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THE JOURNAL OF THE ARCHAEOLOGICAL  
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Archaeological Institute of America

AMERICAN  
JOURNAL OF ARCHAEOLOGY

Second Series

THE JOURNAL OF THE ARCHAEOLOGICAL  
INSTITUTE OF AMERICA

VOLUME XXVI

1922

*T.P.D. I - XI  
pp. 1 - 578 (72. mm) pages  
100, 278a-d, 388a,  
400, 480a-b.*



*184373  
1.10.23*

CONCORD, N. H.

PUBLISHED FOR THE INSTITUTE BY

The Rumford Press

# American Journal of Archaeology

SECOND SERIES

THE JOURNAL OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

Vol. XXVI, 1922

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PILGRIMAGE SCULPTURE<sup>1</sup>

MODERN art may be considered to have begun with the Byzantine renaissance of the tenth century. This outburst of artistic activity seems to have spread from the East over Europe. Before the year 1000 renewed artistic activity appears sporadically in several widely separated regions of the West. In Spain architecture rose during the tenth century to extraordinary heights; capitals were carved with surprising skill in the Rhone valley, as in the crypt of Cruas or the baptistry of Venasque; while in Germany the Ottonian miniatures and ivories developed types of such beauty, that they impressed indelibly the memory of the twelfth century sculptors of France, and still serve as models to artists of today. By the eleventh century, the renaissance had enflamed the entire continent of Europe.

In the East, figure sculpture was applied to the exterior of churches apparently as early as the seventh century, certainly from the time of the tenth century renaissance. The church of Achthamar in Armenia, a dated monument of 915-921 is adorned with sculptures which seem to indicate an Eastern derivation for many of the later developments in the West.<sup>2</sup> Not only is the fact of monumental sculpture in stone here foreshadowed, but here are found numerous details which have become characteristic of occidental sculpture of the twelfth century. The draperies of

<sup>1</sup> The question of illustrations, always embarrassing, has become in this paper insolvable. The truth is that sculpture can be studied intelligently only by the aid of more photographs and better photographs than are anywhere at the disposal of the public. While awaiting the millennium when really adequate collections of photographs will have been acquired by our museums and libraries, my only way has been to choose for reproductions such sculptures or details as the reader might not be able readily to find in other publications. For well-known works I have tried to indicate books in which they have already been illustrated. But reproductions of the quality of those in M. Vitry's *Reims* or M. Houvet's *Chartres* are exceedingly rare. In the average half-tone—and I am well aware that my own are no exception—precisely those details essential for accurate study are lost.

<sup>2</sup> The church at Achthamar has been published by Strzygowski, *Die Baukunst der Armenier und Europa*, Wien, Scroll, 1918. 2 vols., 4to, pp. 289 f.

Guglielmo and Santiago, the medallions of Angoulême, the ad-dossed statues of Loches and Estella, the gestures of Chartres and Arles, and a myriad of other features of western sculpture are anticipated.

One of the oldest extant monuments of western sculpture is preserved in a remote village of the eastern Pyrenees. It is precisely in such regions that archaeology has taught us to look for *retardataire* art; and, indeed, no one who had an archaeological reputation to lose, or still less to win, would ever have dared assign the lintel of St.-Genis-des-Fontaines to an earlier period than the latter part of the eleventh century, were it not for a unique chance. The lintel is dated between 1021 and 1024 by an inscription of unquestionable authenticity.<sup>1</sup> This rare good fortune furnishes us with a conspicuous landmark to guide our course over the uncharted waters of the early eleventh century.



FIGURE 1.—CHRIST AND EVANGELISTS:  
ARLES-SUR-TECH (PYRÉNÉES-  
ORIENTALES).

St.-Genis-des-Fontaines does not stand alone. In the tympanum of the not very distant church of Arles-sur-Tech is incorporated a relief (Fig. 1) obviously of the same school, but of finer and more advanced execution. This relief also happens to be dated; the church was consecrated in 1046. We can, therefore, see the progress that has been scored in twenty years. The same rate of development, if maintained, might easily arrive in another half century at the perfection of the capitals of Cluny. The sculptor of Arles-sur-Tech doubtless knew the earlier work at St.-Genis-des-Fontaines; but that was not the only source of his inspiration. If we compare his facial types, the folds and borders of his draperies with the Bible of Rosas<sup>2</sup> we shall be convinced that he also studied miniatures.

<sup>1</sup> The relief of St.-Genis-des-Fontaines has been illustrated by André Michel, *Histoire de l'Art*, Paris, Colin, 1905-1912. 9 vols., 8vo, I, 2, p. 597.

<sup>2</sup> Paris, Bibl. Nat., Cod. lat. 6; illustrated by Clemen, *Die romanische Monumentalmalerei in den Rheinlanden*, Duesseldorf, Schwann, 1916. 4to, pp. 335-336.



Another monument belongs to the same group. In the lintel of St.-André (Fig. 2) which is the next village to St.-Genis-des-Fontaines are sculptures so similar that one is almost tempted to call them the work of the same hand. St.-André is, however, evidently slightly later than St.-Genis; if we compare the heads of the three Christs we shall perceive without difficulty that they fall in the order St.-Genis, St.-André, Arles-sur-Tech. The relief of St.-André may be assigned to *ca.* 1030 without fear of serious error.

In the interior of the church at St.-André has been preserved a fragment of relief (Fig. 3), mutilated almost beyond recognition.

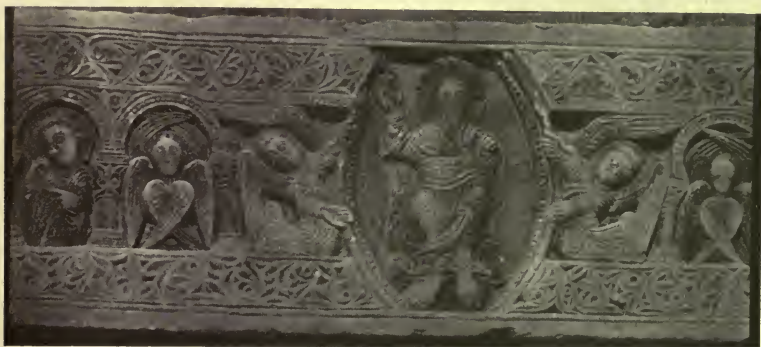


FIGURE 2.—LINTEL: ST.-ANDRÉ-DE-SORRÈDE (PYRÉNÉES-ORIENTALES).

It represents a haloed figure, possibly an apostle, holding an object broken away, perhaps a book. The interest of this figure for our study lies in the circumstance that the legs are crossed.

This mannerism, which became a characteristic motive of the Spanish and Aquitanian schools of the twelfth century, is of very ancient origin. It is found for example in stone sculpture, in a Roman relief of the museum of Arles, and in the spandrel figures of Zwartnotz in Armenia,<sup>1</sup> a monument which dates from 641-661. The latter instance is of especial interest, because the legs are placed in precisely the "x" position generally associated with the twelfth century work of Toulouse. The motive of crossed legs was also widely diffused among ivories and miniatures in the East and West. It is impossible to determine from which among the many possible sources our sculptor borrowed the motive.<sup>2</sup>

<sup>1</sup> Published by Strzygowski, *op. cit.* p. 427.

<sup>2</sup> It may not be without interest to quote a few specific instances to show how common this motive was in the art of the first ten centuries. It is found

Several facts of importance may be deduced from the study of this group of sculptures of the first half of the eleventh century in the eastern Pyrenees. First is the indication that Europe derived its sculptured architecture from the East. In the pointed beard, the top-shaped head, the low and flat relief, the work at St.-Genis recalls Achthamar. The upper wings of the seraphim are crossed in the two sculptures in precisely the same manner. The acanthus leaves of St.-Genis and St.-André are obviously of Byzantine type. One hardly knows whether to ascribe the horseshoe arches to the influence of Armenia or to that of Spain.



FIGURE 3.—HALOED FIGURE INSIDE CHURCH: ST.-ANDRÉ-DE-SORRÈDE (PYRÉNÉES-ORIENTALES).

Nothing would of course be more perilous than to assume that St.-Genis was the first architectural sculpture executed in Europe after the Romans. It is, indeed, nearly certain that there were earlier examples. St.-Genis is merely the earliest extant instance of certain date available for study; but as such is a monument of the greatest significance in enabling us to trace the drift of artistic currents. That the tide was flowing from the orient does not seem open to question.

in an ivory box-cover of the fifth, sixth or seventh century preserved in the archaeological museum of Ravenna and illustrated by Pelka, *Elfenbein*, Berlin, Schmidt, 1920, 12mo, p. 39; in an Irish-manuscript of very early date, Dublin, Kells Gospel, Trinity College, A. I, 6 (58), illustrated by Zimmermann, *Vorkarolingische Miniaturen*, Berlin, Deutsches Verein für Kunstwissenschaft, 1916, 8vo and 4 vols., Folio, p. 169; in a south Anglo-Saxon gospel of the ninth century, Rome, Vat. Barb. Lat. 570, fol. 9b, illustrated by Zimmermann, *op. cit.* p. 314; in a miniature of the Bible of Charles the Bald at the Bibliothèque Nationale, illustrated by Venturi, *Storia dell' Arte Italiana*, Milano, Hoepli, 1901 f., 7 vols., 8vo, II, p. 281; in a psalter of the same library dating from the tenth century, illustrated by Diehl, *Manuel de l'Art Byzantin*, Paris, Picard, 1910, 8vo, p. 569; in a miniature of a Bible of S. Paolo f. l. m. at Rome dating

It would be interesting if we could determine how the sculptor of St.-Genis absorbed these oriental influences. It seems as if either he, or one of his immediate predecessors, must have come in direct contact with the East. But it is certain that he also made use of an ivory carving. M. André Michel has remarked that the draperies and the drawing of certain heads show analogies with the pax of Duca Orso at Cividale.<sup>1</sup> Even closer, perhaps, is the relationship to ivories of the Ada group. The draperies may be compared with a book-cover representing a beardless Christ surrounded by the evangelists in the Fitzwilliam Museum

from the third quarter of the ninth century, illustrated by Boinet, *La Miniature Carolingienne*, Paris, Picard, 1913, Folio, pl. CXXIV; in a St. Gallen manuscript of the last half of the tenth century at the Universitätsbibliothek at Basel, No. B IV. 26, f. 68, illustrated by Escher, *Die Miniaturen in den Basler Bibliotheken, Museen und Archiven*, Basel, Spittlers, 1917, Folio, VIII; in the Bamberg Apocalypse of the tenth century, illustrated by Wölfflin, *Die Bamberger Apokalypse*, München, Königliche Akademie der Wissenschaften, 1918, p. 38; in a tenth century Fulda miniature of the Universitätsbibliothek at Basel, No. A. N. IV. 18, f. 31, ed. Escher, *op. cit.* p. 34; in a manuscript of the eleventh or twelfth century, illustrated by Diehl, *op. cit.* p. 576; in a manuscript of the Winchester school, early eleventh century, British Museum, Stowe 944, illustrated by Herbert, *Illuminated Manuscripts*, London, Methuen, 1911, 8vo, plate XIII; in a psalter of St. Swithun's Priory, school of Winchester twelfth century, British Museum, Cotton MS., Nero, C IV, f. 39; in the miniatures of a *ménologe grec* of the eleventh century; executed at Mount Athos, Moscow, Bibliothèque Synodale, No. 183, illustrated by Tréneff, *Miniatures du ménologe grec du XIe Siècle de la Bibliothèque Synodale à Moscou*, Moscow, 1911, Folio; in the mosaics of the church of the Nativity at Bethlehem, assigned to the twelfth century; in the mosaics of Kief, dating from soon after 1037, illustrated by Diehl, *op. cit.* p. 482, and by Milet in André Michel, *op. cit.* I, 2, p. 192, etc. Crossed legs are also characteristic of the school of miniature painting of Salzburg—see for example the *Perikopenbuch von St.-Erentrud*, München, Kgl. Hof- und Stiftsbibliothek, Clm. 15903, c. p. 52 or the *Gebhardsbibel* in the Stiftsbibliothek of Admont, Cod. 511, illustrated by Swarzenski, *Die Salzburger Malerei*, Leipzig, Hiersemann, 1913, 2 vols., 4to, taf. XXVIII, XXIX, XXX. I strongly suspect, however, that this group of manuscripts was influenced by the sculptures of the Southwest. Thence seem to come the attenuation, the revealing draperies, the heads tipped up, the movement, all characteristic of these miniatures. The armor is of precisely the same type as in the cloister reliefs of Santo Domingo de Silos. There is, indeed, nearly formal proof that the manuscripts were inspired by the sculptures. The initials of the *Perikopenbuch aus Passau*, Munich, Clm. 16002, illustrated by Swarzenski, *op. cit.* p. 300 have addossed figures evidently derived from jamb sculptures.

<sup>1</sup> Illustration in Fogolari, *Cividale del Friuli*, Bergamo, Istituto Italiano d'Arti Grafiche, 1906, 8vo, p. 51.

of Cambridge,<sup>1</sup> the peculiar form of the aureole with the ivory of the same subject in the Kaiser Friedrich Museum.<sup>2</sup>

The three monuments which represent for us the school of the first half of the eleventh century in the eastern Pyrenees are all in the churches of Benedictine abbeys. It was only at a later period that Arlès-sur-Tech, with which St.-André was united, was given to Moissac, and thus became Cluniac. In the first half of the eleventh century all three monasteries were of the pure Benedictine order, and thus in close ecclesiastical relationship, as well as geographical proximity.

Since Cluny was the child of the Benedictine order, it is not surprising to find that important characteristics of Burgundian sculpture are foreshadowed at St.-Genis. The motive of angels holding an aureole with the figure of Christ was assuredly not new in sculpture; it is found for example in the *paliotto* of Pemmore at Cividale.<sup>3</sup> It was, nevertheless, destined to become a favorite theme of the Cluniac school. The violent movement of the angels of St.-Genis foreshadows the superb angels supporting the aureoles of Burgundian tympana like Charlieu. The draperies of St.-Genis in their simple overlapping broad folds, cut like those of Chinese statues of the Tang dynasty, and in their mannered spirals and whirls are strangely like the types of drapery consecrated by the Burgundian style. The motive of a lintel decorated with figures standing under the arches of a blind arcade became characteristically Burgundian. From all this we gather another proof, were any needed, of how closely Cluniac art depends upon Benedictine art.

By far the most significant fact about the eleventh century sculptures of the Eastern Pyrenees is, however, their existence. Was it only in remote mountain valleys that sculpture flourished at this period in Europe?

A little reflection suffices to bring conviction that such was not the case. Wackernagel<sup>4</sup> has brought to light the activities of the

<sup>1</sup> Illustrated by Goldschmidt, *Die Elfenbeinskulpturen aus der Zeit der Karolingischen und Sächsischen Kaiser*, Berlin, Cassirer, 1914, 2 vols., Folio, I, No. 7.

<sup>2</sup> Illustrated *ibid.* I, No. 23.

<sup>3</sup> Illustration in Fogolari, *op. cit.* p. 47.

<sup>4</sup> *Die Plastik des XI. und XII. Jahrhunderts in Apulien*. Leipzig, Hiersemann, 1911. 4to. This study of Wackernagel, and the brief but weighty article by Professor Charles R. Morey, on the 'Sources of Romanesque Sculpture' in the *Art Bulletin*, Vol. II, No. 1, 1919 are fundamental for the intelligent study of mediaeval art.

sculptor *Acceptus* in Apulia. Of the three pulpits by his hand (those of Monte S. Angelo and Canosa are signed), one (Monte S. Angelo) is dated 1041 by an inscription. The activity of the master, therefore, falls in the second quarter of the eleventh century. In his work, especially in the head at Monte S. Angelo, there is none of the crudeness which archaeology has been in the habit of assuming as characteristic of the sculpture of the eleventh century.

The same mastery of form, the same sense of beauty is shown in other stone sculptures of the eleventh century. Weese<sup>1</sup> has published three remarkable statues at St. Emmeran of Regensburg, of which the Christ is dated between 1049 and 1064 by an inscription. Again we find competent technique, a feeling for form and beauty. The Regensburg statues show stylistic affinity with the tomb of St. Ysarn (1048) at Marseille, a highly naturalistic work of a subtlety rarely attained by the twelfth century. When we compare these works in stone with sculptures in metal, such as the doors (1015) or the column (1022) of Hildesheim, or the Arca Santa of Oviedo (1075), we perceive, first, that the plastic art of the eleventh century was different in style from that of the twelfth century, but not necessarily inferior either in conception or in execution; and secondly that the modern archaeological dogma, that the sculpture of the eleventh century was crude and barbarous is a serious and fundamental error.

But it is more than time to turn to the great school of sculpture which flourished in the southwest of France and in Spain.

"*Pour la sculpture romane,*" M. Bertaux has written, "*il n'y a pas de Pyrénées.*" It is a commonplace of history that the existing frontier between France and Spain was first established by St. Louis. Before the thirteenth century the mountains formed no barrier. The same peoples, Basques or Catalans, lived, as they still live, on both slopes.

This fundamental fact has nevertheless been ignored by archaeologists and historians of art. All students of Romanesque sculpture have followed one another in establishing a rigid division following the modern frontier. They have seen in Toulouse one school, in Spain another school. And especially if the author was French, he has found at Toulouse originality, power, inventiveness; in Spain thoughtless copying of French motives. The fact

<sup>1</sup> *Die Bamberger Domskulpturen.* Zweite Auflage. Strassburg, Heitz, 1914. 2 vols., 8vo, p. 103.

that at this period Toulouse was not French had no power to dampen the enthusiasm of patriotism. National vanity appears to have found the liveliest satisfaction in depreciating the monuments on the Spanish side of the frontier, and in praising those on the French side.

Interest in this sport appears to have blinded all eyes to the still surely obvious truth, that the art of the two sides of the frontier



FIGURE 4.—JOURNEY TO EMMAUS:  
CLOISTER: SANTO DOMINGO DE SILOS  
(BURGOS).

is precisely the same. One style stretched from Santiago along the pilgrimage road<sup>1</sup> to Toulouse and Moissac and Conques. This art is neither French nor Spanish. It is the art of the pilgrimage. It is as idle to discuss whether its creative centre was at Toulouse or at Santiago, as it is to discuss whether that of northern French sculpture was at Paris or Amiens. Both Toulouse and Santiago were centres. The same sculptors were active at both. Religiously and consequently financially, Santiago was certainly the more important. The cathedral possessed six sculptured portals against the single one of St.-Sernin. The atelier at Santiago hence naturally employed more artists than that of Toulouse;

among the extant fragments we can trace seven times as many hands at Santiago as at St.-Sernin. The average quality of the work at Toulouse may be slightly above the average at Santiago,

<sup>1</sup> The importance of the road of St. James was brought sharply to the notice of the world of scholarship by the classic work of M. Bédier (*Les légendes épiques*, Paris, Champion, 1913, 4 vols., 8vo). The subject has recently been studied by Miss King (*The Way of St. James*, New York, Hispanic Society, 1921, 3 vols., 12mo) in a work indispensable to the student of northern Spain.

although the best work at Compostela equals if it does not surpass anything at St.-Sernin. Nothing in Spain is more decadent and degraded than the portal at Espallion or some of the work at St.-Bertrand-de-Comminges. Sculptors from Santiago—not from Toulouse—were called to work upon the church of San Isidoro of León and upon Ste.-Foy of Conques.

A peculiarity of the school of the pilgrimages is the creation of oases of art in the midst of deserts. Sculpture flourished, as a



FIGURE 5.—CLOISTER CAPITAL DATED 1073-1076; SANTO DOMINGO DE SILOS (BURGOS).

rule, only in pilgrimage churches throughout the entire southwest. Toulouse and Moissac are as isolated in sterile Languedoc as Santiago in the wilds of Galicia. Exceptionally the art spread from the pilgrimage churches to the abbeys or cathedrals or parish churches not on the road—to Segóvia, Sepúlveda or Soria in Spain, to Albi or St.-Antonin in France. Several of the offshoots north of the Garonne showed great vitality; but in southern Languedoc, as in Spain, they withered and died. It was from the pilgrimages that the art was born; it was by the pilgrimages that it lived; and it was only in the pilgrimage churches that it really flowered.

The study of pilgrimage art must begin with a monument which is neither on the road, nor of the order of Cluny. Santo Domingo de Silos lies to the south of Burgos, and a day's journey from the regular route of the pilgrims. It may be conjectured, however, that not a few would detour in order to visit so holy a monastery; the pilgrim's wallet and cockle-shell of the Christ in the Journey to Emmaus (Fig. 4) argue that pilgrims were often seen in the abbey. This is, I believe, the first time in art that Christ at Emmaus is represented as a pilgrim to St. James.

Santo Domingo died in 1073, and was buried in the cloister, the construction of which he had begun. In 1076 the body was moved, but the epitaph on a capital of the cloister still remained, and still remains (Fig. 5). A cenotaph was subsequently erected to mark the place where the body had first rested.

From this it follows as an inevitable consequence, as M. Bertaux has so brilliantly proved, that the capital with the inscription dates from between 1073 and 1076. Indeed, even graver conclusions follow. The study of the internal evidence of the cloister itself proves, whatever has been said to the contrary, that the north and east galleries and the north bay of the west gallery are all substantially contemporary with each other, with the capital with the inscription; and with the six reliefs of earlier style.<sup>1</sup>

Whoever will compare the ear of the harpy in the dated capital (Fig. 5) with the ear of the Christ in the Deposition, or the hair conventions in the capital with those in the reliefs, will be convinced that the two are not only of the same period, but by the same hand. The lettering of the inscription of 1073-1076 is exactly like that of the reliefs. The sculptured capital of the cloister representing the four and twenty elders (Fig. 6) is obviously by the same hand as the reliefs on one side, and the dated capital on the other. It is incredible that such similar works should be separated by a period of eighty years as asserted by orthodox archaeology.

It may indeed well be that the reliefs are slightly later than 1073-1076. After the cloister had been begun, building activity seems to have been transferred to the church. This was consecrated in 1086. Although an inscription implies that the cloister, too, was dedicated at this period, it is possible, and I think

<sup>1</sup> M. Bertaux has illustrated three capitals and three reliefs in André Michel, *op. cit.* II, 1, pp. 221-226. I reproduce (Figs. 4 and 7), two reliefs not illustrated by M. Bertaux.



probable, that the reliefs were executed after this date. This would bring them into the last fifteen years of the eleventh century. The Doubting Thomas, with its developed canopy, evidently the latest of the series, may have been sculptured as late as 1100. This canopy in fact at first gives the impression of being so advanced in style that one wonders whether it be not of even a later period; but it will be remembered that such canopies were used in ivories and miniatures of the tenth century.<sup>1</sup>

It seems in fact certain that either German ivories, or the Byzantine originals from which these are derived, exercised an overwhelming influence upon early Languedocian and Spanish sculpture. The motive of the raised hand with the palm turned outwards, so characteristic of Toulouse and Santiago, and already present in the relief of the Doubting Thomas at Santo Domingo, is certainly derived from ivories. We find it in the Ada group ivories as early as the eighth century<sup>2</sup> and in the middle of the ninth century in the school of Mainz.<sup>3</sup> There is every reason to suppose that it was taken over from some such work by the sculptor of Silos. He doubtless derived his



FIGURE 6.—CLOISTER CAPITAL: SANTO DOMINGO DE SILOS (BURGOS).

<sup>1</sup> See for example the book-cover of the Kaiser Friedrich Museum in Berlin, illustrated by Goldschmidt, *op. cit.* II, Nos. 52, 53; or the Benedictional of Paris, of the school of Winchester, illustrated by Homburger, *Die Anfänge der Malerschule von Winchester im X. Jahrhundert*, Leipzig, Weicher, 1912, 8vo, pl. IX. The motive probably originated in miniatures, in the ornaments placed either side of arches in Carolingian manuscripts, as in the late ninth century Gospel of Morienvall, preserved at Noyon, and illustrated by Boinet, *op. cit.* pl. LXXXI.

<sup>2</sup> See Goldschmidt, *op. cit.* I, pl. II.

<sup>3</sup> *Ibid.* II, No. 40. The motive also occurs in miniatures, as for example the Besançon Gospels of the school of Winchester, illustrated by Homburger, *op. cit.* pl. XI, and a Byzantine manuscript of ca. 1100 of the Thompson Library, illustrated in the catalogue, pls. III, XXII.

canopies from the same source. There is consequently no reason why the presence of the latter feature in the relief of the cloister should disquiet us in our dating. The scale ornament with which the canopies are decorated is much used in the cloisters of Moissac, which it is known were built in 1100.

When the reliefs of Santo Domingo are compared with the nearly contemporary work at Cluny,<sup>1</sup> it becomes clear that there is a striking resemblance between the two ateliers. The style of both is characterized by the same mastery of line, the same delicacy of technique, the same clinging draperies falling in the same folds over the legs, or hanging down in the same zigzag edges; the faces although very different are alike in being archaic and conventionalized. Santo Domingo and Cluny are indeed sisters, and nearly twin-sisters, born of the same parents—Byzantium and Benedictine art. If Monte Cassino had not been destroyed we should, perhaps, have found there the explanation of both. Santo Domingo himself was, we know, during his entire life in close touch with Monte Cassino; and it is evident that Monte Cassino and Cluny were united by many bonds. The church of San Marcello of Capua, which depended directly upon Monte Cassino, has preserved a portal<sup>2</sup> dating apparently from the early years of the twelfth century, and which has points of contact with both Cluny and Santo Domingo de Silos.

