Laking, vol. iv, fig. 1214) presents the same outline and build, and is etched in the same manner. It has a frieze of the Virgin and Child between SS. Sebastian and Barbara on a closely shaded background, and all parts, especially the back-plate, are richly ornamented with foliated arabesques of characteristic form. On the helmet is a hero’s head and the motto VICTOR POPULI.

Let us now take another group of armours of the same make and date, but distinguished by their surfaces relieved with fluting, in some cases...
Fig. 1. Milanese armour, by Negrolì, c. 1510. Musée de l’Armée, Paris

Fig. 2. North Italian etched breast-plate and tassets, c. 1500. Historical Museum, Dresden

Fig. 3. Armour of Emmanuel the Fortunate, King of Portugal, by Negrolì, c. 1510. Paulilae collection

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Fig. 1. Saul with the head of Goliath, by Desso Dossi. Galleria Borghese, Rome

Fig. 2. Admiral Giovanni Moro, by Titian. Kaiser Friedrich Museum, Berlin

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light and sparse, and in others very bold and pronounced. As we have already pointed out, fluting had been used in Germany in the fifteenth century. In fact the effigy of Konrad von Weinsberg, †1446, at Schöntal (pl. lxvii, fig. 1) shows a boldly fluted breast-plate of early date, but the fluting on Gothic armours remained an accessory rather than an integral feature of the design, and it is always easily distinguishable from the rigid fluting in parallel lines of the Maximilian period. The Italians do not seem to have adopted the idea until the end of the century, and at first appear to have used it in imitation of the civilian costume of the day. The little Marignano suit in the Doge's Palace at Venice (Cat. Lucia, b. 6) shows a breast-plate with four converging lines of pleat-like ribs like the gathering of a tunic. Another instance is the breast-plate on the composite Gothic armour in the Museo Stibbert at Florence (Cat. Lensi, no. 3910). The employment of a few flutes to give an effect of a textile surface seems to have been but a passing fancy, since within a short time we find them employing fluting for its own sake. We rather doubt the suggestion that it was intended to strengthen armour, as fluted and unfluted suits of the same quality by the same armourers continue side by side to the end of the period, and though it had its uses in assisting the glancing surface to divert an opponent's weapon, it is so often introduced regardless of this function that we imagine its adoption was a matter of individual taste rather than of actual utility.

The first and most important of these fluted and etched Italian armours is that formerly in the Uboldo and de Cosson collections, and now in the Metropolitan Museum, New York (pl. lxx, fig. 1). It has been ascribed to the Connétable Charles de Bourbon on the ground of the resemblance between its decoration and that on his helmet and shield at Vienna, but we understand that latterly the Baron de Cosson was less confident of this ascription. The resemblance may denote the same artist rather than the same patron. Here we have the etched frieze of saints, in this case the Virgin and Child between St. Paul and St. George, and below in Roman letters the text CRISTUS RES (sic) VENIT IN PACEM ET DEUS HOMO FACTUS EST, and on the back-plate the protective one, so often employed on armour, IESUS AUTEM TRANSIENS PER MEDIUM ILLORUM IBAT. The channels of the flutes are filled with typical arabesques. The close helmet shown in the illustration does not belong, but is, we understand, a restoration based on the close helmet on the Medici armour c. 179 in the Musée de l'Armée.
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Another example is preserved in the Museo Civico at Bologna (pl. lxx, fig. 2), and, from a mistaken impression derived from its bombé breast-plate, has been mounted on a female dummy. The frieze in this case consists of the sacred monogram between St. Catherine and St. Sebastian, and the spaces between the flutes are filled with foliated arabesques. This armour wears an Italian sallet of Gothic form (cf. Laking, Record, ii, figs. 387 and 388), but of Renaissance decoration, and still possesses its rere-braces and fluted tassets. The legs which are mounted with it do not belong.

A third armour of this type is no. g.8 in the Musée de l'Armée (pl. lxix, fig. a), and in this case we have confirmation of our supposition from internal evidence that this group of armour is Milanese, as its sallet with 'Maximilian' bellows visor is stamped with the Missaglia mark. This must, we believe, be one of the last pieces to bear this mark, as the Missaglia workshop appears to have passed about this time into the hands of their relatives the Negroli, whose compass-mark appears on several armours with similar decoration described below. The frieze on the breast-plate shows the Virgin and Child between St. Barbara and St. Margaret (?), who also appear on the elbow-cops, and, below, the prayer Mater dei Memento mei, which appears also on armours g.7 and g.9. All parts are richly ornamented with flowing arabesques of the usual kind and trophies. The gilding remains in good preservation on the back-plate. The legs with their boxed surfaces should be noted, as the etched armours which we have described above have in all cases been deficient in the lower limbs. g.9 is similar to g.8 in general style, but it lacks the legs, and the fluting of the breast-plate takes the form of embossed gadroons. There is no frieze of saints along the top, but the space is filled with a profusion of arabesque foliage etched with a hatched background and containing a hero's head inscribed CHURIO R. (pl. lxix, fig. b).

We now come to a very remarkable armour of this date and make (pl. lxxi, fig. 3) which is in the collection of M. G. Pauilhac at Paris. It bears the compass and initials of Negroli, and the cypher of the armillary sphere used by Emmanuel the Fortunate, King of Portugal (1495-1521), who dispatched Vasco da Gama on his voyage to the Cape. The whole armour is covered with panels etched with mythological subjects and arabesques richly gilt. The upper part and especially the reinforcing breast have suffered from corrosion, but the cuisses still show the delicate Italian etching very clearly, and the whole armour in its outline and make is as fine a specimen of Milanese work of this date as has come down to us. Only the tassets are fluted. The legs are boxed like the Musée de l'Armée suit and also the 'Bayard' suit now in the Tower of London (Laking, iii, fig. 1934 A, and Archaeologia, vol. 78, pl. x).
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Before we leave these N. Italian armours with etched friezes of saints on the breast it may be interesting to compare several detached breast-plates of this kind. One of very pronounced form has already been exhibited before the Society by Mr. Fioulkes (Archaeologia, vol. 78, pl. xiv). Its boldly roped edges and exaggerated flutes have led some to suggest that it is German, but a careful examination reveals traces of a frieze of etching such as we have already described, in this case the Virgin and Child between St. John the Baptist and St. Christopher; and below, barely discernible, are remains of the familiar text OS NON COMMUNETIS EX EO and what may be part of a date. It is interesting to place it beside Titian's portrait of the Venetian admiral Giovanni Moro in the Kaiser Friedrich Museum at Berlin, pl. lxix, fig. 2, which shows an exactly similar breast. There is a second breast-plate of this type, also from the Rotunda at Woolwich and now in the Tower of London, less boldly fluted, and bearing the Virgin and Child between St. Sebastian and St. John the Baptist. In the interesting little museum in the Castle of Valière at Sion is an etched and fluted breast-plate (pl. lxxxvi, fig. 2) bearing the arms of its owner, Georges Supersaxo, between St. Sebastian and St. Catherine, and the protective text JESUS AUTEM TRANSITENS PER MEDIUM ILLORUM IRAT. Between the rays of flutes are the usual Italian arabesques and trophies, and it so closely resembles the breast-plate of 68 in the Musée de l’Armée that we have no hesitation in stating that it is Milanese. Two other breast-plates were in the William Meyrick sale of 1922 (lots 122 and 123), and are now in the collection of Mr. Clarence Mackay in America, both with friezes of saints in the Italian manner, and one of them almost as boldly roped and bombé as the Tower example. Another breast-plate in the same sale (lot 111) was etched with the Triumph of St. George, but was so obliterated as to make it impossible to be certain of its nationality, and the fashion of the fluting and the semicircular curve of the neck incline one to believe it to be of German make. Compare also the breast-plate and gorget lent by Mr. Macomber to the Loan Exhibition at New York in 1911 (no. 39 in the catalogue).