Compared with the sculptures of Arles-sur-Tech, dated 1046, those of Santo Domingo de Silos show no advance beyond what may readily be accounted for by the period of forty years separating the two works. The little capitals of the arcades of the Santo Domingo reliefs are of the same type as the capitals of Santiago (1078–1102). The most significant analogy of all, however, is with the Christ of St. Emmeran of Regensburg,<sup>3</sup> a work proved by an inscription to have been executed between 1049 and 1065. Not only are the clinging draperies with broad flat folds similar, but we find the same convention of indicating the modelling of the draperies by two parallel lines, the hair and beard treated in the same manner.

M. Bertaux seems to have been deterred from assigning the

<sup>1</sup> See Porter, 'La Sculpture Romane en Bourgogne,' *Gaz. B.-A.*, Octobre, 1920.

<sup>2</sup> Photograph by Alinari.

<sup>3</sup> Illustrated by Weese, *Die Bamberger Domskulpturen*, Strassburg, Heitz, 1914, 2 vols., Svo, taf. 20.

sculpture of Santo Domingo de Silos to the eleventh century by the form of the shields, which are pointed, whereas round shields are believed to have been in use until the twelfth century. It is, however, hardly necessary to insist upon the danger of attempting to date works of art by the "history of costume." Since the latter is itself founded upon the dating of works of art, we are manifestly instituting a vicious circle. The mitres of the Arles façade are a classic example of the pitfalls that beset the unwary archaeologist on such paths. In point of fact, pointed shields were known before the twelfth century. They are found upon the vaulting capitals of Airvault; these were executed before 1100, since the church was consecrated in that year. The pointed shield is also found in a manuscript of the eleventh century illustrated by Quicherat.<sup>1</sup>

From the aesthetic point of view, the reliefs of Santo Domingo represent a notable achievement. The formal and archaic composition is founded upon a subtle appreciation of the significance of opposed lines and masses. How satisfactory, for example, is the grouping of the guards about the tomb of Christ; how exquisite the two end figures, lunging strongly outward from the central group, as in a Pontormo drawing. There is the perfection of balance in the Nicodemus and the Joseph of Arimathea bending over the dead Christ; and the diagonal line formed by the lid of the sarcophagus is singularly happy. We shall have to journey far before we encounter again composition as original and as successful. And can even the proudest moment of the Italian Renaissance show a relief to equal the Pentecost (Fig. 7)—apparently the earliest, and certainly the finest of the series—with the twelve apostles, like candle-flames, swirling towards the Day-Spring from on high?

Of Sahagún, the most important Cluniac possession in Spain, and a focal point on the road, there remain only fragments of sculpture. The grand Virgin (Fig. 8) now in the archaeological museum at Madrid, lacks the delicacy of technique characteristic of Santo Domingo, but in compensation possesses something of the aloofness and impassivity of a Tang Buddha, which the sculpture so unexpectedly resembles even in technical detail. The folds of the drapery are doubtless derived from Cluny; something in the shape of the group with two symmetrical and strongly

<sup>1</sup> *Histoire de Costume en France*, Paris, Hachette, 1875, 8vo, p. 135.

empathic curves, reaching their widest point at the hips recalls Charliu,<sup>1</sup> as do also the zigzag drapery edges. But the figure remains essentially Spanish. Evidently it is a product of the last years of the eleventh century; in fact there can be no doubt that it

belonged to the church of Sahagún begun in 1080 and consecrated in 1099.

The school of sculpture, so brilliantly inaugurated at Santo Domingo de Silos, did not remain without descendants. At Souillac, in the valley of the Dordogne, are incorporated in the west wall of the church fragments of an ancient portal.<sup>2</sup> These sculptures, it is evident enough, are closely related to those of Santo Domingo, but one feels, especially in certain of the faces, the freshness of the fountain-head of Cluny. The aesthetic value of the work is uneven. Something of the sense



FIGURE 7.—PENTECOST: CLOISTER: SANTO DOMINGO DE SILOS (BURGOS).

for composition of the Santo Domingo sculptor is carried over into the relief with the story of Theophilus. The two seated saints flank the central group, as Memmi's Santa Giulitta and Sant'Ansano flank Simone's Annunciation. The figure of the prostrate Theophilus, to whom the Virgin returns his bond, com-

<sup>1</sup> I illustrated this tympanum in the *Gaz. B.-A.*, Octobre, 1920.

<sup>2</sup> The sculptures of Souillac have been illustrated by Vitry et Brière, *Documents de Sculpture française du Moyen Age*, Paris, Longuet, 1904, Folio, pl. 8, and by André Michel, *op. cit.* I, 2, p. 621.

bines with the shrine to form a sort of arch over the four figures enacting the central portion of the drama. The same sense of composition presides in the altogether remarkable trumeau. Here in the midst of apparent confusion all is order. The thrice repeated figure of a bird-headed monster divides the front face into carefully balanced and rhythmic patterns. The wrestlers of the farther side are among the inspired creations of mediaeval art. Satisfying, too, even in ruin, is the Joseph that once doubtless flanked the portal; while the opposite Isaiah haunts every memory. There is, it is true, in this figure a certain something which leads one to understand why solemn archaeologists, notwithstanding his clearly engraved name and ample beard, have set him down as a "foolish virgin"; but the movement of the figure is so stimulating, the swirl of the draperies so intoxicating, the lines of the scroll so decorative, that the severest critic must capitulate.

The Musée Massénat at Brive possesses fragments of a Christ in Limbo which are by the same hand as the sculptures of Souillac. The suspicion arises that they may be another fragment of the portal.

The latest work upon the Moissac porch is inspired by Souillac. The tympanum seems to have been placed originally over the west portal; it was subsequently transferred to its present position, and at this time were executed the trumeau and the reliefs of the porch. Since the abbot Roger, who died in 1131, is represented in the adjustment work as a saint, the transfer of the tympanum took place and the later sculptures were executed, after this date.

The sculptor of the later work at Moissac<sup>1</sup> was an inferior artist who imitated alternately the earlier tympanum and Souillac. His trumeau is inspired by Souillac; but the admirably subordinated detail of the original has been suppressed, and the crisscrossed monsters are copied from the earlier capitals of the



FIGURE 8.—VIRGIN FROM SAHAGÚN: MUSEO ARQUEOLOGICO NACIONAL: MADRID.

<sup>1</sup> The Moissac porch has been illustrated by Vitry et Brière, *op. cit.* pls. V and VI.

Moissac porch. The trumeau has gained a certain brutal power, but has lost the finer and more imaginative qualities of the Souillac original. The prophet in relief on the east side of the trumeau is obviously imitated from the Souillac Isaiah; but the life, the movement and the vigor of the original figure are lacking. Santo Domingo draperies have been supplanted by the Cluniac draperies of the tympanum; the figure, notwithstanding its mannerisms, is dull. Even more commonplace is the prophet of the west jamb, and how inferior to the Joseph of Souillac! But it is in the Peter and the Isaiah flanking the doorway that the inferiority of the Moissac artist is most apparent. The Peter is an unhappy adaptation of the angel to the left in the tympanum; the Isaiah repeats the outlines of the Souillac Joseph. The reliefs with scenes from the story of Lazarus, like those opposite dealing with the early life of Christ, are plodding imitations of the manner of the tympanum. In the representation of the vice of Luxury, however, the sculptor shows quite unexpectedly wealth of imagination and tragic power. This is a great grotesque. Opposite, the Visitation also rises to extraordinary heights. I should hardly know where to find more sensitive line, more expressive drawing, more delicate finish. One is tempted to conjecture that these masterpieces are by another and much finer hand.

The influence of Santo Domingo de Silos continued to be exerted until a late period of the twelfth century. The series of reliefs, part of which is preserved at St.-Guilhem-le-Désert and part at the University of Montpellier, is derived from this original. The Romanesque cloisters of southern France and Italy seem nearly all to have been influenced directly or indirectly by the same prototype. That at Arles is a particularly faithful imitation.

The cloister of Moissac was, as an inscription proves, in construction in the year 1100, and the pier sculptures<sup>1</sup> appear to have been executed in this year. Moissac was a Cluniac abbey on the road; but inspiration was sought not in Burgundy, but in Santo Domingo de Silos. Thence is derived the architecture of the cloister with its coupled columns (the pointed arches are, of course, the result of a later reconstruction); thence the pier sculptures, thence the plastic style.

The Cluniac grace and movement which bubble at Santo Domingo have dried up at Moissac. These figures seem made of

<sup>1</sup> Two of the pier sculptures have been illustrated by André Michel, *op. cit.* I, 2, p. 616.

cast iron. The scale has been coarsened; the figures appear frozen. This immobility produces at first sight an impression of archaism; but on closer study it becomes evident that the Moissac sculptures must be later than Santo Domingo. The facial types, while closely related to those of the Spanish cloister, are more varied and far better characterized. The conventions for the hair and beard, while very similar, are at Moissac more naturalistic. The gestures are more varied and freer than at Santo Domingo. Finally, to resort to a mechanical proof, the form of the letters of the inscriptions at Santo Domingo is more primitive than at Moissac.

The internal evidence of style entirely reinforces, therefore, the documentary evidence that Moissac cloister is later than Santo Domingo. It is hardly necessary to point out how closely the Moissac sculptor has followed his predecessor. The convention of two parallel lines used to indicate the folds of the draperies, the drawing of the eyes, the gestures, the position of the feet placed on a sloping shelf, many other details betray a close relationship. Indeed the Spanish influence at Moissac was always strong. "*On remarque sur un chapiteau des caractères arabes maladroitement copiés par un lapidaire ignorant leur signification.*"<sup>1</sup> The crossed animals of the porch capital are similar to those of a Mozarabic codex of the tenth century published by Gómez-Moreno.<sup>2</sup>

Like the sculptor of Santo Domingo, the master of the Moissac cloister made much use of ivory-carvings. It seems to have been directly from this source, rather than from Santo Domingo, that he derived the arches under which his figures are placed.<sup>3</sup> The horizontal bottom line of the draperies and the modelling of the faces is strikingly analogous to the ivories of the Fitzwilliam Museum at Cambridge<sup>4</sup> and the Stiftsbibliothek of Frankfurt.<sup>5</sup> The motive of two angels carrying a medallion, which is found on one of the capitals of the Moissac cloister, also occurs in an ivory

<sup>1</sup> André Michel, *op. cit.* I, 2, p. 617.

<sup>2</sup> *Iglesias Mozárabes*, Madrid, Centro de Estudios Históricos, 1919, 2 vols. 4to, p. 363.

<sup>3</sup> The motive occurs also in a Roman relief in the museum of Sens. The parallel of the ivory-carvings seems, however, closer—compare, *e.g.*, the Echnach ivory at the Cluny (Goldschmidt, *op. cit.* II, No. 25), or the Ada group ivory of the tenth century in the Bibliothèque Nationale (*ibid.* No. 36), or that of Darmstadt (*ibid.* No. 39).

<sup>4</sup> Goldschmidt, *op. cit.* I, No. 120.

<sup>5</sup> *Ibid.* No. 121.

of the Ada group, now in the Victoria and Albert Museum of London.<sup>1</sup> I suspect, indeed, that the sculptor held in his hand one of these ivories. The peculiar stiffness and coarseness of his figures must be due to this inspiration. So, too, their strength. After all, this, the earliest extant cycle of the apostles in French sculpture, is also the most unforgettable.



FIGURE 9.—SCULPTURE OF  
AMBULATORY: ST. SERNIN:  
TOULOUSE (HAUTE-GAR-  
ONNE).

The capitals of the Moissac cloister are the work of the same atelier that executed the pier sculptures, if not of the same master. They are less under the influence of Santo Domingo de Silos. There was here originated an iconographic program to which the twelfth century repeatedly turned for inspiration.

In the ambulatory of St.-Sernin of Toulouse are enwalled sculptures<sup>2</sup> which are clearly related to the pier reliefs of Moissac. Since the original position of these reliefs in the church is unknown, it is impossible to determine their date with accuracy by documentary evidence, although the building dates of the church have come down to us. A new basilica was begun, presumably soon after the foundation of the chapter regular in 1077; this was consecrated a first time in 1096 and a second time in 1119. St.-Sernin was an imitation of Santiago, and even threatened to de-

velop into a serious rival. Among the fabulous relics claimed by the chapter were the oliphant and the bodies of six apostles, including "the greater part" of that of St. James himself! The new basilica, begun in the latter part of the eleventh century, was

<sup>1</sup> *Ibid.* No. 14. This motive occurs frequently on ancient sarcophagi. But I can see little evidence that the master of the Moissac cloisters made any use of Roman models. The motives of ancient sculpture which are found in his work may well have come to him through the ivories.

<sup>2</sup> Three have been reproduced by Vitry et Brière, *op. cit.* pl. IV. I illustrate one of the angels, Fig. 9.



almost the exact duplicate of the great church at Compostela. All this was too much for the patience of Cluny which had the interests of the pilgrimage so vitally at heart. The Cluniacizing bishop of Toulouse found a pretext for expelling the canons (1082), and installed monks of Cluny in their place. A year later the pope interfered to restore the canons. These had now, however, learned their lesson; they perceived that their best interests, like those of Cluny, lay in fostering the pilgrimage. The guide of the twelfth century makes of St.-Sernin one of the principal pilgrimage churches, but the author feels called upon to warn the reader against the spurious relics of St. James.

The style of the ambulatory sculptures clearly shows derivation from the Moissac piers. Figures of the same adamantine hardness are placed under similar arches; the proportions and the general effect are strikingly analogous. The curious wings of the Toulouse angels recur in certain capitals of the Moissac cloisters. The Toulouse sculptures are, however, later and inferior. The drapery folds, although very similar, are more complicated and less well understood; the drawing of the feet is much poorer; the faces are less well done; the hair conventions are weaker. On the other hand it is certain that the sculptor of St.-Sernin was influenced by Spanish art. He owes important peculiarities of his style to the arca of San Millan de Cogulla, which is a dated monument of 1053.<sup>1</sup> He was also influenced by Santo Domingo de



FIGURE 10—DETAIL OF SOUTH PORTAL: ST. SERVIN: TOULOUSE (HAUTE-GARONNE).

<sup>1</sup> This arca has been published by Sentenach, in *Boletín de la Sociedad Española de Excursiones*, Año XVI, 1908, p. 4 f. Mr. Walter S. Cook first called my attention to this publication. I am also indebted to the same friend for the observation that the sculptures of Santo Domingo de Silos show points of contact with English manuscripts of Bury St. Edmunds—an acknowledgment which I neglected to make in a previous article.

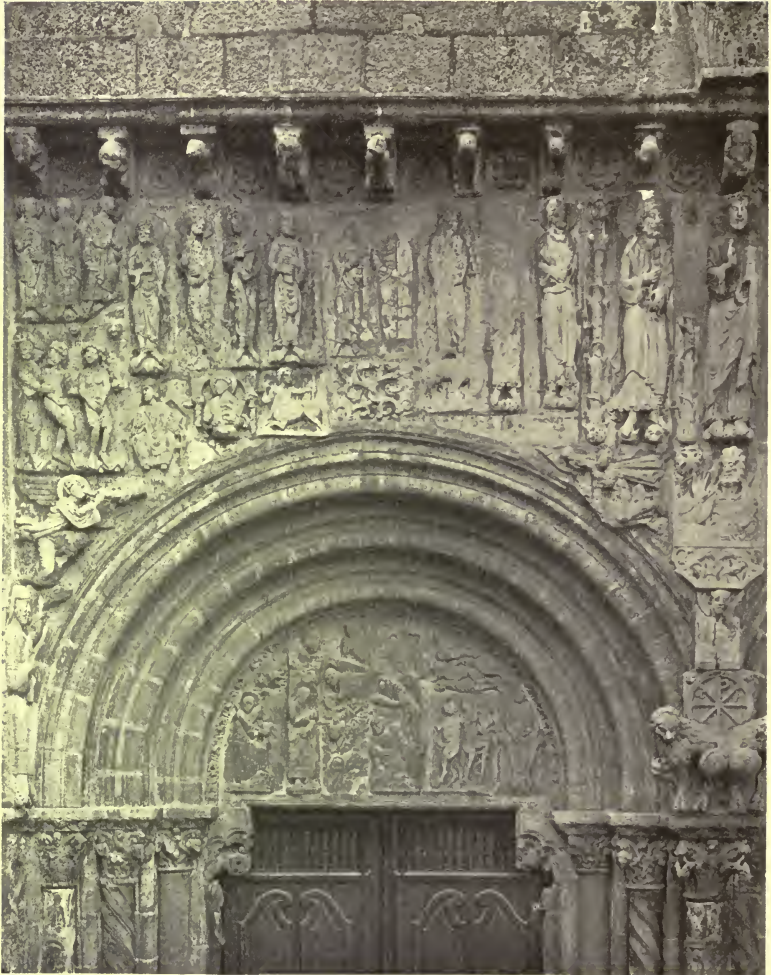


FIGURE 11.—PUERTA DE LAS PLATERIAS, WEST HALF: SANTIAGO DE COMPOSTELA (LA CORUÑA).

Silos. If we compare the face of his seraph (Fig. 9) with the harpies of the dated capital of 1073-1076 at Santo Domingo (Fig. 5) we find the same long nose, the same badly placed eye, the same low head, the same omission of the forehead. The Toulouse ambulatory sculptures are in fact extraordinarily unpleasant productions. They may be assigned to about the year 1105, and it may be conjectured that the canons of St.-Sernin having learned of the

new sculptures of Moissac, lost no time in causing them to be imitated.

The Mephistophelian south portal of St.-Sernin<sup>1</sup> must have been executed before, and probably considerably before the consecration of 1119. It has evidently undergone a very radical restoration in modern times, and presumably under Viollet-le-Duc in 1855. The first impression, indeed, is that of being in the presence of a modern work. The restoration may account, at



FIGURE 12.—WEST TYMPANUM: PUERTA DE LAS PLATERIAS: SANTIAGO DE COMPOSTELA (LA CORUÑA).

least in part, for the ugliness. We are fortunately able to judge of what must have been the quality of the original from other productions of the same artist—a fragment of a seated figure in the museum of Toulouse, and certain sculptures at Santiago. This master appears, as has often been pointed out, to have derived his art from the ambulatory sculptures. Undoubtedly, however, he also sought inspiration from a miniature; to this must be due the iconography, the movement, the throwing back of the heads of the apostles. An innovation of capital importance was the flanking of the portal above by figures of St. James (Fig. 10) and St. Peter.

M. Mâle has announced that these figures of St. James and St. Peter are by the same hand as the similar figures at Santiago.

<sup>1</sup> Illustrated by André Michel, *op. cit.* I, 2, p. 615.

There is, beyond question, a resemblance; but the much finer quality of the Santiago figures (Fig. 11) and numerous other differences prove that these are not the works of the same master. It is, however, evident that one must have influenced the other. Which is the original?

The documents do not determine the question. The St.-Sernin portal was doubtless finished before the consecration of



FIGURE 13.—EAST TYMPANUM: PUERTA DE LAS PLATERIAS: SANTIAGO DE COMPOSTELA (LA CORUÑA).

1119; but it is hardly conceivable that it could have been executed before 1110. The choir of Santiago appears to have been completed in 1102; the nave was at once attacked, and finished in 1124. The transept portals would presumably have been sculptured in the earlier rather than in the later part of this building campaign, say between 1102 and 1112. No definite conclusion as to priority can be drawn.

The internal evidence of the Santiago portal is in the highest degree confusing and complicated. M. Bertaux was the first to observe that the sculptures (Figs. 11, 12, 13, 14, 15, 16, 17) are not all of the same style; he announced that he could distinguish the work of two different hands. In point of fact, the sculptures are the work of many distinct artists—fourteen according to my count.

A glance at the present Puerta de las Platerias suffices to reveal

the fact that we have to do with a conglomeration of fragments not in their original position. No order is traceable in the composition as a whole. Little statues, big statues, pieces of statues are walled in helter-skelter. The man riding on a monster of the west tympanum (Fig. 12) is inserted horizontally. The woman holding a skull just below (Fig. 12) has had her shoulder and part of her head cut off to adapt her to her present position. The flying angel in the spandrel to the right, above this same tympanum, cuts across the archivolt (Fig. 11). Romanesque sculptures, it is well known, were carved before being placed; and Spanish Romanesque builders were notoriously careless in their assembling of these previously prepared decorations. It is, however, incredible that misfitting should have been carried to this degree. Moreover, details like the beginning of an archivolt under the feet of the third apostle, upper row, left-hand side (Fig. 11), show that certain sculptures have been wrested from a very definite place in which they belonged.

The description in the *Pilgrims' Guide* proves, indeed, that certain ones—the Expulsion (Fig. 11) and the sign of the zodiac, Sagittarius (Fig. 11)—which are now in the south portal were originally in the north portal. It has been supposed that when the latter was reconstructed in the seventeenth century, the discarded reliefs were added to the previously intact sculpture of the south portal. That sculptures of the north portal were introduced into the south portal is certainly true. But recognition of that fact does not solve the mystery of the south portal.

The truth is, I think, that the *Puerta de las Platerias* has been twice rebuilt. The mouldings of the two arches have advanced Gothic profiles (Figs. 12 and 13). They are far more developed than, for example, those of the portal of St.-Sernin. The bracketed lintel is similar to Mateo's in the *Portico de la Gloria* (Fig. 28). The least difficult hypothesis seems to be that Mateo re-



FIGURE 14.—JAMB SCULPTURE: PUERTA DE LAS PLATERIAS: SANTIAGO DE COMPOSTELA (LA CORUÑA).

constructed the Puerta de las Platerias in the second half of the twelfth century. It may be conjectured that at this time he incorporated fragments from the west façade. In fact the God the Father in white marble (Fig. 11), now in the spandrel between



FIGURE 15.—THE CREATION OF ADAM:  
PUERTA DE LAS PLATERIAS: SANTIAGO DE COMPOSTELA (LA CORUÑA).

the two portals, must be the same as that described in the *Guide* as forming part of the Transfiguration of the west façade.

The incoherencies of the composition, it is true, can only be partially explained on this hypothesis. The same extraordinary mixture of subjects that exists today in the tympana (Fig. 12, 13) is very exactly described in the twelfth century *Guide*. The four angels in the spandrels (Fig. 11), the lions over the central columns (Fig. 11) are all as they were in the twelfth century. On the other hand, there are notable points of divergence between the description and the existing monument. One of the "*feroces leones*" has disappeared. The jamb sculptures are not those described in the *Guide*. Instead of the existing Sign of the Lion, St. Andrew, Moses and a bishop, there were four apostles. "*In liminaribus eiusdem introitus, sunt duo apostoli quasi valvarum custodes, unus ad dexteram, et alius ad sinistram, similiter in alio introitu sinistrali, in liminibus scilicet, alii duo apostoli*

*habentur.*" Such discrepancies indicate that the portal has undergone a radical reconstruction. The jamb sculptures could hardly have been changed without tearing the portal down and rebuilding it.

The Puerta de las Platerias, therefore, consists of fragments of at least three different portals, heaped together at two reconstructions, one of the second half of the twelfth century and the other of the seventeenth century. Fortunately, however, the description mentions specifically certain reliefs which can still be identified. These must without any question have belonged to the original portal.

Among the sculptures thus described in the *Guide* is the St. James (Fig. 11), which resembles the statue at Toulouse (Fig. 10).<sup>1</sup> Even more happily for our investigations, the description mentions in detail the woman holding a skull in her lap of the west tympanum (Fig. 12). It gives, indeed, an explanation of the subject which otherwise would entirely escape us. The figure represents the vice of Luxury, typified by the legend of the adulterous wife, whose husband forced her to fondle twice a day the head of her lover while it corrupted in her hands. This same subject is represented in a capital of Santa Marta de Tera,<sup>2</sup> a church in which the Toulousan master seems also to have worked.

The interesting part of this relief is that it really is by the hand of the sculptor of the portal of St.-Sernin. Doubt is not possible. Not only are the types, facial modelling, draperies, hands, feet and hair conventions identical, but there are the same mannerisms like the horizontal line following down the shin line and the incision in the bulge of the drapery folds.

The work of our sculptor at Santiago did not end with the Luxury. The man riding a monster inserted horizontally above (Fig. 12) is by his hand; as are also two of the jamb sculptures, the St. Andrew of the east jamb of the west portal and the woman with crossed legs holding a lion of the east jamb of the east portal (Fig. 14) and the boy holding a cock just below her.

<sup>1</sup> Miss King, *op. cit.* III, p. 252 deduces from the iconography that the Toulouse St. James must be derived from the similar figure at Santiago. This conclusion is confirmed by the study of the style of the two sculptures. There must have been a continual interchange of masters between the two ateliers of Toulouse and Santiago.

<sup>2</sup> See the illuminating publication by Gómez-Moreno in *Boletín de la Sociedad Española de Excursiones*, Año XVI, 1908, p. 81. Gómez-Moreno appears to have been the first to perceive the relationship of Santiago to the rest of Europe in its true light.

These unrestored sculptures give an opportunity to judge of the artistic stature of our artist. He is surely of higher rank than one would suspect from St.-Sernin. He possesses vigor and power, and attains a certain effect at the expense of the finer qualities.