It is interesting to follow the choice of Saints used to decorate these armours. St. George has an obvious appeal. St. Sebastian is also a military saint, having been a Roman officer, and according to one account was a native of Milan. His miraculous survival after being shot with arrows at close range may also have suggested that he would enhance the protective virtues of a breast-plate. Similarly, the sight of a representation of St. Christopher was believed to protect one from violent death for the rest of that day, though one would imagine that his portrayal on a breast-plate would be of equal assistance to an opponent. St. Barbara was the patron saint of armourers, a patronage that has since been extended to gunsmiths and artillery in general, while
St. Catherine of Alexandria was ranked as one of the fourteen most helpful saints in heaven.

If we turn for corroboration to the pictures of the day we can find several armours similar to those which we have described, but it is more difficult to find satisfactory representations of contemporary armour among Italian artists than among the German. Michelangelo's and Raphael's preoccupation with the nude, and the tendency of so many Italian artists of the Renaissance to depict warriors, whether saints or gods, à l'antique, make good instances rather hard to find. But Dosso Dossi (1479-1542) supplies some valuable examples. His attention to the accurate representation of contemporary armour may possibly date from his sojourn at the court of Mantua, whose ruling house of the Gonzaga supplied so many distinguished generals. The representative of this generation, Giovanni Francesco III, had commanded the allied Italian forces at Forano against Charles VIII. Dossi's picture of Saul with the head of Goliath in the Galleria Borghese (pl. lxxxii, fig. 1) shows a plain globose armour of the Italian fashion with a frieze of etching across the top of the breast. There is also a version of this composition at Stuttgart. A portrait of a warrior by him in the Uffizi Gallery shows a globose breast-plate with heavy roping along the top and with an etched frieze across the upper part. His portrait of Francesco d'Este as St. George in the Brera Gallery (pl. lxxiii, fig. 2) gives us an excellent instance of armour with smooth globose breast with straight upper edge, and tassets and fluted arms with indications of etched borders. A picture in the church of San Pietro at Modena, ascribed to Rondani (1505-48), representing the Madonna and Child with St. Sebastian and St. Gregory (pl. lxxiii, fig. 1), shows an Italian armour of the early sixteenth century in considerable detail. The fringe of mail below the knee and the greaves ending at the ankle are a favourite Italian feature. The harness is unfluted except for two divergent sprays on the breast, reminiscent of those on the 'Marignano' suit, but even more closely resembling a breast-plate in the Wallace collection (no. 32 A, pl. lxxxiii, fig. 3). There is also a breast-plate of this pattern among the armour from Rhodes (which was evacuated in 1522), recently removed from the Rotunda to the Tower of London. There is another picture portraying armour of this type by Dosso Dossi, but with the breast covered with regularly spaced flutes, representing the Virgin and Child between Saint George and Saint Michael, in the Estense Gallery. His picture of the Virgin enthroned between St. Sebastian and St. George in the same gallery shows the latter in an armour with globose breast with a gilt frieze along the top and gilt bands; the pauldrons and arms are fluted, and the cuisses are boxed like those on the Musée de l'Armée suit c. 8. All the details are very carefully rendered. Also we must not forget to mention the portrait of a warrior
Fig. 1. St. Sebastian, from the picture of the Virgin and Child with two saints, by Rondanini. Modena, Church of St. Peter

Fig. 2. Francesco d'Este as St. George, by Dosso Dossi. Brera Gallery, Milan

Fig. 3. Breast- and back-plate, probably Italian c. 1500. Wallace collection (nos. 32 and 16)

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Early Maximilian armour in the Zeughaus, Berlin, from the armoury of Prince Pless

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by Piero di Cosimo in the National Gallery (no. 895), which shows a suit boldly fluted on breast, tassets, and arms, so like existing German armours of the period that it is doubtful whether this armour is an Italian one. The picture must have been painted between 1504, the date of the completion of Michelangelo's David, which is seen in the background, and the artist's death in 1521.

Other Italian pictures showing fluted armours are that by Ortolano in the National Gallery (no. 660) worn by St. Demetrius, and the picture of the Virgin and Child between Saints by Garofolo in the Galleria Borghese at Rome, which latter does not, unfortunately, show as much of St. Michael's armour as we should like to see, though the details visible are faithfully rendered. Lastly we must include the finely fluted armour worn by Dossi's St. William at Hampton Court. There are numerous replicas of this picture in existence, one of which was included in the sale of the late S. J. Whewell.

A third group of Italian armours is well represented in the Musée de l'Armée, but there are few examples elsewhere. They are so distinctive in form that it is possible that they may have been made for French customers during the French occupation of Milan. They differ from the two groups already described in that their breast-plates, instead of being broad and round, are built high in the neck with a central ridge (cf. p. 238 infra). G. 7 (pl. lxxi, fig. 1) bears the compass mark of Negrolti and is beautifully etched and gilt. g. 36 is another example. It came from the old arsenal at Sedan and is believed to have belonged to Galliot de Genouillac, who was grand maître de l'artillerie and fought at Fornovo, Agnadello, Marignano, and Pavia. For his services in this last battle François I made him grand écuyer de la couronne. It is more coarsely etched than G. 7. The cannon and swords included in the decoration of the borders are assumed to refer to these two offices, and if this is the case date the armour as after 1525. The legs are wanting. G. 37 is of the same build, but not etched. It is traditionally ascribed to another soldier of the Italian wars, Robert, Comte de la Marche. G. 42 and G. 47 are later examples of the same group. G. 42 is dated 1538. The Augsburg mark recorded in the catalogue as being stamped on one of the cuisses does not invalidate its Italian origin, as the cuisses are of later date and do not belong to the suit. Both armours have etched and girt borders of Italian style. G. 10 is somewhat different and was probably made for the Italian market. It bears the compass mark of Negrolti, and though incomplete is a most interesting specimen of its kind. It retains its armet à roudette of traditional Italian form, has bears' paw

1 Lorenz Colman of Augsburg is known to have supplied armour through the merchant-bankers the Fugger to the Court of Mantua about 1566. He received 4,000 florins for a harness which so delighted his patron that he sent him a bonus of another 4,000 fl. — Bertolotti, Arti minori alla Corte di Mantova, 1889, p. 129.