The woman holding the lion (Fig. 14) is a strange subject. We should be entirely embarrassed for an explanation, were it not that



FIGURE 16.—DETAIL: PUERTA DE LAS PLATERIAS: SANTIAGO DE COMPOSTELA (LA CORUÑA).

the theme recurs in a relief now in the museum of Toulouse and coming from St.-Sernin.<sup>1</sup> Here are seen two women, similarly seated with crossed legs, one holding in her lap a lion, the other a lamb. It is the illustration, as Lahondès recognized, of a legend attributed to St. Augustine, but manifestly of much later date, according to which, in the time of Julius Caesar, a strange miracle took place. At Toulouse, at Rome and at Jerusalem were born from women a lion and a lamb, symbolic of the two natures of the coming Messiah.<sup>2</sup> It is evident that we have here another attempt of the canons of St.-Sernin to rival Santiago. For the usual triad Compostela, Rome,

Jerusalem, is substituted the triad Toulouse, Rome, Jerusalem. It was entirely natural that the miracle should have been commemorated in the sculpture of St.-Sernin. The meaning was underscored by the inscriptions, which have, however, been so strangely misunderstood—*Signum leonis. Signum arietis. Hoc fuit factum T(olosae) tempore Julii Cesaris.*

Now there can be little doubt that this subject was originally

<sup>1</sup> Illustrated by Vitry et Brière, *op. cit.* pl. IV, fig. 5.

<sup>2</sup> Lahondès, *Les Monuments de Toulouse*, Toulouse, Privat, 1920, 4to, p. 460.



created at Toulouse, where it was at home, and copied at Santiago, where there was no reason for it to be represented. Hence several important conclusions. The Toulouse sculptures of the lion and the ram, although of much finer quality than those of the south portal, must be about contemporary with them; and our sculptor of the south porch of Santiago and of the south portal of St.-Sernin must have been at Toulouse, and, presumably, have worked there, before he copied at Santiago the work of his more gifted contemporary.

But we are by no means at the end of the complications! The sculptor of the Toulouse signs also worked at Santiago. By him are in fact the David (Fig. 16) and the Creation of Adam (Fig. 17) walled into the west buttress and the Sacrifice of Abraham opposite. This is, perhaps, the finest of all the pilgrimage artists. There are no data sufficient to determine the land of his origin. His David sits under an arch like those of the pier sculptures of the Moissac cloister; but this same motive it will be recalled was copied in the ambulatory sculptures of St.-Sernin.

For all his Toulousan vulgarity, our master is not without quality, even finesse; and he betrays at moments, as in his superb Adam, knowledge of Burgundian models.

It is important to observe that the master of the south porch of St.-Sernin may have executed jamb sculptures at Santiago. Two of his works—the St. Andrew and the Sign of the Lion—are now used as jamb figures, and jamb figures of the most primitive type, that is reliefs of the inner jamb, at right angles to the door. It is possible that the St. Andrew is still in its original position. The description makes it certain that in the early twelfth century both the northern and southern portals had jamb sculptures.



FIGURE 17.—THE CREATION OF ADAM: PUERTA DE LAS PLATERIAS: SANTIAGO DE COMPOSTELA (LA CORUÑA).

Those of the north portal represented the four apostles, Peter, Paul, James and John; all held books in their left hands, and their right hands were raised in benediction. The relief embedded in the west buttress, next to the lion, may be one of these apostles. In the jambs of the south portal were four other apostles whom the *Guide* does not name more specifically; it is entirely possible that Andrew may have been among them.

The fact that jamb sculptures, set at right angles to the door, were found at Santiago, is significant. Guglielmo used this same motive at precisely this moment at Cremona (1107-1117); his prophets, like the Santiago apostles, are on the inner face of the jambs, at right angles to the door.<sup>1</sup> Did Guglielmo copy from Santiago or the Santiagoan sculptor from Guglielmo? Or both from a common original? I suspect that the latter may have been the case. The portal, unfortunately of undetermined date, at Elindsche near Garni in Armenia,<sup>2</sup> is flanked by reliefs, one with crossed legs, representing Peter and Paul. Jamb sculptures are also found facing inward on the portal of S. Andrea of Barletta. This monument, it is true, is not earlier than the thirteenth century, but is significant as representing the survival of an earlier type in a region singularly exposed to oriental influences. At St.-Michel-de-Cuxa, in the eastern Pyrenees, jamb sculptures seem to have appeared early in the twelfth century. They appear to have been set on both faces of the jamb, and enclosed in a frame after the Byzantine manner. Reliefs flanking the doorway exist at Souillac, Moissac and Beaulieu. It seems probable that the motive originated in the East.

The work at Santiago may not have been unknown to the sculptor who about 1125 executed the reliefs of the Hôtel de Ville at St.-Antonin. These figures produce the effect of addossed sculptures, and may be derived from the jambs of Compostela. The Adam of St.-Antonin faintly recalls the Adam of the Creation at Santiago. Stylistically, the work at St.-Antonin shows the influence of Burgundy in the draperies, and especially in the spirals of the knees. Its closest relative is the tympanum at Moissac.

In the portal of Santiago are incorporated three marble columns (Fig. 16) entirely covered with sculptures of figures standing in arched niches. Since the description of the twelfth century

<sup>1</sup> Guglielmo's prophets at Cremona are well illustrated by Monteverdi, *Il Duomo di Cremona*, Milano, Bonomi, 1911, 12mo, pp. 13 f.

<sup>2</sup> Illustrated by Strzygowski, *op. cit.* pp. 812 f.

refers to these remarkable productions, there is no doubt that they belonged to the original construction. To cover a column with arched niches filled with reliefs is a Byzantine idea; it occurs in the columns of the ciborio of S. Marco at Venice. The actual workmanship at Compostela is undoubtedly local; the figures are of the pilgrimage style, and similar to the other reliefs executed before 1124.

The suspicion arises that these columns may have inspired the much later colonnettes of the convent of the Benedictine nuns (Fig. 18). On each are adossed the figures of three apostles. I have never been able to obtain access to the originals of these sculptures, which I know only from the casts in the chapter-house of the cathedral. Hence I have no helps but the style to establish the date. However, it seems evident that the colonnettes must be much later than the work anterior to 1124 in the Puerta de las Platerias. Statues adossed to columns, it will be recalled, appeared at Beauvais and at St.-Denis about 1140.

I see nothing to prove that the Santiago colonnettes are earlier than this date. The closest analogy to them which I know is the compound colonnette from Chalons-sur-Marne, now in the Louvre, which also has three adossed figures, and is likewise of undetermined date.

With this group of monuments should, perhaps, also be included the columns with sculptures in relief in the archevêché at Albi. These are said to be fragments of a secular building, such as the sculptures of St.-Antonin still adorn. Inscriptions—*REX SAUL*, *REX SALAMON*—leave no doubt as to the iconographical meaning of two of the figures. Of the other two, representing women,



FIGURE 18.—COLUMNS: CONVENT OF BENEDICTINE NUNS: SANTIAGO DE COMPOSTELA (LA CORUÑA): FROM CAST IN CHAPTER-HOUSE OF CATHEDRAL.

one is probably the Queen of Sheba. The style seems to show derivation from many different sources. Draperies of Chartres and Beauvais, postures from the Moissac porch, limbs of Santiago, hands of Rieux-Minervois are combined with the manner of the third quarter of the twelfth century.

The sculptured column of the cloister of St.-Bertrand-de-Comminges continued this pleasant tradition down to the eve of the thirteenth century.<sup>1</sup> Here four figures are addossed to the same colonnette, but in the cloister of Aix-en-Provence there is only one. With these cloister figures should be grouped those of Ganogobie and Lavaudieu, although the latter is no longer *in situ*, having been sold. At Chur in Switzerland are preserved four columns with addossed figures; and there are others in the strongly Lombard façade of the Schottenkirche at Regensburg. The motive survived until late in the thirteenth century, and travelled as far east as Bamberg in Germany and as far south as Liguria and even Tuscany — it appears in the façades of the cathedral at Genoa and the Pieve of Arezzo. The more archaic types of jamb sculptures similarly survived in late repetitions; reliefs on the jambs of the portal are found at Leire in Spain, at the cathedral of Foligno in Umbria, at S. Maria Maggiore at Toscanella, at Clermont-Ferrand in Auvergne, in the cathedral of Trani in Apulia, at San Clemente di Cassauria near Torre dei Passeri in the Abruzzi, in the cathedrals of Zara and Traù in Dalmatia, at S. Antonino of Piacenza and the cathedral of Lodi in Lombardy and at Marsico Nuovo in the Basilicata. Archaistic jamb sculptures are found in Spain at Monterey,<sup>2</sup> at Las Caldas de Oviedo and at Villaviciosa.

The sculptured columns of the Puerta de las Platerias are far from being the only traces of Byzantine influence at Santiago. One suspects it, indeed, of underlying much of the work, and if we knew more of Byzantine sculpture it is likely that we could detect definite traces. One fragment is indeed certainly Byzantine. It is that strange bust (Fig. 11) inserted in the spandrel between the two doorways, and which the *Guide* shows to have originally belonged to the Transfiguration of the west façade. The Byzantine foliage in the boss betrays the origin of the sculptor. But this is not all. A head of strikingly similar character is found in a relief

<sup>1</sup> The column of St.-Bertrand-de-Comminges has been illustrated by Vitry et Brière, *op. cit.* pl. XXVIII, fig. 7.

<sup>2</sup> Illustrated by Fatigati, *Portadas Artísticas de monumentos españoles*, Madrid, Hauser y Menet, 1907, 4to, p. 18.

of San Marco at Venice, representing the sacrifice of Isaac.<sup>1</sup> The relief, like the sculptured columns of the Venetian ciborium, is ascribed currently, but not necessarily correctly, to a very early date. However this may be, these two points of contact between San Marco and Santiago deserve observation.

There is a head similar to that of Santiago in the portal of Santillana del Mar. Since the rest of the sculptures of this façade are crude, I am almost tempted to conjecture that the master of Santiago passed through Santillana, and touched this one figure with the finger of his genius.

One of the most interesting of the artists who worked at Santiago is the master who executed the three figures, probably of apostles at the left hand edge of the upper row (Fig. 11), the Expulsion just below (Fig. 11) four figures at the right hand edge of the lower row, the figure just above the Sacrifice of Abraham in the east buttress, and the Betrayal of the eastern tympanum (Fig. 13). Since the Expulsion is mentioned in the description of the twelfth century, our master worked upon the original construction.

This artist shows close relationship to some of the work at Conques. If we compare the draperies of Christ and Judas in the Santiagoan Betrayal (Fig. 13) with those of the prophets in the niche to the left of the Abraham at Conques (Fig. 19); the head of Christ in the Santiagoan Betrayal (Fig. 13) with the head of the second prophet in the niche to the left of Abraham at Conques (Fig. 19); the rosettes scattered on the background of some of the reliefs at Santiago with the stars of Conques; we shall be convinced that the two groups are related. Conques seems distinctly more naturalistic and advanced in style than Santiago.

Another sculptor at Santiago shows even closer analogies with a second sculptor at Conques. This is the artist who executed at Compostela the Flagellation (Fig. 13) and the Crowning with Thorns (Fig. 13) in the centre of the lower register of the east tympanum; the Epiphany (Fig. 13) just above; the neighboring grotesque; an angel carrying a crown near by (Fig. 13); and the west jamb figure of either portal representing Moses with the tablets of the law and a bishop. A curious convention for representing the lower edge of the draperies with redoubled folds is like the signature of this artist. Now precisely this same convention recurs at Conques in the group of figures to the left of Christ (Fig. 20). The similarities do not end here. The figures

<sup>1</sup> Photograph by Alinari.

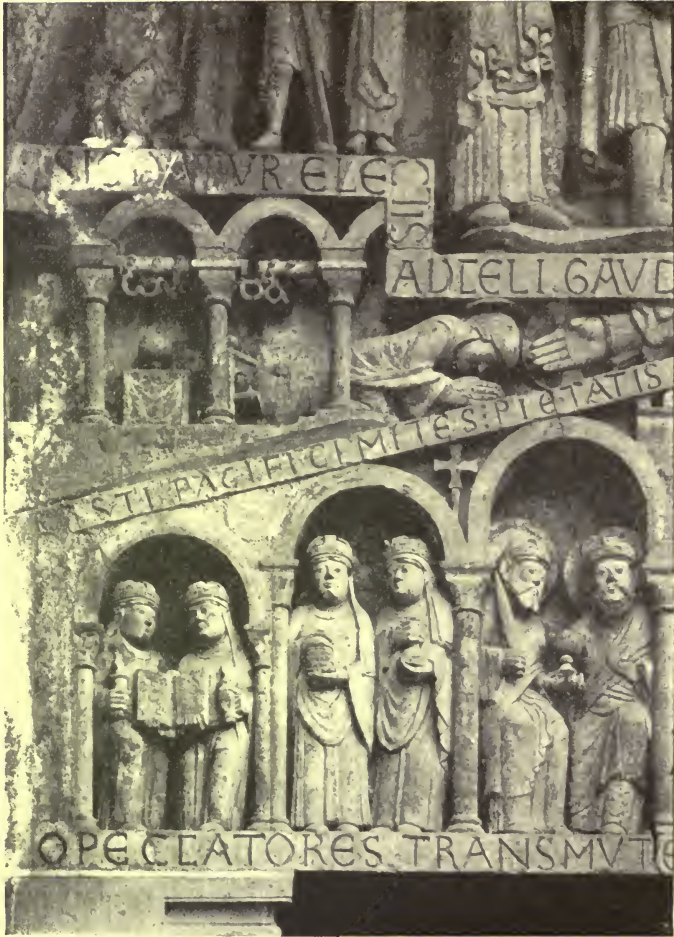


FIGURE 19.—DETAIL OF TYMPANUM: CONQUES (AVEYRON).

in the two monuments are of the same stocky types. The head of the Christ in the Flagellation at Santiago (Fig. 13) is like the head of the king at Conques (Fig. 20). The short skirts of the executioner at Santiago are like those of the same figure at Conques (compare Fig. 13 with Fig. 20). The square hair line is characteristic of both works. The draperies of the Moses at Santiago are entirely similar to those of the abbot leading the king at Conques. That the two groups are by the same hand seems

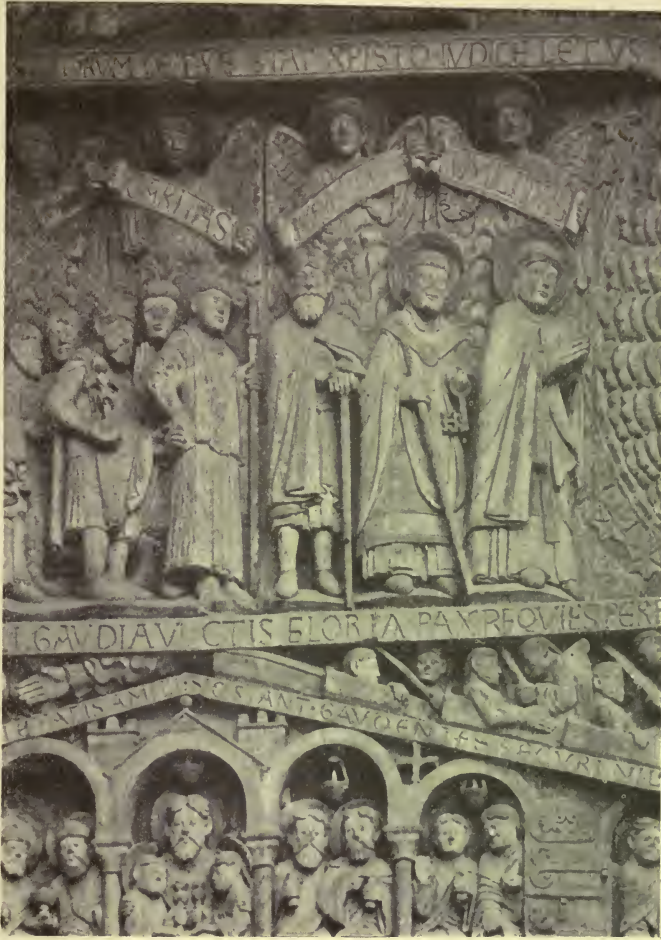


FIGURE 20.—DETAIL OF TYMPANUM: CONQUES (AVEYRON).

certain. Again, however, we note that the sculptures of Conques are more advanced.

The Betrayal by the first master of Santiago must have formed part of the same series of reliefs with the Crowning with Thorns and Flagellation by the second. Therefore the two worked together at Santiago. We are justified in concluding that the same pair worked together also at Conques.

It is probable that these sculptors were of Spanish origin. The

work at Conques<sup>1</sup> is more advanced than that at Santiago. It is, moreover, evidently of Spanish character. The brilliant polychromy suggests a Spanish origin; it is, perhaps, by way of Conques that the tradition reached Auvergne. The facial types are thoroughly Spanish; they already foreshadow those of Mateo. The devils, too, are of Spanish type, and not unlike those of the western tympanum at Santiago.

If the portal at Conques is by the sculptors who worked at Compostela before 1124, and, presumably, considerably before, it is evident that orthodox archaeology has made a serious error in ascribing these sculptures to the end of the twelfth century. Indeed the style is entirely that of the second quarter of the twelfth century. Certain figures, like the one with the cane, the third to the left of Christ (Fig. 20), show points of contact with the pulpit of Isola S. Giulio, which dates from *ca.* 1120.<sup>1</sup> Yet the character of the work at Conques is so advanced that one is inclined to assign it to as late a date as possible. It is not improbable that it was erected about 1130, contemporaneously with the great tympana of Vézelay and Autun.

So important a work as the tympanum at Conques is naturally not without connections in many directions. Certain draperies and certain faces recall Cluny. The truncated pediments are characteristic of the sculpture of Auvergne. It has been believed that the masters of Conques thence derived the idea. I know, however, of no truncated pediment in Auvergne more ancient than that of Conques, unless it be Thuret, which, indeed, looks more primitive, but is undated and may be in reality only crude.

Certain of the facial types of the second master of Conques resemble those of the school of the Velay, such as may be seen in the cathedral and museum of Le Puy. I suspect, however, that these may be derived from Santiago rather than from Conques.

From an aesthetic standpoint, Conques produces a deep impression. Notwithstanding the somewhat restless and confused effect of the division into zones by bands with inscriptions, the freshness of the polychromy, the quaintness of the faces, and the vigor of the modelling combine to make of this one of the grand achievements of Romanesque art.

<sup>1</sup> Noak, in the *Dritten Bericht ueber die Denkmaeler Deutscher Kunst*, p. 43, notes analogies between the pulpit at Isola and the east choir at Mainz. The latter he dates 1125 on independent grounds. It is reassuring that his chronology, arrived at by entirely other ways, should agree to a year with mine.



Before leaving this pair of sculptors who worked together at Santiago and at Conques, it is interesting to note that the relief of the Flagellation at Santiago appears to have been the starting-point for a whole group of interesting sculptures. If we compare this Flagellation with the one at Beaucaire, we shall be in no doubt as to whence the Beaucaire sculptor derived his inspiration. Now from Beaucaire in turn are derived the series of reliefs dealing with the Passion which belonged to the pulpit and screens of the cathedral at Modena, and the celebrated frieze of St.-Gilles.<sup>1</sup>

Still another sculptor of Santiago has left us the relief of the Creation of Adam embedded in the east buttress (Fig. 15). He is an inferior creature who plods along at a respectful distance behind the master of the south portal of St.-Sernin. He follows him so faithfully that he must have worked about the same time.

The hand of the same master may be recognized in the portal of San Isidoro of León (Fig. 21). This church seems to have been the object of a number of reconstructions which succeeded each other from the middle of the eleventh century until the final consecration of 1149. The portals were doubtless executed somewhat before this date. If our sculptor was active at Santiago about 1120, he could easily have worked at San Isidoro twenty

<sup>1</sup> Current archaeology has fallen into another error in considering the frieze of St.-Gilles as dating from the end of the twelfth century. It is certainly contemporary with the great statues below, and consequently of the 1140's. Mr. Allan Priest has remarked, and will shortly publish, analogies between the St.-Gilles frieze and the lintel of the south portal of the west façade at Chartres which justify the inference that the two are the work of the same master. The Samson of a capital of St.-André-le-Bas of Vienne reproduces exactly the youth to the right in the scene of the money-changers at St.-Gilles, from which the Vienne figure is obviously copied. Now the Vienne capital is dated 1152 by an inscription, so that the St.-Gilles frieze is certainly earlier than this date. Confirmation of the early date of St.-Gilles is afforded by the pulpit at Cagliari which was executed between 1158 and 1162 (see Scanno, *Storia dell' arte in Sardegna*, Cagliari, Montorsi, 1907, 4to, pp. 277 f.) I am indebted to Professor Vöge and Miss King for knowledge of this significant monument. Most amazing of all, an exact parallel to the extraordinary animals below the St.-Gilles frieze is to be found in the lion underneath and behind the throne of S. Nicola of Bari, and this is dated by an inscription 1098! Also the lions beneath the columns at St.-Gilles are closely analogous to those beneath the footstool at Bari. The peculiar curls of the Bari caryatids recur at St.-Gilles and Chartres. The Bari master executed in 1107 an archivolt at Monopoli; the heads of this are very similar to those of the St.-Gilles frieze. To complete the cycle, the throne of Bari is most closely related to the work of Guglielmo, but is earlier than anything we know by him.

years later. The passing years, however, seem to have brought him no greater maturity; his Virgin and St. Isidore of Léon are stupidly copied from the St. James (Fig. 10) and St. Peter of Toulouse.

It was apparently from the already troubled waters of Léon that somewhat later the sculptor of St.-Bertrand-de-Comminges drew the inspiration—if that word can be applied to so sorry a performance—for his tympanum.



FIGURE 21.—DETAIL OF SPANDEL: SAN ISIDORO: LÉON.

With the completion of the cathedral of Santiago in 1124 ends the great creative cycle of the pilgrimage school. From this time sculpture reflects now one, now another foreign influence. It veers about like a weathercock, pointing now to Burgundy, now to Lombardy, now to the West, now to Provence, now to the Ile-de-France. The strangers, constantly passing back and forth on the road, brought with them motives from the four quarters of the world. The most distant and unexpected models

were copied. The pilgrimage churches became an international mixing-pot of styles.

In the third decade of the twelfth century, the influence of Burgundy was assuredly the most prominent. The great tympanum of Moissac was executed under this inspiration.<sup>1</sup> At

<sup>1</sup> See Porter, 'La sculpture du XIIIe Siècle en Bourgogne,' in *Gaz. B.-A.*, Octobre, 1920.

Leire (Fig. 22) Burgundian influences are at work too; but combined with other elements. The St. James is another replica of the over-copied St. Peter of Toulouse; the Visitation is reminiscent of that of the Moissac porch; the skirts of the figures in the tympanum fall in folds precisely like those of the figure to the right in the tomb on the south side of Conques; the flaring lower garment and the trailing sleeves recall Notre-Dame-la-Grande of Poitiers; the caryatid lions, Lombardy.

The same polyglot and cosmopolitan character permeates the



FIGURE 22.—TYMPANUM: SAN SALVADOR: LEIRE (NAVARRA).

well-known jamb sculptures from the chapter-house of St.-Etienne in Toulouse.<sup>1</sup> The assistant of Gilabertus marks at once the extreme development and the extreme degradation of the Toulousan style. Cynicism could go no further. These strange creations in their mocking, demoniac attitudes, their stocky proportions, their coarse quality make us understand the character of the Albigenian heresy; after studying them, one almost finds St. Louis sympathetic. Like all the sculpture of the Southwest of this period they reflect a multitude of foreign influences. The facial types seem to be derived from a master of Santiago—the one who did the St. James and the St. Peter. They are, however, obviously much later and more advanced. Some of the draperies

<sup>1</sup> Seven are illustrated by Voegelé, *Die Anfänge des monumentalen Stiles im Mittelalter*, Strassburg, Heitz, 1894, 8vo, pp. 71-74; five by André Michel, *op. cit.* I, 2, p. 624; four by Vitry et Brière, *op. cit.* pl. IV, fig. 4, 6.

come from the same source. The master also knew the "signs" of St.-Sernin. Other draperies are inspired by the tympanum of Moissac. The niches in which the figures stand, and possibly also their halos with a radiating pattern<sup>1</sup> are derived from Nicolò's earlier, crisper and more archaic work at Ferrara (1135). The capitals of the niches show the influence of the Moissac cloister. The movement of the draperies of certain figures is Burgundian, the draperies, the hair and beard conventions, and the ornamented borders of others are derived from St.-Denis (1137-1140) or Chartres (1145-1150). There is a thirteenth century feeling in the faces and hair conventions which suggests a date in the second half of the twelfth century. If we compare these heads with Beaulieu (*ca.* 1135), we shall be convinced that they are notably later. The tomb of Donna Bianca (1156) at Nájera is from the point of view of style closely related to the St.-Etienne sculptures. The analogies in the draperies are striking.<sup>2</sup> The activity of Gilabertus' assistant can hardly fall before the fifth decade of the twelfth century.

The study of the style of Gilabertus himself leads us to the same period. He comes out of Autun (1132) and shows the strong influence of St.-Denis (1137-1140) if not also of Chartres (1145-1150). He shows points of close contact with Chadennac (1140). A date about 1145 would, therefore, be in agreement with what we can deduce from the style of the two masters.<sup>3</sup>

<sup>1</sup> This is a stock Byzantine motive frequently repeated in western—and even in Chinese!—art. It is found for example on the archivolts of S. Marco at Venice, at Bamberg, in the tympanum of the Caecilienkirche at Cologne (Clemen, *op. cit.* p. 788), in the Grabstein der h. Plektrudus (*ibid.* p. 789), in the tomb of St. Junien, at S. Andrea of Barletta, etc. Such halos are typical of the Ada group miniatures and ivories.