2 Others are at Frankfort, Vienna, Paris, Brussels, and Dijon.
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sabatons, and possesses some of its double pieces for the tournament. Its parts are etched and gilt in the same style as the other Italian armours which we have been describing. It is interesting to note that all the Negroli armours which we have mentioned, and also the armour no. c. 178 by him for the champ clos, are of diverse build, and show the versatility of this famous workshop in catering for varying tastes and requirements. But the style of the etched decoration is similar in each case, employing the same motifs and treatment.

The principal helmet worn with these Italian armours was the armet à rondelle, which originated in the middle of the fifteenth century, but continued with very little modification well into the sixteenth century. The tomb, now in the Museo Civico of Bologna, of Giovanni d’Antonio Sala, who fell in 1527 fighting on the French side and was buried in the church of S. Domenico (pl. lxxv, fig. 3), shows a plain unfluted armour with upstanding neck-guards and rounded sabatons, and beside him his armet with its wrapper, which if it came into the sale-room to-day would unhesitatingly be assigned to the fifteenth century. But the armet à rondelle appears in profusion in the woodcuts of Burgkmair and Cranach, and they abound in the interesting picture of the battle of Pavia (1525) in the Ashmolean Museum. Here all the men-at-arms wear armets with wrappers and high double pauldrons on the left shoulder, except one solitary horseman who rides among his fellows wearing a visored sallet of the German fashion of the previous generation.

This survival of the armet makes us hesitate to reject without second thoughts the claim of the page’s suit in the Doge’s Palace to have come from the field of Marignano. Its general outline is still Italian Gothic, but on closer examination it reveals several late features. We have already noticed the pleated breast, but in addition to this the sabatons are square-toed, and the borders of many of the plates, both of armet and body armour, are decorated with etching. Other rondel armets to show etching are one in the Wallace collection (no. 83), and four in the Musée de l’Armée (g. 10, h. 54, 55, and 56). H. 55 is German, as among the gilded decoration is faintly discernible a figure of St. William inscribed S. WILL., and on the other side S. FORG and the date 1500. The armet on armour A. 75 of Charles V at Madrid still retains in its essentials the form of the Italian armet of the fifteenth century.

Beside the armet à rondelle, we have already noticed in passing the light type of Italian sallet sometimes worn with these etched armours of the opening years of the sixteenth century. A particularly fine example of this type is the

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1 In the Histoire du Chevalier Bayard, chap. xi, there is an interesting account of how he had to divest himself of his armet and cuisses, and escape on hands and knees. Later he was concerned by the loss of his armet—mais il luy faisoit qu’il n’avoit point d’armet. Car en tels affaires faict moult dangereux avoir la tête nue—and managed to borrow one.
Fig. 1. Tomb of Wolfgang von Dalberg, d. 1522. Catholic church, Oppenheim

Fig. 2. Tomb of Conrad von Grumbach, d. 1526. Rimpar

Fig. 3. Tomb of Giovanni d'Antonio Maria Sala, d. 1527. Bologna, Museo Civico

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Fig. 1. Detail of the Descent from the Cross, by Sodoma. Sienna. Showing hinged side-pieces to the back.

Fig. 2. Breast-plate of Georges Supersaxo at Sion

Fig. 3. Fluted armour with Seusenhofer mark, and hinged side-pieces to the back-plate. Castle of Churburg

Fig. 4. German etched breast-plate. Burges collection, British Museum

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one with the arms of Ercole Bentivoglio (1459–c. 1507) preserved in the Hermitage at Leningrad (Laking, vol. ii, fig. 388, and Z. H. W. K., ii, pp. 158–60) which has the extra plate on the brow elegantly fluted and etched with arabesques. Sometimes these Italian sallets are fitted with bellows visors of the German fashion. Examples are in the Wallace collection, the Musée de l'Armée (C. 8, G. 9, and H. 45), in the Carrand collection in Florence, and at Malta, and have been described by Laking, so that we do not need to speak further of them here. Mention, however, should be made of the two superlative Italian sallets covered with elaborate etched arabesques (nos. D. 12 and D. 13) in the Real Armeria at Madrid, both of which appear to belong to the border-line of the fifteenth and sixteenth centuries. Their etched ornament is clearly shown on pl. xx of Count Valencia’s catalogue. The arabesques and intricate strap-work have led in the past to their being ascribed to the last Moorish king, Boabdil, but they carry the cross-keys mark of the Missaglia-Negroli atelier and are described in the Inventario Iluminado among the 'veijos venido de Flandes'. They probably therefore belonged to the Archduke Philip, who inherited the Low Countries from his mother and married Joanna of Castile in 1496.

A new form of helmet which introduces itself at this date both in Germany and Italy is the open casque with movable fall on the brow and laminated plates at the back. There is an excellent example, etched in the Italian manner, in the Wallace collection (no. 234, pl. lxxvii, fig. b). The same arrangement of laminations at the back is shown on two close-helmets (nos. H. 64 and G. 36) in the Musée de l’Armée. This form of light helmet is important as being the forerunner of the burgonet which became the favourite helmet of landsknechts and light horse.

There is a singular head-piece in the Clemens collection at Cologne (pl. lxxvii, fig. g), embossed apparently to represent the light caps, sometimes shown on portraits of the day, and worn as a padded foundation for a helmet. It is elegantly etched with arabesque foliage in the Italian style. We only know of one other instance of this kind of head-piece. This is in the Germanisches Museum at Nürnberg, but is of very rough make and we think of doubtful authenticity.

If we go northwards to observe the new fashions of armour adopted in the meantime by the great centres of the craft in S. Germany and Tyrol, Augsburg, Nürnberg, and Innsbruck, we can trace the evolution of the German ‘Maximilian’ armour from the point where it abandoned Gothic slimness and angularity and adopted the rounded outlines of Italy. It is doubtful whether Maximilian himself had much to do with this change, but it is his own representation by Hans Burgkmaier the Elder in his woodcut of the

1 But compare the steel cap d. 23 in the Real Armeria at Madrid.
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Emperor as first issued in 1508 (fig. 20, p. 26 supra) which gives us our first representation of a German "Maximilian" armour. He also appears clad in the new fashion on his treble thaler struck in 1509, which shows him armed at all points on a barded horse (pl. lxxvii, fig. 1), and on the thaler without a date, but probably struck in 1508, in which he is shown half-length in an armour with fluted breast-plate. There is no lack of material for tracing the course of German armour from this date onwards. It is represented in most armours, and the activity of the German artists in this great period of their art has left us countless illustrations in paintings, engravings, and sculptured tombs.

The Zeughaus at Berlin has recently acquired from the armoury of the Prince Pless a very rare specimen of an early Maximilian half-armour (pl. lxxiv). The fluting is still a subordinate feature and is used to enhance the graceful lines of its build, as was the case with the later Gothic armours. The pleat-like gathering of the flutes on back-plate and cuilet and the heart-shaped piercings are still pure Gothic in style. It bears no mark, but belongs to the same family as the later armours of Maximilian at Vienna which we have already described (p. 220). The armet is of unusual form. Instead of opening down the chin in front, the bevor swings open on a hinge fixed on the left side (cf. g. 5 in the Musée de l'Armée). The lower edge fits over and revolves on the upper rim of the gorget. Along the top of the breast in Roman capitals are the letters N N M N N, which Dr. Binder suggests stand for Non Nobis, Maria, Non Nobis. The protection of the inner side of the elbow with a series of narrow lamé first appears on Maximilian's Colman suit no. 62 of 1493, and is not uncommon on armours of the early sixteenth century. It seems to disappear entirely in the second half of the century only to reappear on some of the armours of the seventeenth century. The left pauldron alone shows an early instance of the upstanding neck-guards which later become so conspicuous a feature of Maximilian armours, and it should be compared with the Wallace collection armour no. 316 of similar date (pl. lxviii, fig. 1). The employment of zig-zag embossing on the back of the pauldrons, at the top of the shoulders, and on the vambraces is also found on Maximilian's armours nos. 7 and 67 at

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1 It is worth noting that his thaler struck in 1505 showed him still wearing a cusped placate of Gothic form. Peter Vischer's famous tomb of Hermann VIII von Henneberg at Römhold is believed to have been cast about 1508, after the death of his wife in 1507, as the date of the Graf's decease has clearly been filled in at a later date by an unskilful hand. It shows an early fluted armour of 'Maximilian' form with a rondel armet. Vischer's earlier tombs at Cracow show unfluted armour with round sabatons, but are still in the main Gothic. That of Marshal Kmitas, †1505, shows a fine Gothic sallet.

2 It has been made the subject of an article in Berichte aus den Preussischen Kunstsammlungen, 1929, pp. 75-9, by Dr. Binder, Director of the Zeughaus, to whose courtesy I owe the photographs.
THE DEVELOPMENT OF THE FLUTED BELLOWS HELMET

a, b, c. German sallets, c. 1490-1510. Wallace collection.  
g. North Italian steel cap. Clemens collection, Cologne.  
h. North Italian etched casque. Wallace collection (no. 234)

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Fig. 1. Fluted armour with gorget, c. 1500.

Kunsthistorisches Museum, Vienna (no. 126)

Published by the Society of Antiquaries of London, 1909

Fig. 2. St. Ursula, from the picture of the Virgin and Saints, by Hans Solingen, painted in 1522.

Wallace Collection (no. 763)

Fig. 3. Fluted German armour, c. 1530.
Vienna, and, among other instances of the same date, on the tassets of the Seusenhofer early Maximilian armour no. 71 at Churburg.

The earlier Maximilian armours show fluting of a less pronounced kind than the later ones. The ribs are often few in number or gathered into groups, and the surface between is flat. In the later armours the flutes are usually sharper and the spaces between channelled to a concave section. The more boldly fluted style seems to have come in about 1520, and the other form seems to have survived for some time beside it. There may have been many who preferred the simpler style, and probably the more flamboyant armours covered with deep fluting and heavily roped at the edges were more expensive.

Fluted armours are termed geriffelt in the inventory of the Ambras collection drawn up in 1596. The contemporary Italian name was armatura spigolata (inventory of the armoury of the Castle of Mantua of 1542) and the English word appears to have been 'crested'.

Many German tombs between 1510 and 1525 (e.g. pl. LXXV, fig. 1) show armours with plain surfaces and sparse flutes. The breast-plate on the composite Maximilian armour II. 12 in the Tower of London is a good example of this early form, and the turn-overs are angular and plain. The armour with the Seusenhofer mark (pl. LXXVI, fig. 3) in the Churburg Armoury (no. 71, cf. also no. 72) is an early instance of German fluted armour and has an interesting feature in the make of the back-plate, which has two side-plates under the arms hinged to the main part of the back. A Gothic armour by Conrad Seusenhofer in the same armoury (no. 31) shows a similar feature on the back-plate, so that the Churburg Maximilian suit is probably an early one. Count Trapp points out that this feature is also found on a Maximilian back-plate in the Zeughaus at Berlin from the Bernau Armoury (Z. H. W. K., vol. xi, p. 100), and we can illustrate it very felicitously by a detail from a picture by Sodoma (pl. LXXVI, fig. 1) of the Descent from the Cross in the Siena Gallery.

When describing the fluted armours which are so typical of the Maximilian school in Germany, it must not be forgotten that armours of exactly similar build but with smooth surfaces (compare the armours of Eitel Friedrich, Graf von Zollern, and Andreas, Graf von Sonnenburg, at Vienna) were being turned out at the same time. In the collection of armour now assembled in the

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1 Angellucci, Turin Cat., 1890, p. 37. See also footnote 2 on p. 221.
2 de Cossou, Cat. of Tudor Exhibition, 1890, p. 162.
3 We have already mentioned the Römild example of 1508. The Oppenheim tomb is dated 1522, and there are even later examples of tombs with sparse fluting. The picture by Matthias Grünewald at Munich of St. Maurice and St. Erasmus shows the latter in a Maximilian armour with high neck-guards and sparse fluting. It was painted to the order of the elector of Mainz for the church of St. Maurice and St. Magdalen, which he built at Halle in 1518.

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castle of Ambras\(^1\) at Innsbruck there are several German armours of this date, but not one of them is fluted.

Throughout the twenty or thirty years during which the Maximilian style flourished in Germany we find certain alternative forms, which do not seem to have been a matter of date so much as a matter of personal preference. For instance, the large pauldrons overlapping the armpits, back and front (pl. LXXVIII, fig. 1), were employed at the same time as the smaller laminated defences of the shoulder (pls. LXXXVIII, fig. 3, and LXXX, fig. 1) worn with a pair of besagues. The large enveloping elbow-cop (pl. LXXVIII, fig. 1) along with the smaller kind consisting of a cop with side-wing (pl. LXXVIII, fig. 3). The favourite form of close-helmet throughout the period was that with ‘bellows’ visor. It is this type which Maximilian is shown wearing on the Burgkmair woodcut of 1508 and it lasted down to the ‘thirties. The earlier close-helmets are those with two cheek-plates hinged at the sides and meeting at the chin, in the same way as the Italian armet à rondelle.\(^2\) These often have a circular flange at the bottom which revolves on the upper rim of the gorget. Later on it was found more practical to model the bevor in one piece and pivot it on the same points as the visor, although many first-class armourers preferred to continue in the older fashion, and several of the earlier Greenwich helmets are still made to open down the chin. The later helmets usually have a number of articulated plates at the back of the neck, and the weight of the helmet was borne by the head. Though oppressive this was probably more comfortable than being imprisoned in a helmet which was locked to the gorget, and which would become immovable if the flange was bent by a violent blow.