<sup>2</sup> The sculptures at Beaulieu are illustrated by Vitry et Brière, *op. cit.* pl. V. The Nájera tomb is reproduced by M. Bertaux in André Michel, *op. cit.* II, 1, p. 242.

<sup>3</sup> My suggestion that the Gilabertus of Toulouse is to be identified with the Gislebertus of Autun has been received in some quarters with incredulity. I do not insist upon the point. This question of hands is one seldom susceptible of absolute proof, and which must always remain largely a matter of personal conviction. If it will help to maintain the peace, I shall not contradict, whatever my belief may be, anyone who asserts that Gislebertus of Autun was one, and Gilabertus of Toulouse another of the same name, which was distinctly not a common one, but still not unprecedented, especially in Burgundy. A certain type of mind will always find satisfaction in arguing that the poems of Homer were not written by Homer, but by another Homer. With such I shall not quarrel. The essential point is recognition of the facts that Gilabertus of Toulouse is of



FIGURE 23.—SCULPTURES FROM LA DAURADE: MUSEUM: TOULOUSE  
(HAUTE-GARONNE).

The capitals of the cloister of La Daurade at Toulouse, now gathered together in the museum, are of two distinct periods. The earlier is closely analogous to the cloister at Moissac, as we may easily convince ourselves by comparing the two Daniels. It is indeed difficult to determine which is the older. On the whole the Daurade seems to be slightly the more archaic; but in any case the two monuments must be nearly contemporaneous. It is evident that the cloister of Santo Domingo de Silos was well known to these artists. The second group of Daurade capitals is of much later date; some of them are by the same hand as the sculptures of the chapter house.

The jamb sculptures (Fig. 23) have little relationship to those Burgundian derivation; that his art comes out of Autun; and that his style, however different superficially, is essentially Gislebertian. This much will, I venture to predict, not be disputed by anyone really familiar with the monuments. In the first place, where, except at Autun, could Gilabertus possibly have been formed? His draperies, so closely parallel to Autun, are like those found nowhere else in the entire range of Romanesque art. Compare the Thomas of Toulouse with the capital of Autun representing the angel warning Joseph to flee. The facial types are identical, the eye is done in the same manner, the beard and hair conventions are very like, the drapery on the right leg of the Toulouse figure is identical with that on the left leg of St. Joseph, being

of St.-Etienne. It is evident at a glance that they are much less vital. They are, as Vöge recognized nearly thirty years ago, flat imitations of Chartres. One perceives, however, that they are much later in date than their original. This is clear not only in the less vigorous modelling, in the monotony of the composition,

and the general commonplaceness of the execution, but in certain of the heads which have already Gothic character.

There is, indeed, proof that this master worked about the end of the century. The draperies of the jamb sculptures of the Daurade are precisely like those of the celebrated Annunciation of the Toulouse museum (Fig. 24). The head of the Gabriel annunciate is exceedingly like the head of the prophet to the right in Figure 23. So striking are the points of similarity that it would not be difficult to believe the two the work of the same sculptor. There can be no question in any case that they are contemporary.



FIGURE 24.—ANNUNCIATION: MUSEUM:  
TOULOUSE (HAUTE-GARONNE).

formed of sagging folds of three parallel lines (a similar convention runs through the St.-Etienne capitals), the border of St. Joseph's sleeve has a pattern of dots like the falling edge of St. Thomas' mantle, the ear of the angel is the same peculiar ear as the ear of the Andrew, the ear of Joseph is like the ear of Herod in the Dance of Salome. The capitals of the niche at Autun have, moreover, foliage of the same character as the capitals of the niches at Toulouse. At Toulouse and at Autun there is the same fondness for border ornaments, the same preoccupation with covering the entire surface with a network of decorative lines. The feet are not very dissimilar—compare those of the St. Peter at Autun with those of the Herod at Toulouse. The hands at Toulouse are more developed. There are the same horizontal bandings on legs and arms at Toulouse and Autun. The legs of the beardless apostle holding a scroll finished by Gilabertus have draperies very like those of the right leg of the tall standing figure to the left of the Autun aureole.

Now the head of the Toulousan Gabriel annunciate is almost equally close to the heads of the four glorious jamb sculptures that raise the portal of Valcabrère to more than antique heights.<sup>1</sup> It is only upon second thoughts we perceive that the radiance of this remarkable work proceeds from the heads, or to be more exact, from three of the heads, and from the outer figure on the right-hand side; the rest is not only inferior, but intolerably blundering. There can be no doubt that two very unequal hands worked together on this portal.

The finer of these hands, as we have said, is close to the master of the Toulouse Annunciation. His heads have the same stern quality as that of the Gabriel; like that one could almost believe them inspired by an archaic Greek model. They are, indeed, extraordinarily fine. In looking at them, we seem to breathe the atmosphere of demigods and heroes. This twelfth century artist of the Pyrenees attains all that Rome would have been, but never was.

His uncouth assistant is of little intrinsic merit, and probably a local light, since we find his hand again in the addossed figures of the neighboring cloisters of St.-Bertrand-de-Comminges.<sup>2</sup> In the tympanum of Valcabrère he seems to be trying feebly to imitate Burgundian models. His was clearly an unskilful chisel of the end of the twelfth century.

Indeed the significance of the Valcabrère sculptures in this connection lies in the fact that their date can be determined. The church of Valcabrère was consecrated in 1200. The portal must, therefore, have been executed somewhat before this time.

All this brings the date of the Toulouse Annunciation and the Daurade fragments down to at least the last quarter of the twelfth century. It is exceedingly improbable that they are earlier than 1175.

Closely related to the Daurade fragments in style, is the holy-water basin from Narbonne, now also preserved in the museum of Toulouse. So far as I know, no one has ever suspected this of being earlier than the end of the twelfth century.

The portal of Carennac<sup>3</sup> is of the school of the pilgrimage rather than of that of Burgundy, although the priory was Cluniac, and

<sup>1</sup> Illustrated by Vitry et Brière, *op. cit.* pl. XXVIII, fig. 6.

<sup>2</sup> Illustrated by Vitry et Brière, *op. cit.* pl. XXVIII, fig. 7.

<sup>3</sup> Illustrated by Baum, *Romanische Baukunst in Frankreich*, Stuttgart, Hoffmann, 1910, 4to, p. 89.

it is not certain that the pilgrims passed this way. In the style is conspicuous that mixture of influences which is the peculiarity of pilgrimage art. Influences of Burgundy are not absent; reminiscences of Santiago, of Souillac, of Toulouse may be traced. The division of the composition by horizontal and vertical bands recalls Conques on the one hand, and St.-Junien on the other. One has the impression at St.-Junien that the sculptor has been largely influenced by some work in metal, a *châsse* or an altar-



FIGURE 25.—DETAIL OF FRIEZE: CARRIÓN DE LOS CONDES (PALENCIA): SANTIAGO.

frontal such as those of St.-Gilles and Santiago described so minutely in the *Guide*. The peculiarities of the Carennac composition seem to be determined by the attempt to accommodate an original, rectangular in shape, to the lunette of a tympanum. One of the most striking borrowings at Carennac is

the head of the apostle to Christ's left in the second row. This is a modernized but faithful copy of Guglielmo's Jeremiah at Cremona.<sup>1</sup> As for date, the Carennac portal seems about contemporary with that of Conques. It may consequently be assigned to *ca.* 1130.

The tympanum at Mauriac presents obvious points of contact with that of Carennac. It is later and more Burgundian; and we notice here in the folds of the draperies over the abdomens the influence of the school of the West, which does not appear at Carennac. The lions under the jambs are certainly Lombard. Mauriac is situated in the remote mountains of Auvergne, and the style might well be retarded. I doubt whether this portal is earlier than 1150.

The composition of the fine frieze at Carrión de los Condes (Fig. 25) is certainly derived from a Limoges *châsse*; in this case we are able to put our finger upon the very model. It is the reliquary formerly at Santo Domingo de Silos, but now preserved

<sup>1</sup> Illustrated by Monteverdi, *op. cit.* p. 14.



in the museum at Burgos. There is further evidence that the chief master of Carrión—he obviously did not work alone—knew Santo Domingo; for his style is closely related to the well-known Annunciation of the cloister.<sup>1</sup> I almost question in fact whether that work be not by his very hand. The master of Carrión also sought inspiration in other quarters besides. He seems to have known the later work at Charlieu, and to have taken from it his hands and feet of such peculiar type, and the angel sculptured in relief on the column. Certain capitals and his organ-pipe draperies show knowledge of the façade of St.-Trophime of Arles. From Provence came also without doubt the idea of a sculptured frieze. The bestarred aureole may have been inspired by Conques. The voussures are derived from some monument of Saintonge, possibly Aulnay. Numerous motives have been taken from Toulouse and Santiago.

Since our sculptor knew the frieze of St.-Trophime, he must have worked after 1152. On the other hand he was earlier than Mateo. He shows no knowledge of the Portico de la Gloria, although he was clearly acquainted with the earlier work at Santiago. The activity of Mateo must have begun in the early 70's. We can, therefore, date the Carrión frieze to *ca.* 1165.

Aesthetically, this is one of the grand achievements of the twelfth century. Ruined and battered as it is, we recognize in it immediately the expression of a great creative mind. The apostles, especially to the left, are of superb contour and delicious rhythm.

The much restored Christ of the north portal of Lugo is inspired by the Christ of Carrión.

The inferior and later work at Mimizan also evidently owes much to Carrión. Mimizan, in turn, seems to have been one of the sources for the north portal of Chartres. The sculptor of the side portal at St.-Benoît-sur-Loire likewise appears to have known Carrión. The sculptures of Sauveterre have been ruined by restoration. Originally they probably came close to Mimizan, and showed points of direct contact with Spain.

A curious combination of influences is shown by a capital coming from Sahagún, now at San Marcos of Léon (Fig. 26). The artist had been to Santo Domingo de Silos and had been impressed by the sculptures in the cloisters. He combines heads copied from the early work of the eleventh century with draperies

<sup>1</sup> Illustrated by M. Bertaux in André Michel, *op. cit.* II, 1, p. 228.

taken from the Annunciation. He must, therefore, have worked after 1170. His activity is doubtless to be connected with the consecration of 1183.

A different set of influences came to the front in the extraordinary sculptures of Sangüesa (Fig. 27). The close relationship to the jamb sculptures of Chartres is obvious. The master of the left-hand side—he has signed his name, Leodegarius (Léger)—seems, indeed, to have drawn his inspiration solely from Chartres;



FIGURE 26.—CAPITAL FROM SAHAGÚN:  
SAN MARCOS: LÉON.

but the finer artist of the right-hand jamb knew St.-Loup-de-Naud and Autun as well. His sensitively modelled heads and his draperies both recall the Autun tympanum. In the tympanum and upper part of the façade other hands are at work. The Last Judgment of rudimentary type recalls the Moissac tympanum, but it surmounts a Virgin and Apostles in arches after the manner of Chartres. The spandrels are filled with miscellaneous bits of sculpture,

some of which show Lombard influence; the upper part of the portal with statues in niches is inspired by Pictave models. The architecture recalls Notre-Dame-la-Grande of Poitiers.

The date of Sangüesa is a delicate question. The church was given, it is known, to St. John of Jerusalem in 1132. It would be natural to suppose that the reconstruction was begun immediately afterwards. The sculptors of the portals, however, knew Chartres; and it is the orthodox belief that the portal of Chartres was not begun until 1145. Of all the derivatives of Chartres, Sangüesa is by far the most archaic; we may, therefore, assign the portal to *ca.* 1150.

The remarkable sculptures at Ripoll are a work of the same class. Jamb sculptures from the Ile-de-France, draperies like those of Gilabertus at Toulouse, *rinceaux* taken from Nicolò's work at Sagra S. Michele, voussures from St.-Denis, a saw-tooth moulding from Rome, monsters from Lombardy, drapery and

heads from the work of Guglielmo, a technique influenced by the bronze doors of Novgorod in Russia, all combined in a most extraordinary composition that follows episode for episode a tenth century Catalan manuscript. This work impresses one as later than Sangüesa, but it must have been executed before 1160.

San Miguel of Estella is distinctly more advanced. The convention of hatching to represent the feathers of the wings, common in Spanish sculpture of this period, is, perhaps, derived from Byzantine originals through ivories of the Ada group. The heads of the addossed figures of Estella are inspired by those of the right jamb at Sangüesa, but are coarser and later. Certain draperies seem to have been influenced by the master of Carrión. Others recall the façade of St.-Trophime of Arles. The prophets seem inspired by those of the Daurade at Toulouse. We are evidently about 1185.



FIGURE 27.—WEST JAMB: SANTA MARIA LA REAL: SANÜGESA (NAVARRA).

The master of San Miguel of Estella worked also at Tudela. Although these sculptures have been extravagantly praised, they do not seem, in point of fact, to be of extraordinary merit.

The work at Armentia is more interesting. This is in some ways the most typical of all the pilgrimage churches. Ideas borrowed from everywhere — caryatids from Chartres, apparently, however, not taken directly, but through some intermediary which I cannot determine; a tympanum that seems like the weakest and faintest echo of Autun; draperies borrowed now from Arles, now from the master of Carrión, now from Chartres; a labyramb and two angels that is like a magnification of an abacus

in the Moissac cloister; and withal a wistful tenderness—such is the work donated by the bishop of Calahorra, D. Rodrigo Cascante (1146–1190). These sculptors must have been active about the same time as the master of San Miguel of Estella, and they did



FIGURE 28.—DETAIL OF JAMBS: STE.-FOY:  
MORLAÁS (BASSES-PYRÉNÉES).

not know Mateo's work at Santiago. We may infer, therefore, that Armentía dates from about 1180.

A typical monument of pilgrimage art is, or alas was, the church of Ste.-Foy at Morlaás. A Cluniac priory on the road and dedicated to the great saint of Conques, it naturally fell under precisely the same influences as the monuments beyond the Pyrenees. The restoration of the nineteenth century has unhappily reduced the magnificent portal (Fig. 28)

to an even more pitiable state than the sculptures of St.-Sernin. What remains is, indeed, a modern copy. A few fragments preserved in the local museum and casts under the rafters of the roof are all that can give an idea of the quality of what must have been one of the most interesting portals of southern Europe.

A conspicuous element in the style is the evident Burgundian influence. The twin portals with tympana grouped under a larger tympanum recall Avallon. It is true that twin portals are characteristic of Santiago, where the iconography of the north portal with Christ and the evangelists had analogies with Morlaás. Since the tympana of both Santiago and Avallon are destroyed, an exact conclusion cannot safely be drawn. The

Flight into Egypt of the right-hand tympanum resembles vaguely the unforgettable rendering of the same theme at Bois-Ste.-Marie. The addossed jamb figures are placed high up, in the Burgundian manner; they float like the figures on the archivolt of Anzy-le-Duc. The movement of the angels in one of the capitals to the left is distinctly Burgundian. There is noticeable likewise the influence of the master of the southern porch of St.-Sernin who also worked at Santiago. His are the draperies, his the feet, his the movement of the apostles. From Lombardy came the caryatids of the trumeau and of the vous-sure with the elders. The elders themselves, like the figures of the outer vous-sures, all seated on a roll-moulding, are later derivatives of the north portal at Toro. We are clearly at the beginning of the last quarter of the twelfth century.

In the cloister of Oviedo are two curious reliefs, dating, perhaps, from about 1200, representing Peter and Paul. This strange art, in which the vigorous archaic modelling of the draperies and bodies contrasts so strangely with the Gothically immobile faces, reappears at Santillana del Mar, where in the cloister are, by the same hand, a Virgin, a Santa Juliana with devil, and a most impressive Christ. The strange altar at Santillana is of a different style, and not closely connected with any other work known to me. Its least distant relatives are Leire on the one hand, and the Puerta de las Platerias on the other; as both of these are stations on the road, it may be in a manner considered a derivative of the art of the pilgrimages, as the crude sculptures of San Quirce may be grouped with Leire.



FIGURE 29.—TWO  
APOSTLES: CÁMARA  
SANTA: OVIEDO.

We have now arrived at the moment when there dawned in Spain a third period of sculpture, unhappily of brief duration, but in some respects even more brilliant than that which opened the twelfth century. This golden age is ushered in by the sculptures of the Cámara Santa of Oviedo (Fig. 29). In the dim light

of a small chapel, the figures of supernatural apostles are addossed two by two against the vaulting-shafts. An Egyptian solemnity invests these sculptures, which, indeed, unite the fervor and imagination of Spain, the restraint of France, the delicacy of Burgundy, the strength of Toulouse, and the mystery of the Middle Ages. In comparison even the Portico de la Gloria seems coarse and cold. This, not that, is the supreme masterwork.

Who was this superhumanly gifted sculptor? I was at one time tempted to believe that the Oviedo Cámara Santa was an early work of Mateo. But the hypothesis, seductive as it is, cannot be held. Notwithstanding the many analogies, the difference in style is too great. The Oviedo master is a comet which flashes with extraordinary brilliance across the horizon, then disappears. At a period when the sculptors of northern France were listlessly repeating the timeworn gospel of Chartres; when Provence was sinking into such senility as the tympanum of Maguelonne; when Benedetto had not yet awakened Lombardy to new life; when his own compatriots were patching together works out of stolen fragments with as little conscience as a modern architect and as little coherence as a crazy quilt, this unknown artist created out of his own genius a great and a new manner. We can say that he is related to, or even derived from, the sculptures at Carrión; but we still have not plucked the heart of his mystery. Nothing in Toulouse, nothing in Languedoc, nothing in Spain (unless it be Santo Domingo de Silos), I almost wrote nothing in Europe, surpasses the apostles of Oviedo.

Mateo knew Oviedo, certainly. He knew much else besides. The Christ of the Puerta de las Platerias (Fig. 11), which must be part of the original doorway, since specifically mentioned in the *Guide*, exercised a profound influence upon Mateo as, indeed, upon much other work of the twelfth century. The "organ-pipe" draperies so familiar at Arles seem for example to have been here originated. Mateo's lovely St. James (Fig. 30) is certainly derived from this model.

From Vézelay Mateo came by his jamb sculptures, raised above the columns; the great figure of the Deity in the centre of the tympanum, and the figure on the trumeau below; perhaps, too, the idea of a porch. From Lombardy—or was it peradventure Apulia?—came the figure which passes as the portrait of the artist, and the monsters under the columns, the latter, perhaps, by the way of Provence. From Arles came, I suppose, the pro-

portions of his jamb figures, which seem to approach this canon more closely than that of northern France.

The result of these influences, plus the genius of Mateo, was the first work of Gothic sculpture in Europe. Neither the Porte-Ste.-Anne of Paris, nor the jambs of Senlis foreshadowed to such an extent the future development of the style. It is not too much to say that the work of Mateo stood to the thirteenth century in much the same relationship as that in which the early school of the pilgrimages stood to the twelfth century.



FIGURE 30.—PORTICO DE LA GLORIA: CATHEDRAL: SANTIAGO DE COMPOSTELA (LA CORUÑA).

Little of Mateo's life is known. We find him at work at Santiago in 1168; twenty years later the doors of the Portico de la Gloria (Figs. 30 and 31) were hung, so that the sculptures must have been essentially finished by this time. As late as 1217, however, he was still master-builder at Compostela.

The Portico de la Gloria is in quality less fine than the Cámara Santa of Oviedo. This or that detail has been surpassed by this or that master of northern France. But for the sum of the impressions it remains, perhaps, the most overwhelming monument of mediæval sculpture.



FIGURE 31.—GROUP OF SAINTS: PORTICO DE LA GLORIA: CATHEDRAL:  
SANTIAGO DE COMPOSTELA (LA CORUÑA).

Notwithstanding the casts which were made for the South Kensington Museum, the polychromy is still on the whole well preserved. This singularly increases the realism of the figures. In northern Europe the coloring of the statues has usually been destroyed; but one suspects that it was never as vivid and naturalistic as that which still remains on Mateo's work. These figures are, indeed, almost startling, they seem so to jump out at us; their effect may be compared to that produced by certain Florentine painters of the Quattrocento such as Castagno or Pollaiuolo. Their existence is realized with extraordinary facility. They anticipate the naturalism of Claus Sluter.



We have here not the mystic profound art of the Gothic cathedrals of the north; it is much more a good-natured realism not without a streak of vulgarity; an art which would impress quickly the passing crowd and required no painstaking study for its appreciation. In all this it is fair to see the point of view of the average pilgrim with his interest in the extraordinary, his *bon-homme*, and his, perhaps, not over-profound intellect.

The influence of the art of Mateo, as might be expected, was enormous. The sculptures of the cathedral of Orense have long been recognized as having been inspired by the Portico de la Gloria. Although they are assuredly far from equalling their original, they by no means deserve the aspersions which it has been fashionable to heap upon them. The western portal of San Vicente of Avila is one of the best works inspired by Mateo; in quality it is indeed little if at all below his level. It seems here as if the Mateo tradition had been purified by fresh drafts from Burgundy. The Annunciation of the west portal, as M. Bertaux recognized, is by the same hand. Ciudad Roderigo and Toro may also be considered as derivatives of Mateo.

But it was not only in Spain that the influence of Mateo was felt. His art, as little as that of his predecessors, found in the Pyrenees a barrier.

The sculptors of Bamberg sought inspiration from Mateo. It has been much discussed whether the apostles and prophets of the choir screen are derived from Saxony, from Byzantine tradition, or from Toulouse. It is probable that the sculptor was acquainted not only with Saxony and the sculptures of St.-Etienne and Cahors, but also with the jamb sculptures of Santiago. His Isaiah<sup>1</sup> is reminiscent of the prophet to the left of the left-hand doorway at Santiago. This Compostelan prophet seems indeed to have inspired the facial type of the school of Bamberg. The Bamberg sculptors were also influenced by the Daniel of Santiago (Fig. 31, second statue from left). The Hosea<sup>2</sup> is manifestly inspired by this model of which it reproduces even the curls. The Bamberg "smile" may as well be derived from Santiago direct, as via Reims.

Internal evidence, therefore, justifies the inference that the master of Bamberg had been to Compostela. Now there is external

<sup>1</sup> Illustrated by Weese, *op. cit.* p. 7. It is the prophet holding a saw, next to the David.

<sup>2</sup> Illustrated by Weese, *op. cit.* p. 4.

proof that he had been to the Holy Land. He has sculptured his own portrait in the tympanum of the Gnadetür. On the sleeve of his coat may clearly be seen a cross, indicating that he had made the pilgrimage to the Holy Land. We are probably justified in assuming that, like so many others, he combined this journey with that to Santiago.

It was, however, in France that the work of Mateo proved most fecund. His St. James on the central trumeau of Santiago (Fig. 30) is the ancestor of the Beaux Dieux of Chartres and Amiens. The great porches of Chartres were, perhaps, inspired by Mateo's Portico de la Gloria, which, as originally built, must have produced a not dissimilar effect.

The sculptors of Reims sought inspiration at Santiago. The statue of Daniel, on the left jamb of the Portico de la Gloria (Fig. 31, second statue from the left) determined the type which gives the school of Reims its peculiar and unforgettable character. It is the influence of archaic Santiago that lifts Reims above the classicism and monotony of the work at Amiens or the south portal of Chartres. Everywhere through the cathedral of Reims echoes and rëechoes the theme of the Daniel of Santiago, but varied and beautified. We recognize it in the angels of the buttresses, in the angel of the Annunciation, almost unaltered in the Sourire, embellished and transposed, but still unmistakable in the Joseph, in the Anna, in the Queen of Sheba, in the Solomon, in the caryatid of the west façade, in the angels of the Coronation.<sup>1</sup>

It is, I think, admitted by competent critics that the sculptures of Reims show German influence. It has not, however, so far as I am aware, been remarked that the head of a prophet about the rose of the south transept<sup>2</sup> reproduces the Jonah of the Bamberg choir screen.<sup>3</sup> The Reims figure, I think, must be a work of that sculptor of the second atelier at Bamberg, who has been suspected on independent grounds of having been connected first with the earlier atelier at Bamberg, then with Reims (where he shows himself especially familiar with the transepts) before being called to direct the second Bamberg atelier. I detect, indeed, his hand at Reims also in an angel of a buttress of the south façade.<sup>4</sup> The suspicion arises that it may have been this master

<sup>1</sup> All these sculptures are reproduced by Vitry, *La Cathédrale de Reims*, Paris, 1920, Folio.

<sup>2</sup> Illustrated by Vitry, *op. cit.* II, pl. LVII.

<sup>3</sup> Illustrated by Weese, *op. cit.* II, p. 4.

<sup>4</sup> Illustrated by Vitry, *op. cit.* II, pl. LXVIII.

who fetched the smile of Mateo's Daniel from Santiago and handed it on to the "Joseph master" of Reims.

However this may be, the debt of the sculptors of Reims to Santiago does not end with the smile. Other facial types appear to be derived from the same original. More than this, the Reims sculptors owe to Santiago one of their happiest innovations. At Chartres, at Amiens, at Senlis, in all the older northern French portals, the jamb figures stand in rigid rows, facing nearly or quite stark outwards. Mateo had animated his (Fig. 31); they turn as if to talk with each other. Now this motive of Mateo's is reproduced at Reims.