Other forms of Maximilian visor are the so-called ‘monkey-face’ or boxed type (pl. LXXX, fig. 1),\(^3\) and the ‘sparrow-beak’ or pointed form (pl. LXXVIII, fig. 2). In nearly all Maximilian helmets the visor is in one piece, whether bellows, monkey-faced, or pointed, with the sight provided by a pair of horizontal slits in the upper part. Towards the end of the period a visor in two parts was introduced, in which the upper part containing the sight moved independently on the same pivots as the face-guard. This became the usual form of the close-helmet for the rest of the sixteenth century. The Italian armour g. 7

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\(^1\) Not to be confused with the original Ambras collection of the Archduke Ferdinand, which is now at Vienna.

\(^2\) Graf Trapp in his catalogue of the Churburg Armoury under no. 66 describes a remarkable armet of about 1500, probably made at Innsbruck: it retains the pendent labels which are illustrated in Freydal and on the Valenciennes tapestry. It is complete with its wrapper, is of the finest workmanship, and in perfect preservation.

\(^3\) The late Baron de Cosson suggested that the bellows form was a feature of Nürnberg make, and that the ‘monkey-face’ type was favoured by Augsburg, but the monkey-face helmet on Armour ii. 2 in the Tower of London bears the Nürnberg mark.
in the Musée de l’Armée, the fluted and engraved armour dated 1530 in the collection of Prince Odescalchi (Cripps-Day, Armour Sales, fig. 22) and the Rogendorf armour at Vienna already show this innovation. Helmets with grotesque visors imitating a moustachioed human face are not uncommon, and in the large royal armouries such as that at Madrid where the ‘double’ pieces of suits have been preserved, we find different forms of visor which could be fitted to the same helmet as required.

How the sallet gradually gave way to the close-helmet is illustrated on pl. lxxvii, figs. a–g, by a series of German helmets of the early years of the sixteenth century in the Wallace collection and including a helmet at Vienna, which though of sallet form has the beaver pivoted to it at the sides.

The picture of the Virgin and Child with St. Martin and St. Ursus by Holbein at Solothurn (pl. lxxviii, fig. 2), painted by him in the year 1522, shows a fine upstanding armour with high neck-guards on the pauldrons which is typical of this date. The exuberance of the craftsman found expression in the ‘twenties and ‘thirties in building harnesses of great magnificence, the borders roped and double-roped, and the fluting deeply channelled and engraved. The late Mr. S. J. Whawell purchased a very fine example at the sale of the collection of Sir Archibald Lamb¹ in 1922. It is now in the Metropolitan Museum of New York, and instances are to be found in most of the larger continental collections, especially at Vienna and Paris, each of which possesses a numerous series of German armours of the Maximilian fashion.

The tomb of one of the von Handschusheim family, †1519, in the little church of Handschusheim near Heidelberg, shows a particularly faithful representation of a fluted armour of this date. The sculptor has carefully rendered every strap and buckle in the white limestone in which it is carved. I very much regret that I have so far been unable to obtain a photograph of this tomb, and so reproduce instead (pl. lxxv, fig. 2) a photograph of the tomb of Conrad von Grumbach, †1526, in the church at Rimpar.

The flourishing state of the art of engraving in wood and on copper which marked this epoch in South Germany is reflected in the armour of the time. It soon developed a style quite distinct from the Italian. It is deeper and bolder, and the patterns are carried out with greater precision and without the lighter and sketchier touch of the early Italian engravers. The Germans seldom used a background of close-set, diagonal lines, but preferred one of raised dots, which later became universal. The socket of no. c. 356 in the Musée de l’Armée is a good example of German decoration (see also pl. lxix, f). We have already mentioned a smooth globose breast-plate formerly in the Zouche collection (Sale Cat. of 1920, lot 201) engraved with the Virgin and

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Child, St. George and St. Christopher, and some of the fluted armours are beautifully adorned in this way. The half-armour no. 239–40 in the Wallace collection is richly etched with bands of ornament containing classical deities, flowers, trophies, and masks (pl. lxix, 1), and the breast-plate in the Burges bequest at the British Museum (pl. lxxxvi, fig. 4) shows how very effective this form of decoration could be. We can place beside it a portrait of a warrior by the Master L. S. in the Kaiser Friedrich Museum. The date 1527 is inscribed on the gorget, and the artist has spared no pains to make his picture as much a portrait of the armour as of the wearer (pl. lxxix, fig. 2).

There is a richly fluted, engraved, and roped armour in the collection of Prince Odescalchi, and formerly in that of Edwin Brett (Cripps-Day, Armour Sales, fig. 22), which bears the date 1530 and the initials ‘G. T.’, but whether these are the owner’s or the engraver’s we cannot say. It is unfortunate that the engravers of armour at this date so rarely signed their work, as many of the existing specimens must come from the hand of artists such as Aldegrever, Burgkmair, Cranach, Glockentorn, Solis, and Flötner, who are well known to us by their prints. The etching on the armour of Conrad von Bemelberg at Vienna is signed by Abraham Glockentorn. The armour of Johann Friedrich, duke of Saxony (no. 196), bears initials attributed to Matthias Gerung, and an etched manteau d’armes on one of the armours of Charles V at Madrid bears the signature of the artist Daniel Hopfer of Augsburg and the date 1536, which show that armurers did not hesitate to ‘put out’ their work to be etched by the best practitioners of the art, and that it was not always etched in the shop, as many writers have assumed.

Another good portrait of an armour of this time, and a particularly florid example, is one painted in 1520, of Joachim, Margrave of Brandenburg, in the Castle at Dessau (pl. lxxxix, fig. 1). The young prince is shown at the age of sixteen wearing a fluted armour with high neck-guards, the borders boldly roped, and the arms further embellished by puffed rings. It is of the school of Lucas Cranach, who is known to have lived at one time in the house of the Colman family of armurers at Augsburg. His prints of the Tournament (Bartsch

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1 The practice of engraving the date on an armour was introduced in our period, and is most useful when it occurs. Besides the Genouillac and other armours mentioned in our text, the following are also dated: Vienna no. 141 Otto Heinrich von der Pfalz 1523, no. 200 Fr. Graf von Fürstenberg 1531, no. 330 Fr. Maria della Rovere 1532 (by Negroni), no. 197 Ph. Landgraf v. Hesse 1534; Madrid no. A 108, 1531; Nürnberg, plain half-armour with arms of Stein au 1522; Musée de l’Armée no. 179. I. dei Medici 1515; no. 60 Bavarian armour 1533; Wallace collection, no. 851 Bavarian armour 1532.

2 Other armours at Vienna which are signed, but by engravers at present unidentified are: no. 69 Louis of Hungary, signed ‘E. S.’, no. 141 Otto Heinrich von der Pfalz ‘H’ on one pauldron and ‘M’ on the cuiré, no. 64 Georg von Püchheim ‘I. A’; no. 68 Federico Gonzaga ‘A. T.’ and ‘M’.
Fig. 1. Portrait of Joachim, Margrave of Brandenburg, 1520, at the age of 20 years.
Published by the Society of Antiquaries of London, 1899.

Fig. 2. Portrait of a warrior by the Master L.S., 1557.
Fig. 1. Fluted armour, c. 1515, with 'monkey-faced' helmet. Kunsthistorisches Museum, Vienna (no. 139).