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## AN AMPHORA OF NICOSTHENES IN BALTIMORE

AMONG the vases at the Johns Hopkins University in Baltimore is an amphora signed by Nicosthenes, which, so far as I know, has not been published. It was purchased in 1887 along with several other vases by a few members of the Baltimore Society of the Archaeological Institute of America, and is said to have been found



FIGURE 1.—AMPHORA OF NICOSTHENES: SIDE A: BALTIMORE.

near Caere, whence came so many of Nicosthenes' vases. It is undoubtedly the vase listed by Klein<sup>1</sup> as from Caere in the *Magasin Ruspoli*. Klein speaks of "*Am Hals je ein Faustkämpfer*," whereas in reality there are two boxers on each side, but my friend and former teacher, the late Professor Loescheke of the University of Bonn, and later of Berlin, told me that this vase and an archaic Attic hydria with the Perseus story, which is also in Baltimore in my own collection, came from the Ruspoli collection, where he had seen them.

The amphora is 0.30 m. high.<sup>2</sup> Part of the lip on one side (Fig. 1) has been restored. The amphora is of the elongated metallic form, invented by Nicosthenes, with projecting moulded

<sup>1</sup> *Die Griechischen Vasen mit Meistersignaturen*<sup>2</sup>, 1887, p. 64, No. 45.

<sup>2</sup> 0.155 m. to the first ridge and 0.034 m. from there to the next ridge. Height of neck from small ridge at base 0.075 m. 0.12 m. across top of mouth. Diameter of foot 0.10 m. Greatest circumference below lowest ridge 0.525 m., on ridge 0.535 m. Smallest circumference around neck 0.20 m. Breadth of handle to left of signature 0.05 m., to right from 0.042 m. to 0.047 m. Inside the mouth

ridges on the body, broad flat handles, neck with concave profile, and conical mouth. The form was popular with the prolific factory of Nicosthenes, the most productive of all Greek potters known to us, who out of nearly a hundred signed vases or fragments preserved made fifty-two or more amphoras.<sup>1</sup> The shape was more probably borrowed from Ionia, as Pottier<sup>2</sup> says, than from Ionic Etruscan bronze jugs.<sup>3</sup> The clay is reddish-buff and covered with a buffish slip, a practice which was followed even in Mycenaean days, but which was especially characteristic of the Ionian fabrics. Nicosthenes may have learned the art at Naucratis, where his signature has been found,<sup>4</sup> and he introduced the idea into Attica. Several artists probably painted for Nicosthenes' factory which produced mostly black-figured vases, but also seven or so in the mixed or red-figured technique, among these artists Epictetus and Beazley's "Death and Sleep Painter";<sup>5</sup> but the main designs on many of the amphoras are little more than decorative. Such is the case on the Baltimore vase except on the neck where there is a figured scene. The designs on Nicosthenes' vases, as here, are not executed with care but they show a progressive spirit and originality.

Just above the ridge at the top of the flaring foot of the vase is a ray pattern, then a broad wavy or zigzag line in the color of the slip, then a frieze of rays with the pointed ends downwards, then a tongue pattern, and between the projecting ridges a double ivy leaf pattern. On the shoulder is a meander pattern with alternate two broad black bands, the lower 0.018 m. broad, the upper 0.017 m. broad, separated by a strip of red clay 0.007 m. wide, then a strip of red 0.005 m. wide, then a narrow black band, and then black rays pointing inwards.

<sup>1</sup> Cf. *Wiener Vorlegeblätter*, 1889 and 1890-91; Walters, *History of Ancient Pottery*, I, pp. 384 ff.; *Louvre Album*, pls. 70, 71; *Gaz. Arch.* 1887, p. 108; *Röm. Mitt.*, V, 1890, pp. 322 ff.; *Arch. Anz.* IX, 1894, pp. 180 ff.; *J.H.S.* XVIII, 1898, p. 292; etc. Boulanger, *Nikosthénès, un atelier de céramique à Athènes au temps des Pisistratides*, an unpublished dissertation cited by Perrot, *Histoire de l'Art dans l'Antiquité*, X, p. 256, mentions 89 signed vases or fragments. Nicole, *R. Arch.* IV, 1916, pp. 388-391, 61, lists 94. But four have recently been found at Veii and there are others including a fragment in the Fogg Museum in Cambridge, Mass. Perhaps those mentioned by Nicole, *op. cit.* 61, No. 93, as found at Caere, are the same as those from Veii in the Museo di Villa Giulia.

<sup>2</sup> *B.C.H.*, XVII, 1893, pp. 431 ff.; also Buschor, *Greek Vase-Painting*, p. 87.

<sup>3</sup> Cf. Loeschke, *Arch. Zeit.* XXXIX, 1881, p. 35.

<sup>4</sup> Cf. Dumont et Chaplain, *Les Céramiques de la Grèce propre*, p. 312; *Brit. Mus. Cat.* II, p. 272, No. B600<sup>es</sup>.

<sup>5</sup> Hoppin, *A Handbook of Attic Red-figured Vases*, II, pp. 224 f.; Beazley, *Attic Red-figured Vases in American Museums*, p. 23.

ing meanders of different form, as is shown clearly in Figures 1 and 2, and above this again a tongue or godroon design. On the handles (Fig. 1) are in one case—to right of signature—two rows of twenty-six black rays pointing toward the centre, and on the other twenty-five such rows.

On the neck of the vase on either side is represented a boxing



FIGURE 2.—AMPHORA OF NICOS-  
THENES: SIDE B: BALTIMORE.

match between two short-haired nude youths, whose hands are covered with straps of leather to protect them, *ιμάντες* called *αἱ μελίχαι*,<sup>1</sup> supposed to be innocent and safe as the name implies when compared with the more brutal and harder *σφαῖραι* or *μύρμηκες* or cestus of later date as seen on the famous bronze boxer from Sorrento.<sup>2</sup> The *μελίχαι* were long strips of untanned hide, probably kept soft in some way, wound on our vase diagonally across the front and back of the closed hand<sup>3</sup> and several times about the wrist.<sup>4</sup> On one side (Fig. 1) where the modern restoration is, the head and arms of the combatant to the left are missing, though a bit of both elbows remains. He has his left foot advanced and his opponent likewise advances the left foot.

His left arm (hand missing) is stretched well forward and his right arm is bent at the elbow with his right

<sup>1</sup> Cf. Paus. VIII, 40, 3; Plato, *Laws*, 830 B; Jüthner's edition of Philostratus, *Gym.* 10; Apol. Rhod. *Argonautica*, II, 52–53.

<sup>2</sup> Cf. Brunn-Bruckmann, *Denkmäler Gr. und Röm. Sculptur*, pl. 248.

<sup>3</sup> Brauchitsch, *Die Panathenäischen Preisamphoren*, p. 145, thinks that the fingers and ball of the hand remained free, but they are not so represented on the Baltimore vase.

<sup>4</sup> Cf. *Arch. Zeit.*, XLI, 1883, pl. II; Baumeister, *Bilder*, fig. 33, *Brit. Mus. Cat. of Vases*, III, pl. III; Jüthner, *Antike Turngeräthe*, pp. 66 ff.; Gardiner, *Greek Athletic Sports and Festivals*, pp. 402 ff.; Frost, *J.H.S.* XXVI, 1906, pp. 213 ff.; Hyde, *Olympic Victor Monuments and Greek Athletic Art*, pp. 234 ff.

hand raised above and behind his head. This is the usual position in representations of boxing. Mr. Frost<sup>1</sup> holds that this is merely a conventional rendering and that the Greek boxer stood with his feet nearly level. But, as Gardiner<sup>2</sup> says, "so far from holding the body square, it would appear from the vases that the Greeks exaggerated the sideways position. For frequently the left foot and left arm of one boxer are represented as outside, or to the right of the left foot and arm of his opponent," as on the amphora<sup>3</sup> signed by Nicosthenes and illustrated by Gardiner,<sup>4</sup> where the position of the boxers, and especially of the figure to the right with his raised right hand is very similar to ours. There, too, the two figures have short stocky legs and big hips as on our vase and the eye is rendered in full front. On our vase even the incised breasts are in full front view and on the figure to the right seem to be on the boxer's back.

On the other side of the neck (Fig. 2) both figures are well preserved. The one to the left is lunging forward with his left leg slightly bent and left foot advanced, head and body erect. His right arm is drawn back, bent at the elbow which is raised level with the shoulder, the fist held down ready to strike. His left arm is stretched upward and forward, the hand closed, somewhat similar to the boxer to the left on the Panathenaic amphora illustrated in Gardiner, *op. cit.* p. 427, Fig. 148. His breasts are in front view, though those of his opponent are correctly given in profile, and his eye like that of his opponent is in full front and round, whereas the eye of the man on the other side of the vase is almond-shaped. The position is that assumed by the Greek boxer after he first puts up his hands, and it is frequently depicted on the vases.<sup>5</sup> His opponent draws back his head out of reach of the opening lunge and guards himself with both hands, holding up and back his right hand, ready to strike, and protecting his face and upper body also with the outstretched left hand across his opponent's left. The position is quite similar to that on the Panathenaic Berlin amphora pictured by Gardiner.<sup>6</sup> Gardiner<sup>7</sup> speaks of this symmetrical position which is so common in

<sup>1</sup> *Loc. cit.*

<sup>2</sup> *Loc. cit.*

<sup>3</sup> Brit. Mus. B. 295.

<sup>4</sup> *Op. cit.* p. 420, fig. 143.

<sup>5</sup> Cf. Gardiner, *op. cit.* p. 419.

<sup>6</sup> *Op. cit.* p. 422, fig. 144.

<sup>7</sup> *Op. cit.* p. 419.

wrestling groups, where one boxer is represented with right foot advanced, as extremely rare, though it occurs on the Panathenaic vase illustrated by him on p. 407, Fig. 135 in the boxer to the left. Our vase thus adds one more exception to the usual rule,<sup>1</sup> and also shows how the Greek boxer followed the American style of boxing rather than the old English style, using both hands freely, being active on his feet, and varying his attack. The stiff high guard on our vase also confirms the idea that the Greek boxer hit only at the head, which would explain why the body is so often left unguarded in representations of boxing.

It remains to mention the signature which runs below the boxers last described. It is of the usual form and is perfectly preserved except for the first epsilon. ΝΙΚΟΣΘ[Ε]ΝΕΣΜΕΓΟΙΕΣΕΝ. The Baltimore vase, then, is of importance not only to the student of Greek athletics for the rendering of a boxing match<sup>2</sup> in a rare way, but to the student of Greek vases because it is another amphora signed by Nicosthenes dating about 530 B.C. or earlier—the only one in America<sup>3</sup> so far as I know.

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<sup>1</sup> Gardiner, *op. cit.* p. 426, says that the vases "do prove undoubtedly that the Greeks understood how to give force to a blow by lunging, and inasmuch as the lunge is always with the left foot, it seems probable that they understood the importance of not changing feet." Our vase would seem to indicate that they did change the position of the feet, at least in guarding in early days.

<sup>2</sup> Boxing was a Greek sport from the earliest to the latest days. The Minoan rhyton (Hall, *Aegean Archaeology*, pl. XVI) from Hagia Triada in Crete shows several boxing groups, and Homer describes a boxing match in *Iliad*, XXIII, 699 ff. Cf. Hyde, *op. cit.* pp. 234-246.

<sup>3</sup> There are other shapes by Nicosthenes, at Bryn Mawr College (*A.J.A.* XX, 1916, p. 316; in Philadelphia (*A.J.A.* XIII, 1909, pp. 142 f.); Boston (*Report of Boston Museum*, 1900, p. 36; 1901, p. 36; 1903, p. 70; Nicole, *op. cit.* 61, Nos. 77, 87, 88); and New York (*B. Metr. Mus.* X, 1915, pp. 98 ff.); there is an unpublished, unsigned handle of such an amphora at the University of Chicago; and in the Fogg Museum, Cambridge, Mass., a fragment of an amphora with a silen and the signature. The date 530 to 520 B.C. agrees with the conclusions drawn by Langlotz in his recent important monograph, *Zur Zeitbestimmung der strengrothfigurigen Vasenmalerei und der gleichzeitigen Plastik.*



DYNAMIC SYMMETRY FROM THE DESIGNER'S  
POINT OF VIEW

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THE proportions of Athenian vases have always been a source of special delight to lovers of Greek art. The effect of a well-made Attic shape is, indeed, so peculiarly satisfying to our artistic sensibilities that we have long vaguely felt that there must be a definite underlying principle that makes it so; in other words, that the whole must be an interrelated theme, in which the proportions of the different parts to one another are all nicely thought out. For Athenian pottery is, as has been well said, the only "architectural" pottery in the world. It shares with Chinese or Persian pottery beauty of curve; but in contrast to both of these it is strongly articulated. While one fine curve is what the oriental artist mostly aimed at, the Greek liked to separate the different parts of his vase from one another. He not only considerably narrowed the neck and the base of his body, but generally broke the continuity of his line at these points, making the neck, the body, and the foot three clearly defined parts; and by occasional further articulations in the neck and the foot and by the regular addition of handles he introduced still more divisions. The proportion of these distinct parts to one another give a Greek pot its unique quality of a well-designed piece of architecture. How important an element this subtle interrelated proportion is can be seen when we look at modern imitations of Greek forms, which, though they often correspond fairly closely in general outline to their models, almost invariably lack the element of vitality so conspicuous in the Athenian products.

Was this extraordinary sense of proportion so inborn in the Greek artist that he attained it unconsciously in whatever he created? Or did he produce it only after deliberate and painstaking effort? It is hard and, perhaps, impossible to decide this question definitely; but we may look at the evidence at hand. We know that temperamentally the Greek artist was very willing to exert himself. To him art was not something to be produced on the spur of the moment in a haphazard fashion, but the result of highly trained endeavor. Not only could he stick to a few

structural problems in sculpture almost for generations until they were satisfactorily solved—a feat that no artist before him had performed; but he planned for himself carefully worked-out canons of proportion in the human figure which held sway for long periods at a time. In architecture he was equally painstaking. The gradual development of the echinus outline in the Doric capital is proof enough of how absorbing the perfect solution of a single problem was to him; and the subtle refinements of temple buildings have long ago convinced us of the painstaking work which went to produce the results we admire. So that the Greek sculptor and architect, at least, did not rely solely on their artistic inspiration—though they had an unusual amount of it!—but worked hard on laws governing their art and applied them with assiduity.

It is, therefore, not a far-fetched idea to suppose that an Athenian potter was akin in spirit to his fellow artists; that he did not make his shapes as the whim dictated, but designed them beforehand, and then executed them to given measurements. That would be the practice of a potter of standing at the present day. He pins a drawing of his shape on a board by his side and controls the widths and heights of the pot he is making by the use of rules and calipers. Why should it not have been the same with his Greek predecessor who temperamentally was even more prone to fastidious, accurate work,—as the highly finished character of his products shows? Since Athenian pottery is invariably “turned” as well as “thrown” on the wheel, a design could be copied with great faithfulness, while the shrinkage in the fire was, of course, proportional.

But if we concede that it was natural for the Athenian potter to design his vases before making them, and that their harmonious proportions are not improbably due to conscious calculation, there comes the further question: What proportional scheme did he use in his design? In the past we have not devoted much attention to this important question, simply because we had no clue as to what this proportional scheme was. It is true that Vitruvius mentions a linear unit in architecture and sculpture, but this has been given up as unworkable, so it seemed useless to apply it to pottery. But now Mr. Jay Hambidge has come forward with an entirely new suggestion.<sup>1</sup> According to him the different parts of an Athenian vase are not interrelated in linear

<sup>1</sup> Cf. *Dynamic Symmetry, The Greek Vase*, Yale University Press, 1920.

proportion but in surface areas. In other words, the proportion is not arithmetical but geometrical. And it has this further property that it is the same proportion which is operative in nature; for it apparently occurs in plant and shell life and, perhaps, even in our own skeletons. So that it is not an arbitrary formula, but a principle identical with that underlying the processes of natural growth, and as such one that would help to explain the peculiar sense of rhythm and vitality of Greek art. To support his theory Mr. Hambidge has measured—or rather had measured for him—a large number of vases in different museums, analyzed them according to his geometrical scheme,<sup>1</sup> and found that they conformed with surprising accuracy. Mr. Caskey has done the same with over two hundred vases in the Boston Museum and has come to the same conclusion. Professor Rhys Carpenter, however, in a recent number of the *AMERICAN JOURNAL*



FIGURE 1.—AMPHORA: METROPOLITAN MUSEUM: NEW YORK.

of *ARCHAEOLOGY*, 1921, No. I, pp. 17 ff., has not only questioned this evidence, but presented what to him appear serious objections to the theory. As the question at issue is of importance, and Mr. Carpenter's difficulties are not those of a single person but shared by others who, perhaps, have not gone so fully into the matter as he has, it is worth while to meet these objections, if possible.

Mr. Carpenter's two chief contentions are briefly that (a) Mr.

<sup>1</sup> In this article we take for granted an elementary knowledge of this scheme on the part of our readers. We are throughout using the terms adopted by Mr. Hambidge.

Hambidge's geometrical ratios are purely accidental and, perhaps, due to skilful manipulation on the author's part; and in many cases an arithmetical linear ratio can be made to serve as well; and (b) that to obtain Mr. Hambidge's geometrical ratios is a matter of such abstruse mathematics that we cannot credit the "humble slaves" which produced Athenian pottery with this advanced knowledge.

Mr. Caskey in his *Geometry of Greek Vases*, pp. 26-34, has dealt at length with Mr. Carpenter's attempts to translate dynamic ratios into linear units, and we will refer the reader to his conclusions. I propose here to deal chiefly with Mr. Carpenter's other contention—that the dynamic scheme is so "redoubtable" and "mystifying" that it is unlikely to have been used by the Athenian potters. To try and settle this point we must be no longer analyzers of Greek vases, but designers of them. In other words, we must no longer deal with a vase as a finished product, of which the proportional scheme has to be determined, but with the shape as it might exist in the brain of the artist. Let us imagine, then, that we are the Greek potter who is designing the beautiful black-figured amphora (Fig. 1)—a vase chosen at random,<sup>1</sup> as one of obviously fine proportions and one that has not been hitherto measured. The measurements of this amphora are:

Total height . . . . .	47.1 cm.
Total width . . . . .	38.2 "
Width of lip . . . . .	24 "
Height of lip . . . . .	3.5 "
Smallest width of neck . . . . .	15.5 "
Height to bottom of neck . . . . .	10.6 "
Height of foot (with moulding) . . . . .	3.8 "
Width of foot . . . . .	20.6 "
Height of handles . . . . .	44.5 "
Height to projection of handles . . . . .	34.55 "

The dynamic ratio of its containing rectangle, *i.e.*, its height divided by its width, is 1.236, which is "two whirling squares." To obtain such a rectangle all we have to do is to draw one whirling square AN on top of another MW—a very simple geometric exercise (cf. Fig. 2). By applying a square FW in the whole

<sup>1</sup> This amphora and the kalpis described below are both recent accessions of the Metropolitan Museum of Art. The measurements were taken by Miss Van Ingen, an assistant in the Classical Department, Mr. Bollo, the Museum designer, and myself, the three of us checking one another's conclusions continually.

figure AW, and by subdividing the whirling squares into their component parts of squares and smaller whirling squares—again a very simple undertaking—and by drawing the diagonals of the chief figures so formed, we obtain the salient points as follows:

Width of lip = intersection of the diagonals BJ and EH

Height of lip = intersection of the diagonals CJ and EH

Smallest width of neck = intersection of the diagonals BN and GE

Height of foot = intersection of the diagonals PU and TQ

Greatest width of foot = intersection of the diagonal FW and side PS (error of 1 mm.)

Height of handles = intersection of the diagonals CH and BJ

The little moulding marking the bottom of the neck comes exactly on the line of a 1.045 figure applied within the 1.236

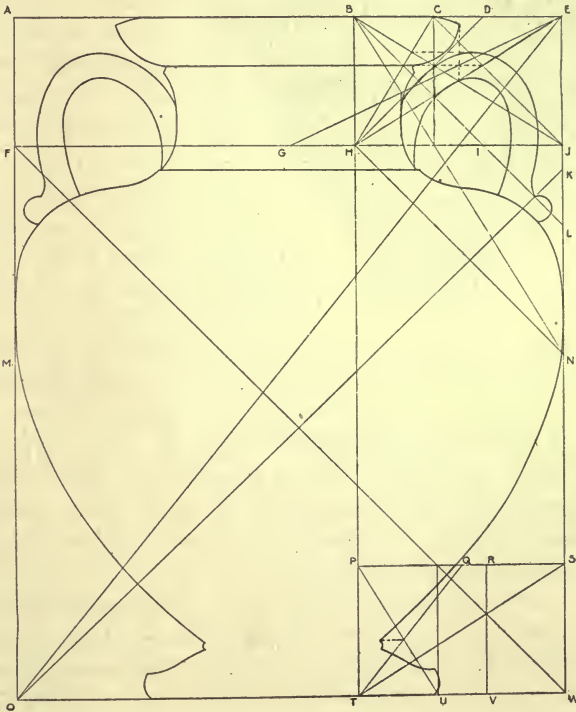


FIGURE 2.—ANALYSIS OF AMPHORA IN METROPOLITAN MUSEUM.

figure; and the intersection of the diagonal of this 1.045 figure, KO, and of the square, BL, gives us the point of the projection of the attachment of the handle—a conspicuous point in the design.

What is there mystifying and abstruse in this drawing,<sup>1</sup> which with the help of a rule, a T square and dividers can be made in a few minutes, and which presupposes only the elementary knowledge of the chief subdivisions of a whirling square? Though arithmetically these rectangles with their decimal ratios may seem "redoubtable," geometrically—which is the way the designer used them—they can be mastered by a child of ten. And



FIGURE 3.—KALPIS: METROPOLITAN MUSEUM: NEW YORK.

yet there is nothing mechanical in designing a vase by this method. The choice of points—which is the most important part of the design—is left entirely to the instinct of the artist; so that all the method supplies is a useful framework within which the imagination can play at will. We may guess that the artist's procedure was, perhaps, as follows. First he drew freehand a rough sketch of his shape; then he put

this into a containing rectangle of dynamic ratio, drew his subdivisions and diagonals, checked thereby his proportions, and then altered these where necessary to make them conform to the dynamic scheme. In time his eye may well have become so trained that there were hardly any alterations in his first sketch.

To take another example, this time a red-figured kalpis, purchased recently by the Metropolitan Museum (Fig. 3)—likewise a beautiful shape not hitherto measured. The measurements are as follows:

Greatest height . . . . .	37.55 cm.
Width, with handles . . . . .	39.6 "
Width of body . . . . .	31.5 "
Width of lip . . . . .	14.6 "
Smallest width of neck . . . . .	9.7 "

<sup>1</sup>It must be remembered that the drawings have been reduced one-fifth of their full size.

Width at bottom of body .....	9.2	cm.
Width of foot .....	13.8	"
Height of foot (with moulding) .....	2.21	"
Height of handles at side .....	25.89	"
Height of handle at back .....	35.85	"
Height to top of panel at shoulder .....	31.55	"
Height to top of palmette border .....	23.35	"
Height to bottom of palmette border .....	20.15	"

These give the following ratios:

Rectangles formed by the greatest height and the greatest width (*i.e.*, including the handles), 1.0557, which is the reciprocal of the figure made up of half a square plus the reciprocal of a root five rectangle ( $.5 + .4472$ ).

Rectangle formed by the greatest height and the width of the body, 1.191, which is two squares minus half a whirling square ( $2 - .809$ ).

From the designer's point of view these "redoubtable" rectangles are obtained by very simple methods. The drawing of a square, its bisection, and the addition of a root five rectangle on the longer side of the half square gives the allover shape (Fig. 4). By subdivisions of the obvious component parts, such as drawing

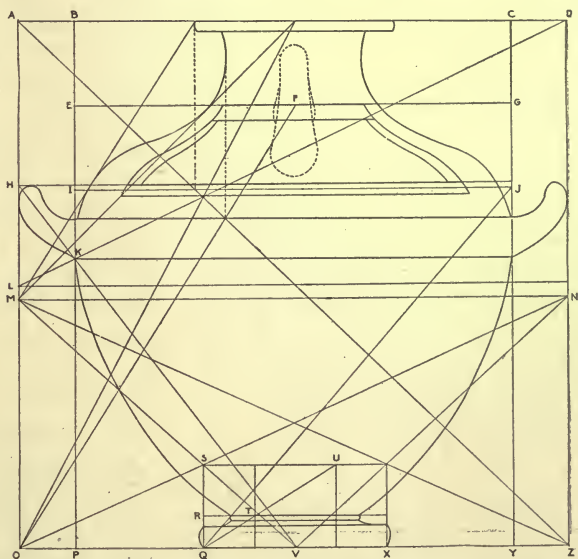


FIGURE 4.—ANALYSIS OF KALPIS IN METROPOLITAN MUSEUM.

a square EY and a .809 figure IY in the 1.191 rectangle, and by drawing the diagonals to these figures, the salient points are easily obtained as follows:

Width of lip = intersection of the diagonal AZ and the side IJ (of the .809 figure)  
 Smallest width of neck = intersection of the diagonals AZ and OF  
 Width at bottom of body = intersection of the diagonal QJ with side RT  
 Width at top of foot = intersection of the diagonals MZ and VN  
 Height of foot = intersection of the diagonal QU and side RT (of square in  $\sqrt{5}$  rectangle SX)

Height of handles at side = continuation of line VK to side AO  
 Attachment of handles at side = intersection of diagonal LD and side BP  
 Height to top of panel on shoulder = end EG of square EY  
 Height to top of palmette border = intersection of diagonals OF and AZ  
 Height to bottom of palmette border = intersection of diagonal LD and side BP

The whole performance amounts to a rather delightful drawing

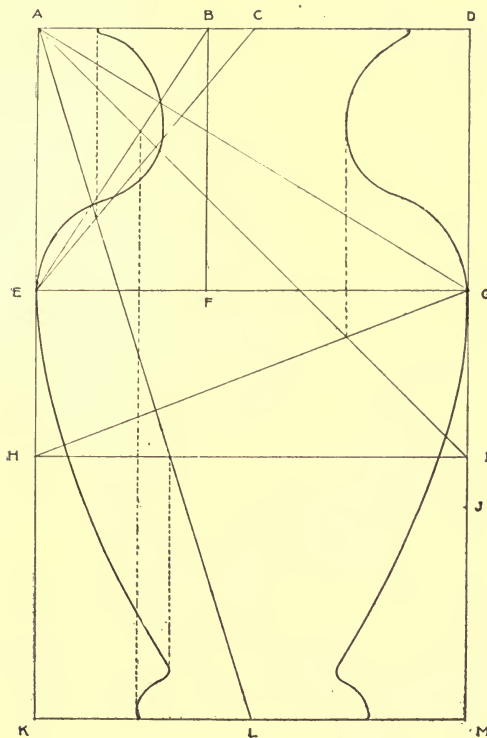


FIGURE 5.—ANALYSIS OF MODERN VASE.

exercise without any use of complicated ratios or numbers—one which we can well credit any intelligent Greek to master with ease. Mr. Carpenter makes much of the supposed ignorance and lowly status of the potters. As a matter of fact these potters were merely non-citizens, foreigners who might be highly intelligent people. And all we have to judge them by—their work—shows us that they were masters of their art; so highly expert in all the technical difficulties of their profession, that their intelligence is vouched for.