Fig. 2. Late fluted armour, c. 1560. Kunsthistorisches Museum, Vienna (no. 209).

Fig. 3. Detail of the Judgement of Paris, by Lucas Cranach. Karlsruhe.

Fig. 4. Fluted and embossed armour, c. 1535. Historical Museum, Dresden.

Published by the Society of Antiquaries of London, 1929.
126 and 127) and St George (b. 64) are well known to all armour students. Another picture of his school is illustrated on pl. lxxx, fig. 3, and represents the Judgement of Paris. Our plate is reproduced from the picture at Carlsruhe, but the subject seems to have been a favourite one with the artist's patrons, as there are versions at Copenhagen, Darmstadt, and Gotha, and another was recently bought in Holland for the Metropolitan Museum. The composition was first used by the elder Cranach in his woodcut of 1508 (Bartsch 114), but we imagine that the picture dates from the early thirties. In the woodcut Paris wears unfluted armour of the same kind as Cranach's print of St. George of 1509, and the elaborately fluted and roped armour of the picture is clearly much later.

In later Maximilian armours we sometimes find the bands of flutes separated by rows of embossed scales. On pl. lxxx, fig. 4, we illustrate an example in the Historical Museum at Dresden, and there was a three-quarter harness with this kind of decoration in the collection of the Marquis of Breadalbane and now in that of Mr. R. L. Scott. The last and final form of fluting is exemplified on an armour of about 1560 at Vienna (pl. lxxx, fig. 2) in which the flutes are so narrow and so closely set that they are hardly visible in the photograph. It is here a mere mechanical reminiscence of its prototype.

German tombs continue to show fluted armour until after the middle of the century. The tomb of Götz von Berschlingen, †1562, in the church of Schöntal, shows him kneeling in a fluted harness of late fashion, but we believe that very few existing fluted armours were made after 1540. For some time the Maximilian fashion had had to compete with the increasing popularity of the 'Spanish'¹ and 'landsknecht' styles, to give them the names under which Laking has classified them. The 'Saxon' or Brunswick type had also appeared by 1540. There is a group of fluted armours, which from the presence of placates or divided breast-plates might be thought to be of early date, but they betray the end of the Maximilian style in several particulars. Their placates are pierced at the top with the double eagle, the fluting is close set and evenly distributed over the whole surface, and the breast-plates are no longer globose but have a pointed ridge down the middle like the Saxon armours. Two are in the Wallace collection (nos. 353 and 779), and there are others in the Landesmuseum at Zurich and at Copenhagen. The two examples in the Wallace collection have Nürnberg marks.

Contemporary with the heavier armours, which we have been describing, were the light landsknecht armours or 'Almayne rivets' which were worn by the infantry and light cavalry, and which the leaders did not disdain to use. The armour of that redoubtable leader of landsknechts, Georg von

¹ Such as the Churburg armour no. 97, which from internal evidence was probably built shortly after 1529.
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Freundsberg, †1527, preserved at Vienna, shows a plain half-armour of this type. Heinrich der Fromme, Duke of Saxony, is shown even more lightly armed in a portrait by Lucas Cranach at Dresden, which shows him standing in a large mail 'bishop's mantle' grasping a two-handed sword.

The output of the German centres of the craft must have been enormous during our period. Not only had they to supply their own armies fighting in Germany, the Low Countries, and Italy, but they exported armour in large quantities to foreign buyers, and Henry VIII brought over German craftsmen in 1511 to found his workshop at Greenwich. Hitherto the English taste had inclined towards the Milanese style, but in the first part of the sixteenth century we have records of Henry VIII and Cardinal Wolsey continually purchasing large quantities of 'Almayne rivets'. The number of harnesses of this date which bear the Nurnberg mark far outnumber the productions of any other workshop in museums to-day.

If we look round the countries outside Germany and Italy we find that the taste for fluted armour was by no means universal. The armours which Charles V ordered from his German and Italian armourers and which are now preserved in the Real Armeria at Madrid show very little fluting. Some of them have vertical bands or ribs which give a suggestion of fluting (nos. A. 49, 93, 129, and 116), but of actual embossed fluting in the German manner there is none. The armour of Emmanuel of Portugal, which we have already described among the early etched Italian armours, is the only armour that we know of connected with the Peninsula which is definitely fluted.

It is more difficult to speak of French taste in this matter. We have very little knowledge of French native-made armour, and one presumes that, as for part of this period the French were in occupation of Milan, those who were on the spot, or those at home who could afford it, made full use of the skill of the Milanese master-craftsmen. We have already described a series of armours in the Musée de l'Armée of Italian make, including that of Galliot de Genouillac, which we believe were intended for French patrons. If we examine the tombs, paintings, and tapestries in France we find little evidence of the fluted fashion. Contemporary monuments such as the tomb of Imbert de Bastarnay and his son at Montréal (with a superb rondel armet), attributed to Jean Goujon, show plain armour worn with heraldic tabards. The tapestries in the Musée Cluny of the time of Louis XII representing the History of David and Bathsheba, and that at Padua (pl. l.xxxi) of Flemish manufacture, show armour in great detail, but the surfaces are smooth and unfluted. The breast-plates are high in the neck with central ridges like the Franco-Italian group of armours described on p. 229. That the weavers could render fluting with great effect when they wished is exemplified by a tapestry in the National Museum at Copenhagen which
Fig. 1. St. George and the Dragon, by Leonhard Beck. Kunsthistorisches Museum, Vienna

Fig. 2. Tomb of Antoine de Lallaing and his wife. Hoogstraten

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shows Christian III in a fluted German harness in great detail. A second
and very complete armour ascribed to de Genouillac, formerly in the pos-
session of the Duchesse d'Uzès and now in the Metropolitan Museum, New
York, may be of French workmanship, if it is not Italian (Laking, vol. iii,
fig. 1021, but date wrongly given). It is dated 1527 and completely
covered with etched and gilt ornament, but is devoid of fluting. We have already
mentioned the so-called Bayard armour among the Italian school. Its appear-
ance is rather impaired by its breast-plate, which almost certainly does not
belong to it. Certain details of its build invite comparison with armours g. 11
and g. 12 in the Musée de l’Armée, and similar narrow bands of shallow roping
or piping are found on g. 131.

The tomb of Anthoine de Lallaing at Hoogstratten in Belgium (pl. lxxii,
fig. 2) shows that German influence had penetrated as far as the Low Countries,
as his cuisses are fluted in the true Maximilian style.

In England we find the same reluctance to adopt a fashion which was
paramount in Germany and not uncommon in Italy. English effigies and
brasses of the time show very little of it, and the armours of Henry VIII in the
Tower of London are quite unfluted except no. ii. 7, which is probably Milanese
like its helmet.

Up to this time the rich series of English brasses and monuments supply
a most valuable history of defensive armour, but in the sixteenth century a
serious falling off in artistic quality sets in and with it we lose a certain
amount of confidence in the accuracy of the artist’s representation of military
equipment. The brasses from about 1490 to 1550 show an almost mechanical
repetition of armours of a debased Gothic form. Placates and pointed tassets
of a single plate (‘tuiles’) continue, and upstanding neck-guards and broad
round-toed sabatons are almost the only concessions to contemporary fashion.
We give an example that of Sir Thomas Brooke, Lord Cobham, †1529
(pl. lxxxiii, fig. 3), one from many of this type. Fluting only appears occasion-
ally in the form of a spray on the placate. The effigies in stone similarly show
late Gothic forms continuing far into the century.\(^1\) Whether this conservatism
is due to the sculptors, or to the faithfulness of the English squires to local
fashions, we cannot say. But Henry himself saw to it that his armour came
from the finest foreign workshops. His suit with steel bases by Conrad Seusen-
ofer (ii. 5) was a present from the Emperor Maximilian, his armour for the

\(^1\) Among others one might mention the effigies of Sir John Spencer, †1522, at Great Brington
(Crossley, English Church Monuments, p. 221), Sir W. Smythe, †1525, at Elford (ibid., p. 223), and
compare also pls. xlvii-lxxxiii in Mr. Gardner’s article on ‘English Alabaster Tombs’ in Arch. Journal,
vol. lxxx. The effigy of Sir John Peche, †1522 (Stothard, pl. 142), is an exception in that it shows
fluted and laminated tassets.
champ clos (ii. 6) is probably of Milanese make, judging from its close resemblance to Italian armours of the same kind in the Musée de l'Armée g. 178 and 179, and his tonlet suit ii. 7 also. But his two armours made in his later years, one of which is at Windsor and one in the Tower (ii. 9), are probably from his own workshop at Greenwich. Holbein's fine portrait of Sir Nicholas Carew, in the possession of the Duke of Buccleuch, painted between 1526 and 1528,¹ shows an unfluted armour very similar in outline to the two last-mentioned armours of Henry VIII, and like them is probably of Greenwich make.

We have one instance, however, of a fluted armour on an English tomb, and that is the monument to John de Vere, fifteenth Earl of Oxford, †1539, in the church of Castle Hedingham, Essex.² It is sculptured in relief on a slab of grey touch, and is quite unlike any other English monument with which we are acquainted. Even his greaves are fluted, a feature very rare on fluted armours, which almost invariably have the greaves alone left plain.³ The tomb of Lord Williams, †1559, in the centre of the chancel of Thame church, Oxfordshire, shows him in a rich suit with certain details such as the toes of his sabaton and the wings of his elbow-cops decorated with fluting. With the exception of Henry VIII's armours only a few fragments of actual English armour of this date have come down to us. The helm of Sir Giles Capel was not of course intended for the field, and the same applies to the other English helmets of this date which have been preserved in churches. The fine armet which once belonged to Mr. Seymour Lucas and is now in the collection of Sir Edward Barry (Laking, vol. ii, fig. 445 E) has been assumed to be English, and though this is not proved we should like to think so. The town armour in the church at Mendlesham in Suffolk includes a fluted breast-plate, and two breast-plates dug up at Settle in Yorkshire and now in the possession of Mr. Cripps-Day also belong to our period, but they resemble the rougher continental types too closely for us to lay down that they are of English make, and it is more likely that they formed part of the large importations of 'Almayne rivets'.⁴

¹ Paul Ganz, Klassiker der Kunst Series, Holbein, p. 77.
³ Hall's chronicle (1904 edition, vol. i, p. 63) states that Henry VIII when he landed at Calais in 1513 'was apparellled in almaine ryvet crested and his vanbrace of the same, and on his hedde a chapeau montabyn with a rich coronal', and ibid., vol. ii, p. 249, 1539, 'the Lord Maier himself was in a fayre Armour, the crests thereof were gilt'.
⁴ Henry VIII was buying armour in Italy in 1516 (Cal. of State Papers, no. 434) and in Flanders in December of the same year (ibid., no. 635). In 1512 Wolsey and John Daunce made an agreement with Guido Portynari, merchant of Florence, for the delivery of 2,000 complete harness called Almayne rivets according to a pattern in the hands of John Dauncy, accounting always a salet, a gorjet, a breastplate, a backplate and a pair of splints at sixteen shillings the set (ibid., no. 1382).
PERIOD AND THE ITALIAN WARS

In our rapid survey of Maximilian armour we have deliberately omitted the fantastic puffed and slashed parade-armours imitating the civilian fashion of the day which had a short vogue in court circles between about 1510 and 1522. Examples are to be seen at Vienna, Paris, Berlin, Berne, Stockholm, the Wallace collection, and the Metropolitan Museum, New York. That the armour was never intended for any serious purpose is shown by the fact that sometimes it is pierced with round holes between the puffs to lighten it. Arms puffed and pierced in this way are in the Instituto del Conde Valencia at Madrid, and in the collections of the duke of Infantado, the duke of Alva, and M. Paulhac. In Spain this type of 'masking' armour was called armadura triumfale.

It remains to say a word about horse-armour. Gothic horse-armours are of extreme rarity. Apart from chanfrons and detached pieces, we only know of three, those at Paris, in the Wallace collection, and in the Museo Stibbert (this last is composite and much of it may be of later date and might almost be included in our period). But when we come to Maximilian bards we have numerous examples for study. The temptation to sacrifice mobility to variety, which was so marked a feature of the middle ages, does not seem to have been affected by the grimly serious spirit in which the Italian wars were conducted, for the caparisoning of the horse at this date was of great richness. Its crest was plumèd, and the bards covered with textiles, and if of leather or parchment gaily painted. These light, painted bards must have been very numerous in their day. In the Historie du Chevalier Bayard, Chapter L, we read that 'Raymon de Cardonne, Visroy de Naples ... avoit en sa compagnie douze ou quatorze cent hommes d'armes, dont les huit cent estoient barded'. Hall constantly delights in describing magnificent bards in his picturesque chronicle. He also relates how at the Battle of the Spurs the French men-at-arms 'fled and threw away their spers, sweders and mases and cut of the bards of their horses to run lighter'.

Under the same year Sanuto records a purchase by Henry of 12,000 suits of armour from 'certain staplers' (ibid., no. 1385), and Wolsey and John Dauce purchased through Robert Bolte of London, mercer, 3,000 harnesses at sixteen shillings (ibid., no. 1385). In 1513 there is recorded an indenture with John Cavalcanti, 'merchant stranger' for 1,700 'complete armours for footmen' (ibid., no. 1920), and in 1514 we find Edward Gylleford, master of the armours, purchasing 100 Milan harnesses from Guido Portinari (ibid., no. 2843). There are further entries too numerous to mention.