As a third example let us take not a Greek vase but a modern one, which was designed and executed according to dynamic



symmetry (Fig. 5). As it is a very simple scheme, it may help to show how easy such a design can be. The containing rectangle (the greatest height, 25.4 cm., by the greatest width, 15.7 cm.) has a ratio of 1.618. That is, it consists of a whirling square, obtained by drawing a square EM, bisecting one side of it at J, and making the line DJ equal to the line EJ. We apply a square in this figure on the end AD, and thereby have two squares overlapping to the extent of figure EI. We likewise apply a square in the smaller whirling square AG, namely BG. If we draw the diagonals of the figures thus formed, our salient points are obtained very neatly as follows:

- Width of lip = intersection of the diagonals AL and EC
- Smallest width of neck = intersection of the diagonals AI and HG
- Width at base of body = intersection of the diagonal AL with side HI
- Width of foot = intersection of the diagonals AI and EB

Now let us turn to the method of work advocated by Mr. Carpenter, viz., the use of the linear unit. If we take the actual measurements of the amphora and of the kalpis, the smallest common divisor is found to be .01 cm. in both cases. We should have to suppose, then, that the potter took his rule, divided it into parts of  $\frac{1}{10}$  cm. in length and then proceeded to get the widths and heights of the salient points of the vases thereby. This would be such a "redoubtable" arithmetical feat and the procedure of work so tedious that it is unthinkable that the Greeks attempted it. But supposing we allow a reasonable "workman's error," could the static scheme not be made to fit better? To give it this chance, I sent the measurements to Mr. Carpenter and the following tables are the best results he could obtain:

Amphora	Measurements		Error	Measurements in "Dactyls"
	Actual	Intended		
Total height . . . . .	47.1 cm.	46.98 cm.	+00.12 cm.	.27
Extreme width . . . . .	38.2	38.28	-00.08	.22
Foot: height (to middle of base ring of bowl) . . . . .	3.6	3.48	+00.12	2
width (greatest) . . . . .	20.6	20.88	-00.28	12
width (on base ring of bowl) . . . . .	12.2	12.18	+00.02	7
Bowl: height (from middle of base ring to join of neck) . . . . .	32.85	33.06	-00.21	19
width (v. "extreme width" supra) . . . . .	—	—	—	—

Amphora	Measurements		Error	Measurements in "Dactyls"
	Actual	Intended		
Neck: height (with lip) . . . . .	10.65 cm.	10.44 cm.	+00.21 cm.	6
height (without lip) . . . . .	7.15 . . . .	6.96 . . . .	+00.19 . . . .	4
least width . . . . .	15.5 . . . .	15.66 . . . .	-00.16 . . . .	9
Lip: height . . . . .	3.5 . . . .	3.48 . . . .	+00.02 . . . .	2
width . . . . .	24 . . . .	24.36 . . . .	-00.36 . . . .	14
Average error . . . . .	±00.161 cm.			
Assumed value of dactyl . . . . .	1.74 "			
Assumed value of foot . . . . .	27.84 "			

Kalp's	Measurements		Error	Measurements in "Dactyls"
	Actual	Intended		
Body: height to top of panel on shoulders . . . . .	29.6 cm.	29.52 cm.	+00.08 cm.	15
width (greatest) . . . . .	31.50 . . . .	31.49 . . . .	+00.01 . . . .	16
width (at bottom) . . . . .	9.22 . . . .	9.84 . . . .	-00.62 . . . .	5
Neck: height from top of panel on shoulders (including lip) . . . . .	6.00 . . . .	5.9 . . . .	+00.10 . . . .	3
Width . . . . .	9.7 . . . .	9.84 . . . .	-00.14 . . . .	5
Lip: width . . . . .	14.6 . . . .	14.76 . . . .	-00.16 . . . .	7½
Foot: height (to bottom of moulding) . . . . .	1.95 . . . .	1.97 . . . .	-00.02 . . . .	1
width . . . . .	13.8 . . . .	13.78 . . . .	+00.02 . . . .	7
Total height of kalpis . . . . .	37.55 . . . .	37.40 . . . .	+00.15 . . . .	19
Extreme width of kalpis . . . . .	39.6 . . . .	39.36 . . . .	+00.24 . . . .	20
Handles: height at side ( <i>i.e.</i> , distance above ground) . . . . .	25.82 . . . .	25.58 . . . .	+00.24 . . . .	13
height of handle at back . . . . .	35.85 . . . .	35.43 . . . .	+00.42 . . . .	18
Projection of handles $\left( = \frac{.396 - .315}{2} \right)$ . . . . .	4.05 . . . .	3.94 . . . .	+00.11 . . . .	2
Average error . . . . .	±00.1777 cm.			

## Decorations

Height from bottom of body to palmette border (bottom) (=20.15-02.25) . . . . .	17.90 . . . .	17.71 . . . .	00.19 . . . .	9
Height of palmette border (=23.35-20.15) . . . . .	3.20 . . . .	. . . . .	. . . . .	
Interval (palmette border to panel on shoulders =25.05-23.35) . . . . .	1.7 . . . .	1.97 . . . .	00.27 . . . .	1
Height of panel on shoulders (=31.55-25.05). <i>N. B.</i> Panel, therefore, twice as high as palmette border . . . . .	6.5 . . . .	. . . . .	. . . . .	
Distance from bottom of palmette border to top of panel on shoulder . . . . .	11.4 . . . .	11.8 . . . .	00.40 . . . .	6
Assumed value of dactyl . . . . .	1.968 cm.			
Assumed value of foot . . . . .	31.5 "			

It will be noted (1) that the units of measurement 1.968 cm. and 1.74 cm. not only vary in the two vases, but are both arbitrary, having no apparent relation to the Greek foot; (2) that to make the vases fit even this scheme, the "error" has to be considerable. When in a width of only 9.22 cm. a reduction is made of more than 6 mm., the difference is so great that the whole appearance of a vase is changed thereby. If we allow such "errors" any vase could be made to fit any scheme.<sup>1</sup>

Similar attempts at making actual measurements of vases fit a static scheme have led Mr. Caskey to the important conclusion that "in most cases one or more or all of the following obstacles are encountered: (1) The unit chosen must be arbitrary, not some simple division of the Greek foot. (2) The unit must be made very small, so that the proportions have little more significance than a mere record of the dimensions would have. (3) A large margin or error must be admitted. (4) Even if the proportions can be expressed in fairly large divisions of the Greek foot no reason appears why those particular lengths were chosen rather than others."

I will let the reader judge which works out the simpler or more attractive method of obtaining salient points in Greek vases—geometrically, according to Dynamic Symmetry or arithmetically, by means of a linear unit. Naturally if the proportions of Greek vases worked out obviously into static measurements, in such simple proportions as the example quoted by Mr. Carpenter, *op. cit.* p. 33 (which is drawn at the small scale of 1 in. by less than 2 in., when obviously distances would approximate), we could persuade ourselves that that may have been the method used; though we should have been surprised to find that the Greek potter by using so obvious a scheme of proportion obtained such subtle results. But since actual experiments show that they do not, and since, therefore, we have to suppose that the potters continually varied their unit and made it of infinitesimal lengths, it is difficult to believe that this finicky method of designing was in use by Athenian potters. And why should we believe that the Greek potter could not perform the simplest drawings in geometry and yet in arithmetic was so well versed, when we know definitely that it was geometry rather than arithmetic that the

<sup>1</sup> In two other vases measured statically by Mr. Carpenter the results were similar. For instance, in a foot of a small oinochoe only 12.5 mm. high he was forced in order to make it conform to allow an error of almost 3 mm.

Greeks delighted in and were proficient in;<sup>1</sup> and that those very rectangles which to Mr. Carpenter seem so obscure, to the Greeks were the topic of common conversation, as the discussion at the opening of Plato's *Theaetetus* shows (147 D).

Professor Rhys Carpenter concludes his article on Dynamic Symmetry as follows: "To sum up,—when we notice (1) the multiplicity of indices for the containing rectangles, (2) the elaborately various and seemingly arbitrary combinations of sub-rectangles and diagonals by which the chief points of the vase are established, (3) the complete irrelevance of these rectangles to the actual areas of the vase, and especially to the contour curves which are so largely the animating life of an ancient vase, and (4) the frequent minute divergence between this intricate analysis and the simple ratios of the linear scale,—we must allow that Mr. Hambidge's discovery of a far-reaching and long-forgotten Gracco-Egyptian lore of dynamic symmetry is still very much *sub judice*. As it stands, the evidence is ingenious, but ambiguous. A priori, the probabilities are all against its being true." Let us examine these four points in the light of our recent experience of designing the vases:

(1) and (2) As a matter of fact the multiplicity of indices is not nearly so great as we may imagine. As Mr. Caskey has shown (*op. cit.* p. 25) "a large proportion of vases conform accurately to a limited number of comparatively simple rectangles," and after his long experience of measuring actual Greek vases he is able to write (p. 26), "In actual practice I have found that doubt as to the choice between two ratios very rarely arises." The same is true with the points which determine the details of the vases. An examination of Mr. Carpenter's drawing (Fig. 6, p. 31) might lead one to suppose that the points to be chosen are so numerous and so close together that the whole scheme seems absurd. But we must remember that this drawing is quite misleading because its scale is too small. Half a millimeter in so tiny a rectangle (less than 4 by 5 cm.!) would mean several millimeters in a full-sized vase, and when you begin to design you soon find that several millimeters make a considerable difference.

<sup>1</sup> Cf. on this subject L. Whibley, *A Companion to Greek Studies*, pp. 200–204, and A. N. Whitehead, *Encyclopaedia Britannica*, s.v. Geometry, p. 71: "The arithmetic of the ancients was inadequate as a science of number. . . . Hence, perhaps it arose that till comparatively modern times, appeal to arithmetical aid in geometrical reasoning was in all possible ways restrained. Geometry figured rather as a helper to the more difficult science of arithmetic."

(3) Mr. Carpenter thinks that "the contour-curves are largely the animating life of an ancient vase" and complains that to Mr. Hambidge "these outlines are seemingly irrelevant." As a matter of fact when we try to design Greek shapes we presently discover that it is the proportions which largely determine the curves. We need only attempt, for instance, to widen the neck of the amphora (Fig. 1) by three millimeters (1.5 mm. on each side) to realize what a much flatter and less "animated" curve that would produce, or to widen the base of the body by the same small amount to see how the whole character, not only of the curve, but of the entire vase would be changed. In short, it is the proportions (which incidentally are the most important factor in determining the curves) which are the vitalizing element in a Greek vase.

(2) And why does Mr. Carpenter call these points "arbitrary"? In geometry the subdivision of rectangles by diagonals and by perpendiculars to diagonals is anything but arbitrary. The rectangles so formed are always intimately related to the larger rectangle, and can be expressed in terms of the containing rectangle, for any minor shape produced by a cutting of a major shape is by mathematical necessity in terms of the whole. So that such subdivisions produce a theme of interrelated rectangles, comparable, we might say, to the phrases of a musical composition.

(3) But there is another objection to these "points" which troubles Mr. Carpenter—it is what to him appears "the complete irrelevance of the rectangles to the actual areas of the vase." He explains this difficulty at length in the earlier part of his article: "The geometry is all in rectangular areas, but the coincidence of these areas with the vase is a matter largely of points on lines. Thus a certain area will establish the width of the lip, but it is not properly the *area* of the lip which is so determined, it is its linear horizontal extension. Actually, it is mainly the linear measurements along horizontal and vertical axes which are determined by this geometry of rectangular areas." But how would Mr. Carpenter have us design anything—a vase, a capital, a temple or a chair—if not on the flat? That has always been the practice of architects or of designers of anything in three dimensions, whether rectangular or rounded, and it is difficult to imagine any other method. There again actual practice in designing is a great help, for it teaches us what, perhaps, seems strange at first thought—that the proportions upon a single vertical plane de-

termine the proportions of an object in three dimensions, and the beauty of a temple façade, of a column, of the hull of a ship, as well as of a vase, is determined by the proportions of a rectangular section. And very naturally "the hastiest measurements performed on a photograph" do not tally with such a design on paper; nor do the measurements on the photograph of any building tally with those of its blue print—for the simple reason that in an object of three dimensions you have to deal with perspective.

(4) For Mr. Carpenter's fourth objection, the frequent minute divergence between the "intricate" dynamic analysis and the "simple" ratios of the linear scale we have already referred to Mr. Caskey's conclusions (*op. cit.* p. 28). Moreover, in our own experiments we have learned that at least in the designing of Greek vases (as against the analysis of them) the dynamic scheme is often simple compared to the intricate mathematics the use of a linear unit entails.

We must not conclude without a brief reference to another attack on Dynamic Symmetry by Edwin M. Blake of Brooklyn, New York, published in the *Art Bulletin* for March 1921. This attack is based, as Mr. Blake expresses it, on "mathematical and psychological" grounds. The mathematical objection resolves itself into the multiplicity of possible indices and this we have dealt with above. It is perfectly true that by putting in every conceivable subdivision of the various rectangles the scheme is reduced to absurdity. But actual experience with analyses of Greek vases shows that the Greeks did not subdivide their rectangles in such a far-fetched, intricate manner, but used only the obvious component parts. Any proportional scheme can be reduced to absurdity in like manner. If we held that the Greeks used a linear unit, the possible division of linear lengths into infinitesimal parts would not militate against the scheme, as long as the designers actually used large, simple divisions. It is only when analyses prove that the linear unit, if used, was a small fraction, that the theory becomes untenable. Similarly, in dynamic symmetry if actual analyses showed that such an intricate scheme as Mr. Blake suggests was in use, we should, of course, all agree that the idea was absurd. But actual experience demonstrates it was not, and that Greek vases can be analyzed in a much simpler and more obvious method.

Mr. Blake's "psychological" objections are, perhaps, too personal to have general application. But we may point out that

though Mr. Blake sees no beauty in certain figures of specific proportions, Plato did. He thought, for instance, half of the root-three rectangle (i. e. the scalene triangle in which the square of the greater side is three times that of the smaller) the "most beautiful" shape.<sup>1</sup> Moreover it is not only the containing shape, but its possibilities for design through its coördinating properties that make it of artistic value. So that if Mr. Blake says that "we cannot base differences of artistic quality on the distinction between rational and irrational quantities because the eye is powerless to make the distinction," this is a purely personal confession.

As it stands, then, we agree with Mr. Carpenter that Mr. Hambidge's discovery is still *sub judice*. No discovery of such far-reaching importance as this one can be accepted without long and many-sided weighing of the pros and cons of the evidence. But in order to determine finally this question, it is essential that as many archaeologists as possible should work independently on the problem—take their own careful measurements from actual vases and make their own analyses and, if possible, their own designs, and then see where this cumulative evidence leads us to. A priori, however, it seems to me, given the painstaking temperament of the Greek artist and the subtle character of the dynamic scheme, there is a possibility that we are at last in possession of the actual working scheme of Greek design.

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<sup>1</sup> Cp. *Timaeus*, 54 C.

## PROFESSOR CARPENTER'S REPLY

## I

Miss Richter was good enough to include in her article some calculations of mine by which I showed that the amphora and kalpis could be very simply measured off on a linear rule if (and, of course, only *if*) we allowed a workman's error averaging somewhat less than two millimeters. The suggestion was that the potter would measure off foot, bowl, neck, and so forth with a graduated rule, so as to get the elements of the vase into proportion. The rule was a rough approximation to a foot rule divided into sixteen dactyls.<sup>1</sup> The tables show that the dimensions of the two vases can be read off with such a foot rule in terms of simple numerical units, if we allow that the potter did not trouble to be perfectly exact. I dare say he worried more about getting his curves and lines to suit his eye than about following a purely mathematical precision. Even so, the table shows that he usually transgressed by very little more than a millimeter.

The suggestion of such a discrepancy is anathema to the Dynamic Symmetrists: well may it be, since they have pledged themselves to the ideal accuracies of geometry. Yet two millimeters is not much of an error. Miss Richter's own geometry is out by more than half that. In her Figure 1 the "dynamic ratio," on which the whole performance depends, is fixed at 1.236; yet 47.1 divided by 38.2 ("its height divided by its width") really yields 1.233—which means that the actual amphora is more than a millimeter too low for the dynamic scheme.<sup>2</sup>

Aristotle has here a wise and healing word. In *Eth. Nic.* 1098 a 27 he says, *χρῆ καὶ τὴν ἀκρίβειαν μὴ ὁμοίως ἐν ἅπασιν ἐπιζητεῖν, ἀλλ' ἐν ἐκάστοις κατὰ τὴν ὑποκειμένην ὕλην καὶ ἐπὶ τοσοῦτον ἐφ' ὅσον οἰκεῖον τῇ μεθόδῳ. καὶ γὰρ τέκτων καὶ γεωμέτρης διαφερόντως ἐπιζητοῦσι τὴν ὀρθήν. ὁ μὲν γὰρ ἐφ' ὅσον χρησίμη πρὸς τὸ ἔργον, ὁ δὲ τί ἐστὶν ἢ ποῖόν τι.*

The minute accuracy demanded and delighted in by the Dynamic Symmetrists is a transference of modern scientific usage into a wholly irrelevant context. I doubt if very many people meas-

<sup>1</sup> The ancient potter had obviously no arithmetic to perform in this connection. The elaborate arithmetical calculations of which Miss Richter complains are wholly modern and (alas!) wholly mine.

<sup>2</sup>  $1.236 \times 38.2 = 47.215$ . In the kalpis of Fig. 3, 1.0557 should strictly be 1.0546, and 1.191 should be 1.192. These are trifling discrepancies, but they somewhat dim the lustre of an apparent three-place decimal accuracy.



ured anything accurately to the fraction of a millimeter before modern times. Miss Richter grants that even a photograph of a vase will not yield true measurements "for the simple reason that in an object of three dimensions you have to deal with perspective"; and yet this invisible accuracy is demanded for the vase itself.

## II

But it is of capital importance to realize that even if the potters did not measure off their vases in the way that I have suggested, *this is not the slightest proof that they used the method of designing by Dynamic Symmetry*. It is the strength of Mr. Hambidge's whole contention about Dynamic Symmetry that its employment in ancient times cannot be disproved; it is its weakness that it also cannot be proved. In that respect it rather resembles the Ptolemaic system of astronomy.

To keep to Miss Richter's excellent distinction between (1) the modern analyst, and (2) the ancient potter,

(1) Mr. Blake<sup>1</sup> and I tried to show (and I think on the whole we succeeded in showing) that the modern analyst's ability to furnish a satisfactory dynamic analysis for any or every Greek vase proved nothing whatever about the actual existence of Dynamic Symmetry as a practice of ancient Greek potters. Mr. Blake with an amusing (but I fear malicious) "root 13" of his own devising proceeded to show that there were not one, but many (he even suggested, mathematically innumerable) dynamic analyses for any given pot.

Once the probable analysis has been decided upon by the analyst, all other possibilities and potential constructions are, of course, eliminated, and we have

(2) The potter's supposed original scheme, which may be *comparatively* simple, as Miss Richter shows. So far, neither Dynamic Analyst nor skeptic has really proved anything at all about the ancient potter: I do not see that either of them ever can or will. If anyone is convinced of the cogency and rationality of fixing the points through which the outline of a vase is to run, by the processes which are advocated in (let us say) Figure 4 of Miss Richter's article, I think Miss Richter has (for that reader) won her case.

A few more specific matters invite comment:

<sup>1</sup> In *Art Bulletin*, March, 1921.

It is inadmissible to maintain that the dynamic proportions determine the curves. Through given points at base, handle, and neck, any number of different curves may be drawn.

The analogy between root 5 as it appears in the Hambidgean geometry of any given Greek vase and the underlying geometry of nature in *phyllotaxis*, proportional growth in shell-forms, etc., is not reputable. (Miss Richter does not press it.)

For the criticism that I have taken advantage of the small scale of my drawings, see the footnote to p. 32 and lines 2-3 of p. 34 of my previous article.

I must protest, wholly without rancor, that in her answers to my four "points" Miss Richter has neither met nor everywhere grasped the original arguments. But even that must be forgiven in an adversary who makes such delightful sallies as that against Mr. Blake for his "purely personal confession" that his eye cannot distinguish between rational and irrational quantities.

RHYS CARPENTER.

BRYN MAWR COLLEGE.

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It is generally futile, as we know, to reply to a reply; the controversy might well be endless. If one's best ammunition has had so little effect, *τι νὰ κάμνωμεν*? But figures fortunately are figures, and perhaps I may be permitted to point out that (1) Professor Carpenter's "foot" rule—27.84 cm. in one case and 31.5 cm. in the other—not only does not tally with the Attic foot of 32.7 cm.,<sup>1</sup> but presents a variation of 3.66 cm. (or 36.6 mm.) in the two given cases. Can we really call this "approximation," rough or otherwise? (2) The fact that 47.1 cm., the height of the amphora Fig. 1, divided by 38.2 cm., its width, really yields 1.233 instead of 1.236 makes a difference, it is true, of 1.1 mm.; but this, if distributed between the two dimensions—as it naturally would be for the calculation of the ratio—means only a fraction of a millimeter. Everyone will allow that this is permissible; for the "minute accuracy" imputed to Dynamic Symmetrists by Professor Carpenter is not of their own contention. There is a golden mean, however, in pottery as elsewhere, between finicky and sloppy work.

GISELA M. A. RICHTER.

<sup>1</sup> Allowance for shrinkage does not help, since that would amount to about 10%.

## GENERAL MEETING OF THE ARCHAEOLOGICAL INSTITUTE OF AMERICA

DECEMBER 28-30, 1921

THE Archaeological Institute of America held its twenty-third meeting for the reading and discussion of papers at the University of Michigan December 28, 29, and 30, 1921, in conjunction with the American Philological Association. Three sessions for the reading of papers were held, and there were two joint sessions with the American Philological Association. On December 30 the members of the Institute were the guests of the Detroit Society of the Institute at luncheon, and of the Detroit Arts and Crafts Society at tea. The abstracts of the papers which follow were furnished by the authors.

WEDNESDAY, DECEMBER 28. 2.30 P.M.

1. Dr. J. Penrose Harland, of the University of Michigan, *The Minyan Migration*.

The results of the recent excavations in Hellas, particularly those conducted in the Peloponnesus by the American School, have confirmed the conjecture of Eduard Meyer and other historians, that the first invaders of "Hellenic" or Indo-European stock arrived in the southern part of the Balkan Peninsula *ca.* 2000 B.C.

In the Early Helladic Period (*ca.* 2500-2000 B.C.) the Peloponnesus appears to have been inhabited by a non-Indo-European race akin to the Lycians of Asia Minor. The evidence from the traditions and dialects points to this, and the archaeological evidence, which shows a close cultural connection between the Peloponnesus and the Cyclades in this early period, supplements the other evidence and ties it up with the Early Helladic Period.

That the régime and civilization of these non-Indo-European Early Helladic Peloponnesians were brought to an abrupt and sudden end *ca.* 2000 B.C. by an invading people from the North (probably South Thessaly and Phocis), is clearly shown by five or possibly six points of evidence. (1) The Early Helladic settlement at Korakou was destroyed by a general conflagration at the end of the Early Helladic Period. Zygouries also shows traces of destruction by fire at this time. (2) Several Early Helladic sites were destroyed by fire and never reinhabited. (3) Sudden cessation of the lustrous paint technique and typical shapes of Early Helladic (hand-made) pottery. (4) Sudden appearance of wheel-made Gray Minyan ware in highly developed state. Probable origin in Phocis. Another new ware, matt-painted pottery, also appears, but its prov-

enance has not yet been determined. (5) Change in the type of house. The curvilinear hoop-roofed house supersedes the Early Helladic rectangular house with a flat roof. (6) Possible change in burial customs.