1 Gay in his Glossaire Archéologique quotes a very full description of the painting of a bard taken from an inventory of 1488. Gille described an actual specimen ornamented with gilt stars and roses and coats of arms which was to be seen in his day at Naples. As is to be expected, very few leather harnesses have survived the course of centuries. At the Tower of London one leather crupper remains of the sixty-six leather harnesses mentioned in the inventory of 1561 (foulkes, vi, 87). There are the interesting leather horse-armour of Matthias Stöckl at Salzburg, Z.H.W.K., ix, p. 224, and instances at Turin (n. 2 and p. 69). M. Paulhac possesses a crupper and two flanking pieces of cuirbouilli, one of two sets, of which the other is now in America.
NOTES ON THE ARMOUR OF THE MAXIMILIAN

Pl. LXXXII., fig. 1, shows a representation of St. George by Leonhard Beck in the K. H. Museum at Vienna wearing typical cloth bases over his tassets and mounted on a horse whose bards are covered with rich textile. We have already passed in review the fluted horse-armour in Burgkmair's woodcut of Maximilian of 1508, fig. 26 (p. 26 supra). The two sales of the armoury of Prince Radziwill from the family castle of Nieszowiec which took place at Christie's in 1926 and 1927 included no less than 22 chanfrons and 15 peytrals of Maximilian date, many of the latter bearing the Nürnberg mark. The 'Burgundian' bard in the Tower of London (VI. 6-12), believed to have been a present from Maximilian to Henry VIII, is a superb example of early repoussé decoration, his engraved bard VI. 1-5, also in the Tower, and Maximilian's own bard at Vienna (no. 52) with the double-headed eagle, beautifully embossed, etched, blued and gild, are examples of Maximilian horse-armour which will readily occur to all. Sir Guy Laking has already dealt fully with the question of horse-armour in his twenty-second chapter, so that we need only add a few remarks.

In the armoury of Graf Erbach-Erbach there is a very fine Maximilian armour for horse and man, blued and engraved, of which the chanfron, crinet, peytral, and crupper are composed of leather with steel frames. The equestrian armour at Turin (n. 1) with the Sforza badge and ascribed to Cardinal Ascanio Sforza, but more likely that of Francesco Maria Sforza, with whom it better agrees in point of date, presents a curious feature which does not appear to have been hitherto remarked. The near side of the horse-armour is ornamented with the badge of the sunburst on a black ground introduced between groups of flutes. But on the off-side the armour of the horse is quite plain and the fluting is differently arranged, consisting of ribs at regular intervals, and not in pairs with a space between, as on the near side. The division takes place down the middle of chanfron and peytral, and it is similarly diminished on the crupper behind.

Attention has been drawn by many writers to the painting on canvas at Vienna of Harnischmeister Albrecht riding a horse clad in steel down to the hoofs, and Sir Guy Laking stated in his Record, vol. iii., p. 196, that he doubted if such armour for the horse ever really existed, at the same time saying that he 'believed this to be the sole pictorial evidence of complete armour for the horse's legs'. There is a drawing, however, in a book in the library of Graf Thun at Tetschen showing Maximilian, when archduke, in a suit of Gothic armour riding a horse similarly encased (reproduced V. Jahr., vii., 1888), and Maximilian's treble thaler of 1509, which we have had occasion to mention above in another connexion (pl. LXXXII., fig. 1), shows his horse's legs protected by articulated plates as far as the fetlocks on both fore and hind legs, and so does the thaler of the archduke Ferdinand of Austria of 1522 (pl. LXXXIII., fig. 2).
Fig. 1. Treble thaler of Maximilian I, 1509, the horse with armoured legs

Fig. 2. Treble thaler of Ferdinand, 1522, the horse with armoured legs

Fig. 3. Brass of Sir Thomas Brooke, d. 1529. Cobham, Kent

Fig. 4. Breast-plate attributed to the condottiere Bartolommeo Colloni, showing etched decoration in the Italian style. Kunsthistorisches Museum, Vienna (no. 129)

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PERIOD AND THE ITALIAN WARS

In the correspondence of the Gonzagas, published by Bertolotti in his *Arti minori alla corte di Mantova*, p. 130, we find the armourer Lorenz Colman of Augsburg writing to the marquis in 1512 about ‘una bella barda da asalo tutta serrada de la testa fina alle ungic del cavallo qual se potra manegiar senza fatica alcuna (sic!) come mi ho visto vostri belli cavalli mi penso mi in la fantasia fare una si bella barda…’ Mr. Cripps-Day has drawn my attention to yet another reference to horse-armours of this nature mentioned in a letter from Sir Robert Wingfield to Henry VIII dated 24th July 1515, where he states that the Emperor had recently presented the young king of Poland with ‘two courcers all covered with steel to the fetlocks and [round] the belly, save in the spurring place’ (C. S. P., no. 746).

The Musée de la Porte de Hal possesses what is described as a cuisse for the off hind leg of a horse (Cat. of 1902, series iv. 9, and illustrated in floulkes, The Armourer and his Craft, fig. 7) fluted in the Maximilian manner with articulated plates on the inner side. Two other pieces, possibly for the upper part of the fore-legs of a horse, appeared in the first Radziwill sale at Christie’s (29th June 1926), lots 115 and 119, where they were each catalogued as ‘the rere-plate of a lance’. One is now in the collection of Mr. Cripps-Day and the other is in the Metropolitan Museum, New York (fig. 2). There is some danger of confusing pieces such as these with articulated pauldrons of the type worn on the tonlet armour, no. 61 at Vienna (described by Schrenck as that of Albert Achilles, Margrave of Brandenburg, but considerably later than his date). As we have not ourselves had the advantage of examining the Porte de Hal piece we mention it in this connexion with some diffidence, but the two Radziwill pieces are so constructed as to be unwearable as pauldrons. Laking drew attention to the short cuisses on the fore-legs of some of the barded horses in the ‘Triumph of Maximilian’ (vol. iii, fig. 1005), and it is worth noting that these appear also in the remarkable battle-picture by Altdorfer in the Alte Pinacothek at Munich known as the *Alexanderschlacht*. One imagines, however, that armour of this kind was only produced in a spirit of bravado.¹

In this Maximilian armour provides us with another instance of a not uncommon phenomenon, that a subject only attains to its fullest development after the need for it has passed. The stage-coach reached its maximum efficiency on the new Bath Road some years after the steam locomotive had made its

¹ Since writing the above, I understand that M. Buttin is engaged upon a monograph on this subject, which all students will await with great interest.
appearance, and judging from pictorial representations, horse- armour was not so common in the fourteenth and fifteenth centuries as during the Maximilian period, when the forces which were to displace armour had already come into play.

Acknowledgements are due to the Somerset Archaeological Society for pl. lxxxiii, fig. 3, and to Messrs. Alinari, Florence, for pls. lxxiii, fig. 2 and lxxxii; Anderson, Rome, for pl. lxxii, fig. 1; Christof Müller, Nürnberg, for pl. lxvii, fig. 2; Fot. dell' Emilia, Bologna, for pls. lxx, fig. 2 and lxxv, fig. 3; Giraudon, Paris, for pl. lxxxii, fig. 2; Gundermann, Würzburg, for pls. lxvii, figs. 1, 3 and lxxv, fig. 2; Hanfstaengl, Munich, for pl. lxxxii, fig. 1.

I have to thank Mr. A. E. Popham for drawing my attention to recent literature on the Albertina drawing mentioned on p. 221.
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