Of the three strata of dialects in the Peloponnesus, the Indo-European "Arcadian" follows the non-Indo-European dialect (of the Early Helladic people), but precedes the Dorian. Therefore, the Middle Helladic invaders spoke "Arcadian," and were the first people of "Hellenic" or Indo-European stock to enter the Peloponnesus, where they arrived *ca.* 2000 B.C. To these people made up of many tribes I have applied the name Minyan, as a comprehensive "label of convenience," because of the conspicuous part that gray Minyan ware played in this event, and in the first centuries of this people's régime in the Peloponnesus. The "Minyans" appear to have dominated the Peloponnesus from *ca.* 2000 B.C. until they were forced to yield a greater part of it to the next invaders, the "Achaean," *ca.* 1400 B.C.

## 2. Professor A. L. Frothingham, of Princeton University, *The Ludovisi Sarcophagus and the Dating of Roman Sarcophagi.*

There are various pitfalls in the dating of Roman sarcophagi. The two more important to which I want to call attention are: (1) The use of inscriptions as proof of the date of the work; and, (2) The use of the central figure on the sarcophagi as equally indisputable proof of the date. A fragment in my possession of the cover of a sarcophagus where the framed space for the inscription remained uninscribed is an example of a quite general fact that a sarcophagus was often left uninscribed in the work-shop for a long time until purchased, and that sometimes an inscription was added from one generation to several centuries after the carving of the sarcophagus. In the same way the remodelling of the principal figure on a sarcophagus relief to represent the person to be buried in it was often a much later piece of work, in either one of two cases: either as in the case of the inscription because the sarcophagus had not been used, or was waiting for its purchaser in the workshop; or, second, because the sarcophagus, after being used once, was pilfered from its original tomb and put to the use of a second occupant. An example of this first category is a fragment also in my collection.

The two greatest sarcophagi of the Roman Empire both in point of artistic merit and size, belong to this last category: (1) The sarcophagus of porphyry in the Vatican, which I have proved was originally the sarcophagus of the Emperor Marcus Aurelius, stolen later from the mausoleum of Hadrian by the Emperor Constantine in order to place in it the body of his mother Helena; (2) The so-called Ludovisi sarcophagus of white marble in the National Museum in Rome, which is the subject of this paper. It has been more or less of a mystery because it has been attributed to the latter part of the third century, when Roman sculpture was in full decadence; and yet is, perhaps, the greatest masterpiece of Roman dramatic relief sculpture,—a masterpiece both in composition, in sentiment and in technical execution. This date has been assigned to it entirely on account of the head of the principal figure on horseback, by many supposed to be an emperor. This head is undoubtedly a piece of late third century work. What I shall prove in this paper is that this head is absolutely different in style and execution from every other head on the sarcophagus,

that the head was re-cut, and that the sarcophagus itself is a splendid work of the earlier part of the reign of Marcus Aurelius. It is unique in the wonderful way in which the background, which is so prominent a part of relief sculpture in all Greek and Roman art, is here entirely eliminated. Every space is filled with figures, so that the eye sees nothing but the intensely dramatic battle scene realistically portrayed in the open. Finally, in its pyramidal-like composition, in the dying away of the dramatic action toward each end of the relief, and in the intensity and variety of emotion expressed both in the heads and in the figures, it is the greatest work of an unknown genius who lived nearly a hundred years earlier than the time of the supposed execution of the sarcophagus. In other words, it is a work of about 170 A.D. instead of about 270 A.D.

I had previously shown that the other great sarcophagus, the supposed tomb of Helena, was in reality the tomb of Marcus Aurelius, whose sculptures were equally remarkable for their beauty and suppressed dramatic qualities, and was executed immediately after his death, with a portrayal of the funeral sacrifices that accompanied the burial of his body. The Ludovisi sarcophagus I believe to have originally contained the body of one of the leading generals of Marcus Aurelius, killed in one of the northern wars of his reign. A century after his death, his tomb was desecrated, his body thrown out of the sarcophagus and the head of his figure re-cut to represent the new occupant.

It is interesting to be able to assign these two great works to practically the same period, and to connect them both with Marcus Aurelius.

### 3. Dr. Albert M. Friend, of Princeton University, *Some Early Mediaeval Manuscripts in the Library of J. P. Morgan.*

Besides the manuscripts in the Library of J. P. Morgan there are very few of early mediaeval date in America which are illuminated. The New York Public Library owns a lectionary illuminated probably in the abbey of Corvey near the Hartz Mountains in the early tenth century, and Mr. Henry Walters possesses a gospel book with miniatures which resemble those of this same period of the school of Cologne. In the Library of Mr. Morgan the Ashburnham Golden Gospels from Lindau (Morgan Ms. 1) can be demonstrated to have been illuminated in St. Gall together with the Folchard Psalter during the last third of the ninth century. The back cover of this manuscript which is worked in gold, silver and enamels, was also made in the same abbey, produced during the last years of the eighth century. The mutilated gospels from the collection of the Comte de Troussures (Morgan Ms. 333) is one of a group of manuscripts illuminated in the abbey of St. Bertin at St. Omer under the abbot Odbertus (986-1007). The missing illuminations of this manuscript may be identified in the first part of Ms. 56 in the library at St. Omer. The manuscript called the Gallican Missal from the collection of Henry Yates Thompson (Morgan Ms. 641) was illuminated in the scriptorium of Mont-Saint-Michel. It resembles most closely Ms. 72 in the library at Avranches. Because of certain allusions to the return of Robert Curthose, Duke of Normandy, from the First Crusade and of certain additions to the list of Saints the Missal can be dated *ca.* 1100.

### 4. Professor Georgiana Goddard King, of Bryn Mawr College, *Some Oriental Elements in Mediaeval Spanish Architecture.* (Read by Professor William B. Dinsmoor.)

Moorish work being excluded, the features selected lie in well-defined regions; at the east and the north coast, in the basin of the Ebro or the Duero, at Segovia or at Merida. At Merida Visigothic work is like East-Roman; near Jaca occurs the disk and the Syrian apse enclosed within a square wall; the Syrian south cloister is found at Segovia where Templars were, and in Asturias where exiles dislodged by Moslems might meet in the seventh and eighth century; there also the chambers flanking the apse and entrance with other dark chambers above. The Limousin single-aisled church, and the columns and corbels of Spanish Romanesque, have also Syrian prototypes. Coptic are the triple apse and triple dedication of altars in pre-Romanesque; also probably the transeptal east end of Asturian and Mozarabic churches. The Byzantine centralized type with roofs at different levels was copied in the east and clumsily in the north. Domes are all of eastern form (though the most interesting are Moslem), many ribbed, and fluted; some are on squinches, some on conical trompes, nine only on true pendentives. At Zamora and thereabouts is the outside ribbing, like the Greek; and many Eastern types of moulding appear. Contact with the East is fairly indicated by (1) Byzantine dominion in the sixth century; (2) cults of Egyptian gods and Syrian saints; (3) the monastery of Silos, and other ecclesiastical associations; (4) the trade route by the Ebro to the Atlantic, and another by the *Camino de plata*; (5) the Crusades in Navarre and the northeast. Postscript: the knot is magical.

5. Dr. Carl E. Guthe, of the Carnegie Institution of Washington, *The Manufacture of Pueblo Indian Pottery*.

This paper was based on a detailed study of pottery-making as now carried on at San Ildefonso, a pueblo near Santa Fé. The investigation was made under the auspices of the Department of Archaeology of Phillips Academy, Andover, Mass. Its purpose was to record the method of manufacture of Indian pueblo pottery before innovations were introduced and before commercialization ended the native practice. The various steps in moulding, sun-drying and scraping, slipping and polishing, decorating and firing the pottery were explained and illustrated.<sup>1</sup>

6. Dr. Gisela M. A. Richter, of the Metropolitan Museum of Art, New York, *Notes on Greek Furniture*.

No abstract of this paper was received.

7. Professor David M. Robinson, of the Johns Hopkins University, *A New Epitaph from Sinope and a New Epitaph in Dialogue Form from Sardis*.

The first part of this paper dealt with an inscription of the third century A.D., which was first published by the author in the *A. J. P.* XXVII, 1906, p. 448. Recently the inscription has been taken to Constantinople and has been republished with a photograph in *B. C. H.* XLIV, 1920, p. 361. The photograph published now makes the author's readings certain as opposed to

<sup>1</sup> In the absence of Dr. Guthe, this summary of his paper was kindly furnished by Mrs. Guthe.

those given by Reinach in *R. Arch.* III, 1916, pp. 341 ff. However, in the last line a new reading,  $\alpha\delta\eta$  was proposed and several verse translations were read, including the following:

No tomb is here, only a stone, a slab, a sign  
 To mark Narcissus full of graceful charm benign.  
 Goodness was his, noble were all his ways; his heart  
 Held Pylia Nestor's far-famed speaking art.  
 Envy, who crushes all things, I upbraid thee, nay  
 Hast thou no shame at all when such men pass away?

The second part of the paper dealt with a stele found at Sardis in 1914. It is of the late Hellenistic or Roman type, probably first century B. C., quite like those discussed in Pfuhl's article in *Jb. Arch. I.* XX, 1905, pp. 47 ff., especially like those on pp. 52, 54. This stele represents in a niche a draped female figure with similar attendants on either side. In the upper part on a shelf are represented a lily, papyrus, a basket, and to the left of the lady is carved an *alpha*. Below is a metrical Greek inscription which is difficult to read but which is extremely important for sepulchral symbolism. It may be rendered into English verse in somewhat this fashion:

Graceful the shape incised upon the carven stone  
 And delicate the lines of beauty shown.  
 "But whose?" None of the muses nine. Instead  
 The name Menophila is plainly read.  
 "Wherefore the shelved lily and the alpha lone,  
 The book, the basket, and the wreath of stone?"  
 Wisdom's the book and what about the head is worn  
 Means office. Alpha shows an only-born.  
 Well-woven household virtues in the basket blend  
 But fate unweaves each interwoven end.  
 The petaled flower? Like lily pure it was her time  
 To bloom. Death stole it from the garden of her prime.  
  
 "Handful of dust am I." Of such, as many dead,  
 Are praises sung by friends, and fond words said.  
 Not so, ah me, with parents. To their silent years  
 Thy going left a legacy of tears.

THURSDAY, DECEMBER 29. 9.30 A.M.

1. Dr. Harriet Boyd Hawes, of Wellesley College, *A Gift of Themistocles: Two Famous Reliefs in Rome and Boston.*

The "Ludovisi Throne" and the Boston tri-partite relief formed the ends and adjacent side pieces of a couch-altar in the sanctuary of the Lycomids at Phlya.

(1) The fish and pomegranate shown on the Boston relief were food forbidden to initiates in Attic mysteries. These attributes and early rules of Greek iconography make the seated figure on the left of the Boston relief Demeter, the one on the right Persephone. Between them stands Eros. Only at Phlya were

these three divinities worshipped together. Themistocles restored and decorated the Lycomid sanctuary at Phlya, which had been burnt by the Persians. Time and place accord with the style of the reliefs. (2) At Phlya Earth was named the Great Goddess and her mysteries antedated the mysteries at Eleusis. Phlyus was accounted her son, Lycus her great-grandson. The central figure on the "Ludovisi Throne" is Mother Earth supported by attendants who may be called the Ismenian Nymphs; Pausanias mentions a House of Lycus near Ismenus' shore and an altar of the Ismenian Nymphs at Phlya. (3) The veiled woman on the Roman relief is a priestess celebrating the mysteries of Earth. (4) The old woman on the Boston relief is a ministrant in the mysteries of Earth. The object she held in her hand was a *horn*; it has been chiselled away because of its mystic connections. Other mystic objects, such as *liknon* and *ptuon*, stood in front of her completing the required width of the slab. (5) The youth on the Boston relief is a young Lycomid chanting hymns of Orpheus in honor of Eros, as narrated by Pausanias. (6) The flute-player on the Roman relief is also celebrating the Lycomid rites of Eros.

The ideas embodied in these marbles are "Orphic"; they were derived from the pre-Hellenic religion and formed the background of Euripides, whose childhood was spent at Phlya in the days when these reliefs were being carved.

2. Professor George W. Elderkin, of Princeton University, (a) *A Possible Allusion to the Erechtheum in the Peace of Aristophanes*; (b) *Salmoxis and the Lysippean Portrait of Alexander*.

These papers will be published in full.

3. Professor Howard Crosby Butler, of Princeton University, *The Bearing of Proportions upon the Dating of Ionic Columns*.

The material of this paper will appear in full in Volume II of *Sardis*.

4. Professor William B. Dinsmoor, of Columbia University, *Structural Iron in Greek Architecture*.

This paper will be published in full in a later number of the JOURNAL.

5. Miss Emily L. Wadsworth, of Meriden, Connecticut, *Stucco Reliefs in Rome*.

The use of stucco reliefs, that is of modelled stucco or plaster, was very popular for interior decoration in Rome during the first two centuries of the Empire. Thanks to the medium used, and to the employment of a method both expeditious and practical, that of working free hand quickly before the plaster could dry, the reliefs are usually full of spirit, freedom and originality. Several important examples are well known—the decorated vaults from the house discovered in the Farnesina gardens, and the interiors of the Tombs of the Valerii and of the Pancratii on the Latin Way. There are others, less well known, which are, perhaps, even more interesting. At Castel Gandolfo, on the wall of a



semicircular corridor in the theatre built by Domitian in his Alban Villa, there is a continuous frieze with subjects appropriately connected with the stage. Two tombs recently discovered under the church of San Clemente on the Appian Way contain reliefs which are coarser and heavier, but at the same time very decorative and attractive. The reliefs which decorate the walls, piers and vaults of the so-called Underground Basilica, the most spectacular of the recent discoveries in Rome, add greatly to the mysterious atmosphere of the monument. The range covered by the subjects is very great, including mythological scenes, genre and humorous scenes, rustic shrines, portrait heads, cult objects, stylized victories and subordinate ornamental motives.

6. Professor C. P. Morey, of Princeton University, *The Origin of the Asiatic (Sidamara) Sarcophagi*.

The additions to the series made by Weigand (*Jb. Arch.* I. 1914), and by Stohlmán (*A.J.A.* 1921) have increased the known examples of the Asiatic (Sidamara) sarcophagi to about 55. A monograph on the series as a whole, including a catalogue raisonné, will be published by the writer as a fascicle of H. C. Butler's *Sardis* in 1922. The present paper is a résumé of a chapter of this monograph, dealing with the location of the atelier which produced the earlier sarcophagi of the series in the second half of the second century.

That the series as a whole was made in Asia is now generally admitted. Proof of origin in Asia Minor is found in the fact the majority of the examples found *in situ* were discovered in Asia Minor, in the persistent resemblance of the architectural motifs of the sarcophagi to details of Asiatic buildings, in the eastern character of the marble, wherever analysis has been made, and the Asiatic provenance of the specific parallels for certain figure-types used by the sculptors of the atelier.

Weigand has isolated the types of the Lesbian cyma used in Syria, Asia Minor, Greece and Italy in the second century A.D., and the Lesbian cyma of the sarcophagi conforms to the Asiatic variety. Another peculiarity of the earlier sarcophagi is the concave entablature flanking the central aedicula, as on the sarcophagus of Melfi, a disposition which reproduces that of the *prostas* of Asiatic stage façades, such as that of Azani and especially Sagalassus. The later sarcophagi of the earlier group imitate the later stage façades of Asia Minor when the entablatures have become of rectangular plan throughout.

The sarcophagus discovered at Sardis enables us to limit the centre of production to the vicinity of Sardis, since the neglect shown in carving the right lateral face shows that the sculptor was acquainted with the position to the right of the steps of the tomb which the sarcophagus was to occupy, and where such neglect would not be noticeable. The Sardis example belongs to the earlier group of the series, and shows thus that its atelier must have been in the vicinity of Sardis. The distribution of the earlier group in Asia Minor reveals that all but one of the inland examples were found in Lydia or on its borders; hence Weigand was right in guessing that they were produced in Lydia. Six have been found in Lydia; five in coast towns of Asia Minor to which they could have been exported; five more in Italy where export is certain. This indicates a seaport as the centre of export. Of the two seaports of Lydia, Smyrna and Ephesus, the latter has most in its favor. The copying of a detail of the frieze of the Ionic

temple on the Ilissus on one of the sarcophagi and also on a relief found at Ephesus, in both cases with an accuracy that extends to the actual dimensions, indicates that sarcophagus and relief were executed in the same atelier. The ornament of the Lydian group is closely paralleled by that of the upper story of the Library at Ephesus, finished under Antoninus Pius, and one of the most popular of the figure types used in the Lydian atelier is being fashioned by one of the sculptors in the representation of a studio carved in relief on a fragment from Ephesus in the Ottoman Museum. In Lycia the sarcophagi seem to have been known as ἀγγεία Ἀσιακά in contrast to the local ones which bore the name of ἀγγεία τοπικά (cf. inscription published by Heberdey, *Sitz. Wien. Akad.* XLV, 2, p. 27, No. 26). Ἀσιακός at this period could only refer to the Roman province of Asia of which Ephesus was the capital. The atelier which produced the earlier group to which the Sardis example belongs is thus seen to be Lydian, having its centre probably in Ephesus. The evidence for the location of the later atelier which produced the sarcophagus of Sidamara and its congeners is less decisive, but points to a centre in the north of Asia Minor, possibly one of the sea-coast cities, as Cyzicus, Nicaea, or Nicomedia.

7. Dr. Edgar L. Hewett, of the School of American Research, Sante Fé, *Native American Painters*.

No abstract of this paper was received.

FRIDAY, DECEMBER 30. 9.30 A.M.

1. Mr. Emerson H. Swift, of Princeton University, *Imagines in Imperial Portraiture*.

This paper will be published in full in a later number of the JOURNAL.

2. Mr. Clarence Kennedy, of Smith College, *New Photographs of Greek Sculpture*.

No abstract of this paper was received.

3. Professor A. L. Frothingham, of Princeton University, *Medusa as Artemis in the Temple at Corfu*.

The results of the German Emperor's excavation of a very archaic temple at Corfu are about to be published, according to Professor Dörpfeld, who directed the excavations in 1910 and subsequent years. In 1911 I said that the temple might be one of Artemis and made the revolutionary suggestion of the identity of Medusa with Artemis in this instance, owing to the extraordinary fact that the central figure in the terra-cotta pedimental sculptures of this temple was a figure of the Gorgon Medusa flanked by her two children, Pegasus and Chrysaor, and by her two colossal lions. I expressed this theory in a letter published in the *Nation* and in an article in the *American Journal of Archaeology* of the same year. Recently Dr. Dörpfeld writes me that an inscription discovered after the publication of my theory has proved that the temple was in fact a temple of

Artemis and he has accepted my theory of the identification of Medusa with both the Goddess and the Sun and that the temple was dedicated to her. This should put an end to the old theory of Medusa as a frightful, evil demon and a bogey, which I have been fighting ever since 1910, and is the most spectacular proof of my theory, that she was a goddess, which I expect to embody in a special volume.

There are two phases in the creation and development of the Gorgon Medusa. Originally she is pre-Olympian. She is a child of Mother Earth and belongs to the primitive stage of proto-Hellenic religion, the matriarchal stage when the mother goddess was supreme and when the great snake, the emblem of life, was also the emblem of the great productive forces of mother earth. Medusa was the embodiment of this material productive force. The second stage in the Gorgon evolution coincided with the substitution of the male for the female deity as leader of the Pantheon, when in the duality of productive forces the father-sun-heat took the upper hand of the other element in the production of life, the mother-earth-moisture element. In this second phase the darting snakes of the solar heat around the Gorgon's nimbus were symbolic of one side of the Gorgon's function, in the same way as the great snakes at her girdle were symbolic of the earth moisture forces of the great mother.

The pediment at Corfu is unique not only in its subject but in its importance as by far the earliest pedimental sculpture of Greek art. The rest of the pedimental sculptures besides the Gorgon and her four accompanying figures represent apparently the primitive conflict between the gods and the giants and the victory of the forces of order over chaos. Zeus appears as a subordinate figure in the fight. The two children of Medusa represent the two elements of heat and moisture. Chrysaor is Apollo in his character of sun-god. In historical times the epithet of Apollo as a solar god was Chrysaor, and his darting arrows are described as snakes. Pegasus, the horse, is of course the well-known emblem of Poseidon, the god of waters, and therefore in primitive Medusa symbolism represented the other element, moisture. At Corfu, therefore, Medusa is the great producing force of the universe through a combination of heat and moisture. She is the presiding genius over the creative evolution out of which world order is produced. There are a number of small decorative pedimental compositions with the Gorgon head as central figure, both as a solar and as a vegetation or fertility emblem. They are, therefore, echoes of the thought embodied in the Corfu pediment.

4. Professor George Grant McCurdy and Professor Charles Peabody, of the American School of Prehistoric Studies in France, *The New Prehistoric School: America Digging in France.*

The new School of Prehistoric Studies began excavations on time at the beginning of July, 1921, in an *abri*, or rock-shelter of Mousterian epoch, adjoining the famous Mousterian Station of La Quina, near Villebois-Lavalette, (Charente). This site had been awarded the American School by Dr. Henri Martin, of Paris, from whose original idea the School took birth. The workers were the Director, Professor George Grant MacCurdy, of Yale University and Mrs. MacCurdy, Miss Crockett of Radcliffe College, Miss MacCurdy the niece of the Director, and Mr. A. W. Pond, a graduate of Beloit College, and the

winner of the scholarship of two thousand francs offered by the School. During two months of excavation, mostly confined to the American *abri*, but occasionally running over into other upper palaeolithic stations, a fair quantity of stone implements, especially scrapers was found, and very many animal bone fragments and teeth (the reindeer, horse, bison and hyena were most numerously represented). A fine *pointe de la gravette*, a bone point and a hunter's bone tally of Aurignacian age are among the unusual specimens found. The most important thing to emphasize is the opportunity the students have there of doing their own excavating and learning at first hand the value of specimens; also the privilege which is theirs of studying in the well equipped laboratory of Dr. Martin near by, and of profiting by his advice. After the close of the digging, excursions were taken to the Dordogne and to the sites and caverns of Lot, and the Pyrenees; these included the famous Tuc d'Audubert and Trois Frères, shown by the hospitality of Count Bégouen. The budget for the second year is guaranteed, applications for the two scholarships offered are coming in, and there is no reason for discouragement as to the immediate future of the School.

5. Dr. W. Frederick Stohlman, of Princeton University, *The Primitive Christian Cycle in Asia Minor*.

The student of Early Christian art is struck by the disparity between the great number of monuments found in Rome, dating from the first four centuries, and the corresponding dearth of monuments found in Asia Minor. The catacomb paintings and sarcophagi of Rome furnish a comprehensive cycle of scenes, whereas for Asia Minor we have to wait until the sixth century to construct even a limited cycle. But a very complete cycle for Asia Minor can be reconstructed if, instead of confining ourselves to monuments found in Asia Minor, we take into account those at Rome and elsewhere that show a close connection with Asia Minor art. Now the columnar sarcophagi of Rome and Gaul show the closest connection in architectural arrangement, style and canon of the figure with the pagan columnar sarcophagi of Asia Minor. The early columnar types of Rome and Gaul copy the types of the Asia Minor sarcophagi in the use of the three niched, arch and gable, five arch, and level entablature types. As time goes on these forms break down into fantastic combinations and in addition there arise such forms as the city gate, where the background is filled with a succession of gates with crenellations, the tree type, where the branches of trees form the arcade, the Red Sea type and the Star and Wreath type. These types, distinguished as they are from the ordinary frieze sarcophagus by their architecture, are further marked by a distinctive cycle of scenes, scenes which never occur on frieze sarcophagi and a good many of which continue in Asia Minor and Byzantine art of a later date.

The scenes found on columnar sarcophagi and never on those of the frieze type are: (1) Beardless Moses in the Crossing of the Red Sea; (2) Job; (3) Marriage of the Virgin; (4) Joseph's Dream; (5) Christ healing *two* blind men; (6) Christ healing the paralytic at the pool of Bethesda; (7) Christ and the centurion; (8) Christ washing the feet of Peter; (9) Crown of thorns; (10) Simon of Cyrene; (11) Symbolic Crucifixion; (12) Paul stoned at Lystra; (13) Execution of Paul; (14) Peter released from prison by the Angel; (15) Peter led to execu-

tion, Peter carrying the cross. To this list must be added another almost as exclusively confined to the columnar type: (1) Isaac on the altar in the sacrifice of Isaac; (2) Beardless Moses receiving the laws; (3) Beardless Moses striking the rock; (4) Ascension of Elijah; (5) Hebrews refusing to worship the image; (6) Betrayal; (7) Christ before Pilate; (8) Delivery of keys to Peter.

This list alone would mark the columnar sarcophagi as a group apart, but they are grouped together by stronger ties than iconography since they are distinguished from the frieze sarcophagi by marked characteristics in the architectural arrangement. These architectural features are derived in some cases directly and in others indirectly from pagan Asia Minor sarcophagi, and this alone would make us look to Asia Minor for the place of origin of the scenes. But when this is reinforced by the appearance of these scenes in later Asia Minor and Byzantine art, and in many cases by their limitation to Asiatic and Byzantine art, we can feel confident that they represent the Primitive Christian Cycle of Asia Minor.

6. Professor Ernest T. Dewald, of Rutgers College, *The Appearance of the Horseshoe Arch in Western Europe*.

This paper will be published in full in a later number of the JOURNAL.

7. Dr. J. Penrose Harland, of the University of Michigan, *American Excavations at Zygouries, near Corinth*.

No abstract of this paper was received.



ARCHAEOLOGICAL NEWS<sup>1</sup>NOTES ON RECENT EXCAVATIONS AND  
DISCOVERIES; OTHER NEWSSIDNEY N. DEANE, *Editor**Smith College, Northampton, Mass.*

## GENERAL AND MISCELLANEOUS

**AN EPIGRAPHIC BULLETIN.**—In *R. Et. Gr.* XXXIII, 1920, pp. 403-432, P. ROUSSEL gives a classified list of books and periodical articles relating to Greek epigraphy which have appeared in the years 1917-1919, together with brief indications of their contents.

**THE ARCHAEOLOGY OF WESTERN ASIA.**—In *Exp. Times*, XXXIII, 1921, pp. 37-39, A. H. SAYCE discusses the latest Babylonian, Hittite, Palestinian, and Egyptian discoveries that bear upon the interpretation of the Old Testament.

**CONSTANTINOPLE.**—Two Inscriptions.—Two inscriptions in Constantinople are published by K. LEHMANN in *Ath. Mitt.* XLII, 1917, pp. 185-190 (fig.); one an apparently Ephebic list of about 250 names, of late Hellenistic date, and possibly from Cyzicus, and the other from a Christian tombstone.

**CYPRUS.**—Archaic Sculptures.—In *Ath. Mitt.* XL, 1915, pp. 53-70 (4 pls.; 10 figs.), M. OHNEFALSCH-RICHTER publishes five archaic sculptures from Frangissa in Cyprus, now in the British Museum. Of these three, a four-horse chariot group and two bearded heads, are of terra-cotta, and are of local workmanship, influenced by both Greek and Phoenician art. The other two are beardless heads of limestone, sex uncertain.

**EMMONA.**—Excavations in 1916.—In *Jh. Oest. Arch.* I. XIX-XX, 1919, Beiblatt, cols. 155-164 (4 figs.), W. SCHMID describes the excavations at Emmona in 1916 and gives plans of the streets and buildings.

**NECROLOGY.**—Geoffroy d'Ault-Dumesnil.—The vice-president of the prehistoric section of the Association pour l'enseignement des sciences anthropologiques, Geoffroy d'Ault-Dumesnil, died at Paris, March 11, 1921, at the age of 78 years. His explorations, especially of the megalithic monuments of Brittany, and his collections of the lesser remains of prehistoric times, as well

<sup>1</sup> The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor DEANE, Editor-in-charge, assisted by Professor SAMUEL E. BASSETT, Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Dr. T. A. BUENGER, Professor HAROLD N. FOWLER, Professor HAROLD R. HASTINGS, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor A. S. PEASE, Professor JOHN C. ROLFE, Dr. JOHN SHAPLEY, Professor A. L. WHEELER and the Editors, especially Professor BATES.

No attempt is made to include in this number of the JOURNAL material published after December 31, 1921.

For an explanation of the abbreviations, see pp. 129-130.

as the extent and sureness of his knowledge, were well-known and appreciated. Unfortunately he published almost nothing. (S. R., *R. Arch.* XIII, 1921, p. 153.)

**Alfred Cartier.**—Alfred Cartier, a scholar whose chief, but by no means sole interest was in prehistoric archaeology and the history of art, was born August 30, 1854, at Geneva where he died June 8, 1921. A very appreciative notice of his life and work, with a bibliography, is published by S. REINACH, *R. Arch.*, fifth series, XIV, 1921, pp. 179–181.

**E. Bormann.**—Eugen Bormann died March 4, 1917. He was born October 6, 1842, and succeeded Hirschfeld at Vienna in 1885. As a pupil of Mommsen he was especially interested in Latin inscriptions and devoted many years to the eleventh volume of the *C. I. L.* (*Jh. Oest. Arch. I.* XIX–XX, 1919, Beiblatt, cols. 347–350.)

**Max Dvorak.**—Max Dvorak, a pupil of Wickhoff and Professor of the History of Art at the University of Vienna, died at Vienna, February 8, 1921, at the age of 47 years. His best-known work, on the riddle of the art of the brothers Van Eyck, appeared in the *Jahrbuch* of the Austrian museums. He published also a monograph on the Palazzo Venezia and was editor of the *Jahrbuch* of the Zentral-commission for the study of monuments and of the short-lived *Kunstgeschichtliche Anzeigen*. (S. R., *R. Arch.* XIII, 1921, p. 152.)

**Robert de Lastegrie.**—In *R. Arch.*, fifth series, XIII, 1921, pp. 147–150, SALOMON REINACH contributes a notice of Robert de Lastegrie, who was for many years generally considered the chief of French mediaevalists. He was born at Paris, November 15, 1849, and died at the château du Saillant (Corrèze) January 29, 1921. He was not a very prolific writer, but his works are solid and valuable. Perhaps the most important among them is *L'architecture religieuse en France* (Vol. I, *Époque romane*, 1912), in which he maintains the derivation of Romanesque from Roman architecture.

**Jules Nicole.**—The foremost Swiss Hellenist, Jules Nicole, was born at Geneva in 1842 and died in the same city April 14, 1921. His most important single publication is that of the Geneva papyri (Vol. I, 1896); in one of these he embodied new evidence relating to the trial of Phidias (J. Nicole, *Le procès de Phidias*, Geneva, 1910). (S. R., *R. Arch.*, fifth series, XIV, 1921, p. 182.)

**Joseph Offord.**—Joseph Offord, hardly a professional archaeologist, but nevertheless author of numerous notes and articles on Egyptian, Syrian, and even Greek archaeology, died in London, January 31, 1920, at the age of 68 years. (S. R., *R. Arch.*, fifth series, XIII, 1921, p. 152.)

**W. R. Paton.**—The eminent Hellenist, W. R. Paton, died at Samos, April 21, 1921, at the age of 63 years. He was of Scotch origin and studied at Oxford. He married a native of Samos and settled at Vathy on that island. His earliest important work was the *Inscriptions of Cos* (1891, in collaboration with Hicks), his latest the edition and translation of the *Greek Anthology* (1916–1918, Loeb Classical Library). (S. R., *R. Arch.*, fifth series, XIV, 1921, p. 182.)

**Samuel Ball Platner.**—Samuel Ball Platner was born at Unionville, Connecticut, December 4, 1864. He was graduated from Yale College in 1883 and received the degree of Ph.D. from Yale after two years of study, in 1885. In the autumn of that year he became instructor in Latin and French in Adelbert College of Western Reserve University, at Cleveland, Ohio. He was made Assistant Professor of Latin in 1890, Professor of Latin in 1892. He was



Secretary of the Managing Committee of the American School of Classical Studies in Rome, 1897-1911, Annual Professor in that school, 1899-1900, President of the American Philological Association, 1900-1901. He was a member of the Archaeological Institute for more than twenty-five years and for several years was a member of the Council. His published writings, apart from brief articles and reviews, were few. The most important is his *Topography and Monuments of Ancient Rome* (1904, 2nd ed., 1911), an admirable and very trustworthy book. A *Dictionary of Roman Topography*, begun in collaboration with Mr. Thomas Ashby of the British School at Rome, is to be completed by Mr. Ashby. It was in order to finish this work that Professor Platner sailed for Europe in August, 1921. He died suddenly at sea, August 20, of heart failure. No man was ever of a more lovable disposition.

Quis desiderio sit pudor aut modus

Tam cari capitis?

H. N. F.

**André de Ridder.**—The death of André de Ridder, May 12, 1921, took from the Louvre another of the distinguished members of its staff. He passed from the École Normale to the École d'Athènes, and at Athens he prepared the catalogues of the bronzes of the Archaeological Society and of those found on the Acropolis (1891 and 1896). The best known among his other works are the *Catalogue des vases peints de la Bibliothèque nationale*, the *Catalogue de la collection de Clerq* (1904-1911), and the catalogue of the bronzes in the Louvre. (ÉTIENNE MICHON, *R. Arch.*, fifth series, XIV, 1921, pp. 182-184.)

**NORTHERN DALMATIA.**—Various Discoveries.—In *Jh. Oest. Arch. I. XVIII*, 1915, Beiblat, cols. 175-188 (10 figs.), A. COLNAGO gives the results of his excavations in Northern Dalmatia. At Maslenica two graves containing coins of Constantine I and II were opened. At Krupa parts of the town wall were examined and one of the gates apparently located. The contents of four of the graves found at Starigrad (Argyruntum) in 1913 are described. Further investigations of the Roman roads in Northern Dalmatia were made. Small objects from Medvigje and Ervenik and Latin inscriptions from the necropolis at Cyjina Gradina are published.

**SOFIA.**—Small Reliefs.—In *Jh. Oest. Arch. I. XIX-XX*, 1919, Beiblat, cols. 43-50 (7 figs.), G. KAZAROW publishes seven small reliefs, all but one fragmentary, found in Bulgaria. Six are in Sofia and one in the gymnasium at Rasgrad. Two represent the Thracian horseman, one Dionysus, and two Mithra.

**SOUTHERN ISTRIA.**—Ancient Villas.—In *Jh. Oest. Arch. I. XVIII*, 1915, Beiblat, cols. 99-164 (41 figs.), A. GNIRS describes in detail the remains of the elaborate villa excavated by him on the south bank of the Val Catena, on the island of Brioni Grande, and publishes a sketch of a restoration. He also gives an account of various ruins on the north bank and describes the remains of the Roman villa on the bay of Olmo Grande, Southern Istria.

**THRACE.**—The Necropolis of Elaeus.—In *C. R. Acad. Insc.* 1921, pp. 130-136, C. PICARD reports that the excavations begun in the necropolis of Elaeus in Gallipoli in 1915 (see *ibid.* 1916, pp. 40-47; *A.J.A.* XXI, 1917, p. 93) were resumed in 1920 and have resulted in the discovery of 28 graves. The fact that most of these burials were in pithoi indicates that the part of the cemetery recently excavated is older than the earlier excavated portion, which contained some sarcophagi. This inference is confirmed by the character of the

pottery found in the graves. The few figured vases found were of the black figured style, indicating that this part of the necropolis dates from the late sixth and the early fifth centuries B.C.

## EGYPT

**THIRTY YEARS' PROGRESS IN EGYPTOLOGY.**—In *Exp. Times*, XXXIII, 1921, pp. 110–114, W. E. PETRIE gives a survey of the recent discoveries in Egypt and of the progress that has been made in tracing the history of civilization in that country.

**THE EGYPTIAN EXPEDITION OF THE METROPOLITAN MUSEUM.**—A special number of *B. Metr. Mus.*, supplementary to that of November, 1921, is devoted to reports on the activities of the Egyptian Expedition of the Metropolitan Museum in 1920–1921. A prefatory note by A. M. LUTHGOE (pp. 3–4) is followed by an account of the excavations at Lisht, by A. C. MACE (pp. 5–19; 21 figs.). Here the investigation of the pyramid of Amenemhat I was resumed after an interval of six years. On its western side the house walls of a settlement of much later date than the pyramid were first studied and removed. Numerous small objects illustrating the daily life of Egyptian villagers were found. In the brick silos of this date some glazed amulets were discovered which indicated that the period of the village was not later than Dynasty XXII. On the XIIth Dynasty level a conspicuous monument is a large mastaba of white limestone, with a solid core of bed rock. It was planned as a part of the pyramid buildings, and was probably intended for the burial of a relative of the king; not, however, the queen, since the reliefs discovered indicate that the person commemorated was a man. Some of the foundation stones were reused stones of the Old Kingdom. North of the mastaba, in a corridor 14 m. wide between the inner enclosure of the pyramid and a brick retaining wall was a double row of burial pits which were no doubt the tombs of the princesses. All had been thoroughly plundered in ancient times. A part of the base of the pyramid was uncovered. Quarriers had not left a single casing-stone. The most interesting find of the season's work was a foundation deposit, in which were rough bricks containing plaques with the name of the king and of the pyramid. The latter was Isut-khau. It had been supposed that the name of the pyramid was Kanefer, but perhaps this is to be recognized as the name of the district. N. DE G. DAVIES describes the work of the Museum for the Tytus Memorial Fund in the study and copying of the paintings in the tomb of Neferhotep at Thebes (pp. 19–28; 11 figs.). Excavations in the Theban necropolis are the subject of an article by H. E. WINLOCK (pp. 29–53; 30 figs.). In the regions south of Deir el Bahri some unfinished tombs of the XIth dynasty were discovered. The platform near which these tombs are grouped was cleared and it was proved that the tomb discovered by Mond, though less monumental than might have been expected, and outside the temple axis, is the royal tomb, probably that of the last king of this line. The most important discovery was made in the XIth Dynasty temple originally excavated by Naville at Deir el Bahri. The shrines in the ambulatory about the pyramid, according to Mr. Winlock's theory, were earlier than the temple itself, and the king Mentuhotep with whom they were associated therefore earlier than the Mentuhotep who built the temple. Mr. Winlock's chronology was strikingly confirmed by his discovery of two tombs in positions related

to the two northernmost shrines, but outside the hypostyle hall beneath which other tombs of this series were discovered. One contained the sarcophagus of the queen Aashaît. The sarcophagus is a fine example of Middle Kingdom sculpture. The coffin contained the mummy of a young woman, accompanied by traces of her ornaments. Many folded sheets of linen were laid over the mummy. The other contained the remains of an infant princess named Maît, encased in a coffin and sarcophagus far too large for the child. This tomb, though it had been entered, had not been plundered, and the wrappings of the mummy contained five necklaces of gold, silver, and precious stones. H. G. EVELYN WHITE (pp. 54-62; 11 figs.) describes researches in the monasteries of Wady 'n Natrún. Architectural photographs were made, and some valuable manuscript fragments were discovered.

**RECENT EXCAVATIONS OF THE SERVICE DES ANTIQUITÉS.**—In *C. R. Acad. Insc.* 1920, pp. 359-366, PIERRE LACAU reports on the activities of the Service des Antiquités de l'Égypte in 1919-1920. At Denderah M. Baraye has completed the excavation of the Mammissi or birth-temple attached to the great temple of Hathor. It dates from the reign of Nectanebo II, and its decorations relate to the birth of Horus. Near this building are the remains of one of the most ancient Christian basilicas discovered in Egypt. At the right of the temple has been found the rectangular basin of an artificial lake. It is evident that the arrangement of a temple precinct resembled that of a great private estate. At Achmounein M. Lefebvre has discovered an important tomb of the Ptolemaic period, constructed by a high priest of Thoth. The walls are covered with funeral and genre scenes and inscriptions. There are some novel elements in the scenes depicted, such as the representation of an elephant; and the style reflects Greek influence. In the burial pit were three sarcophagi, one of which contained a wooden coffin of mummy shape, remarkable for an inscription which was executed in small bits of colored glass paste. Not far from this site was a necropolis of the mummied ibises of the nome.

**CAIRO.**—An Edict of Hadrian.—In *R. Ét. Gr.* XXXIII, 1920, pp. 375-402, P. JOUËT publishes and comments on an edict of Hadrian of which two papyrus copies are found in the Museum at Cairo. It announces the postponement of the collection of taxes in certain districts of Egypt in view of the failure of the usual irrigation from the Nile. It is to be dated 136 A.D.

**DEIR-EL-BERSHEH.**—The Tomb of Dehuti-Nekht.—In *B. Mus. F. A.* XIX, 1921, pp. 43-46 (5 figs.), D. DUNHAM describes the contents of the rock-cut tomb of Dehuti Nekht and his wife, excavated at Deir-el-Bersheh by the Harvard University-Museum of Fine Arts Expedition in 1915. Two remarkable wooden sarcophagi, each consisting of two cases, the interiors of which show paintings of numerous figures and objects designed for the service of the souls within, were found in this tomb, and have now been installed in the Museum of Fine Arts. Numerous models in wood came from the same tomb, including many boats.

**FARAS.**—The Oxford Excavations.—In *Ann. Arch. Anth.* VIII, 1921, pp. 65-104 (20 pls.), F. LL. GRIFFITH continues his report on the Oxford excavations in Nubia (see *ibid.* VIII, 1921, pp. 1-18, and *A.J.A.* XXV, 1921, p. 292). There are few traces of settlement in Nubia in the period of the Old Kingdom. In the period of the Middle Kingdom the country between the First and Second Cataracts was occupied by communities of Reisner's "C-group." The

remains indicate that they were a pastoral people. A sub-division of the chronology of this period, based on the types of graves, has been attempted. Remains of Egyptian fortresses show how the authority of Egypt was maintained in this remote region. Temples are found at some of the great centres. By the time of Sesostris I the C-group civilization was practically extinct in lower Nubia. A culture somewhat less dominated by Egypt is represented by the necropolis of Kerm, above the Third Cataract. With the rise of the Theban power of the New Kingdom all independent civilization in Nubia was overwhelmed. The region was governed by an Egyptian viceroy, and imposing temples were built. None of the temples of Nubia, however, are later than the time of Rameses II. At Faras the Oxford Expedition has excavated a cemetery of the C-group. The graves are oval pits enclosed by circular superstructures of rubble with flat roofing slabs. Five stelae of white marble were found in the cemetery, but it is uncertain whether they were intended to mark graves. The cemetery had been plundered. Fragments of clothing, most commonly of leather, were found; and beads in the graves of women and children. The pottery discovered was not in the graves themselves, but on the old ground level within the superstructures. Some was of Egyptian wheel-made ware, some of local handmade. Most of the material in this cemetery is later than Dynasty XII. Near the proto-dynastic village of Faras are the remains of a fort of the Middle Kingdom, measuring about 70 m. by 80 m., and built of mud brick, surrounded by a solid wall 3.3 m. thick. Few objects were found in it; but mud sealings discovered here showed designs characteristic of the Middle Kingdom. The most important monuments of the New Kingdom discovered at Faras are the following: (1) Ruins of a temple of Hathor on an isolated rock south of the Meroitic enclosure, originally built early in the New Kingdom period, and later restored in limestone brought from Egypt by Hatshepsut; (2) a grotto cut in the side of the rock facing the river in the reign of Rameses II, probably a shrine; (3) a temple of Rameses II, now represented by a number of sculptures and inscribed blocks in the southwest angle of the great Faras enclosure; (4) a temple of Thutmosis III, of which only fragments are preserved, on the west side of the citadel; (5) a great temple of Tutankhamun north of the walled town, covering an area 56 m. by 25 m. and consisting of a colonnaded court, hypostyle hall, and sanctuary. Numerous sculptured blocks of this temple indicate that the building was dedicated to the king himself. A fragment of a granite group representing a king of the XVIIIth Dynasty between Ammon and another god has a long inscription in honor of the king, who was apparently one of the Akhenaton group, probably Tutankhamun.

**KOUBANIEH.**—The Cemeteries.—In *R. Arch.*, fifth series, XIV, 1921, pp. 158–163, EDOUARD NAVILLE gives a brief summary of the results of Dr. Junker's excavations at Koubanieh, near Assuan (*Bericht über die Grabungen der Akademie der Wissenschaften in Wien auf den Friedhöfen von El-Koubanieh-Süd* (Winter 1910–1911); *ibid.*, *El-Koubanieh-Nord* (Winter 1910–1911)). The two cemeteries are not of the same date, the southern one being the earlier. Both are Nubian, rather than Egyptian. Their dates range from Reisner's period A to his period C. In general Junker's results confirm Reisner's conclusions, but there are details in which they disagree.

**BABYLONIA AND ASSYRIA**

**ASSYRIAN CHRONOLOGY.**—The excavations of the *Deutsche Orient-Gesellschaft* at Assur, the ancient capital of Assyria, have yielded a number of lists of kings that are of the utmost importance in reconstructing the chronology of the kings of Assyria, and incidentally also of the kings of Babylon. This material has been gathered, translated, and tabulated by E. F. WEIDNER in *Mitt. Vorderas. Ges.* XXVI, 1921, 2, pp. 1-66 (5 pl.). Eleven fragments of lists of Assyrian kings have been discovered. (1) Two lists give the names of the kings only in chronological order. (2) Two lists give the names of the kings with remarks in regard to their family relationship to their predecessors. (3) One list gives the kings of Assyria and of Babylon in synchronism, arranged according to the order in which they began to reign. (4) Five lists give the kings of Assyria and of Babylon in parallel columns of contemporaneous reigns. (5) One list gives the eponyms for a series of years beginning with Adadnirari I and continuing down to Ashurbanipal. On the basis of these texts it is now possible to reconstruct the entire list of Assyrian kings from Puzur-Ashir I (ca. 2100 B.C.) to Sin-shar-ishkun and the fall of Nineveh in 606 B.C. The synchronistic lists also throw a flood of light on Babylonian chronology since they enable us to fill up the gaps in the great Babylonian lists A and B. Weidner now estimates the beginning of the dynasty of Amurru, of which Hammurabi was the sixth king, at 2057 B.C. This is a difference of 168 years from the date 2225 B.C. supposed to have been established astronomically by Kugler and accepted by E. Meyer and many other Assyriologists. In *R. Assyr.* XVIII, 1921, pp. 83-94, W. F. ALBRIGHT subjects Weidner's conclusions to an elaborate criticism, and comes to the conclusion that he has made several mistakes in his calculations and that the beginning of the dynasty of Amurru is still to be placed where Kugler has fixed it.

**BRITISH MUSEUM EXCAVATIONS IN BABYLONIA.**—In *Archaeologia*, LXX, 1918-1920, pp. 101-144 (6 pls.; 13 figs.), R. CAMPBELL THOMPSON reports on the excavations which he conducted for the British Museum in 1918 on the mound of Abu Shahrain, the site of ancient Eredu. The following are his principal conclusions. (1) There was not much occupation of the mound after Sumerian times. This is clear from the lack of later objects, and from the character of references to Eredu in Assyrian cuneiform texts. (2) The later Sumerians used the mound as a necropolis. Many Sumerian interments were found, generally near the surface, and accompanied by pottery of Sumerian type. The lack of larnax coffins indicates that there was no extensive occupation of the site in Assyrian times. Records found in the excavations show that restorations on the site were carried out by Nur-Immer, Bur-Sin, and Ur-Engur. The buttress of plano-convex bricks discovered by Taylor shows that the Sumerians built here at an early period. (4) Before the Sumerian occupation the city of Eredu, like other cities in this region, was inhabited by a prehistoric race identical with the people found by De Morgan at Susa and Musian. This people seems to have migrated from the Hindu-Kush. Many fragments of their pottery, painted with geometric designs in black, were found, as well as numerous other objects of clay and stone. (4) By the evidence of mussel-shells it is shown that Eredu was not on the sea, but near the tidal water of the Euphrates lagoons. In *Proc. Soc. Ant.* XXXII, 1920, pp. 22-42 (26 figs.), H. R. HALL describes the excavations which he conducted in Meso-

potamia for the British Museum in 1919. At Abu Shahrain, continuing Captain Thompson's excavations, he discovered a quantity of stone implements, pottery, clay sickles, etc., of the chalcolithic period, and uncovered the remains of a series of Sumerian houses, the walls of which were built of crude brick and covered with stucco. A bastion of rough limestone blocks is of interest because the use of stone is so rare in Babylonia. At ancient Ur (Tell el Mukayyar) the east face of the temple-tower or ziggurat was cleared to its base; a palace of the kings Ur-Engur and Dungi of the "First" Dynasty of Ur was excavated, and a part of the wall of the temenos of Nannar, with casemates, was found. Streets and tombs of the late Babylonian city were discovered, and fragments of portrait statues in dolerite, probably belonging to the time of the destruction of Ur by the Elamites, 2350 B.C. In the graves were burial pots and larnaces, with small pottery and other objects. At Tell el Ma'abed or Tell el'Obeid four miles west of Ur, finds of special interest were made. Within the walls of a pre-Sargonic building, and under a brick platform built by one of the later kings of Ur was found a cache of copper and other objects. Some seem to have been parts of a throne which was supported on the backs of copper lions. The heads of the lions, which are finely executed, seem to have been cast. The place of the clay core was taken by bitumen, in order to reinforce the copper; so the heads exist both in the bitumen cast and in the copper shell. They had tongues of red jasper, teeth of shell, and eyes of blue stone, shell, and red jasper. Other heads of animals and birds were found, and it has been possible to transport some of these to England. The most remarkable object discovered was a copper relief, about three feet high, representing the lion-headed eagle, Imgig, the tutelary genius of Lagash, holding two stags by the tails. This has also been removed to England. An interesting architectural find was a group of mud pillars ornamented with geometric patterns in mosaic.

## SYRIA AND PALESTINE

**THIRTY YEARS OF PALESTINE EXPLORATIONS.**—In *Exp. Times*, XXXIII, 1921, pp. 87-92, R. A. S. MACALISTER traces the progress of excavation in Palestine during the thirty years that have elapsed since the first work was begun by W. F. Petrie at the mound of Tell-el-Hesy, the Biblical Lachish, down to the present excavations that are going on at Askalon.

**ASKALON.**—**Reports of Excavations.**—In *Pal. Ex. Fund*, LIII, 1921, pp. 162-172, J. GARSTANG and W. J. PHYTHIAN-ADAMS discuss the results of the excavations at Askalon up to the time of writing in October. Four archaeological periods are now clearly recognizable: first, the Canaanite, extending from about 1400 B.C. to 1100 B.C. Here appear the Mycenaean iron glaze ware, the base ring jugs, cyma bowls and wish-bone handles that are characteristic of the Canaanite period in other mounds of Palestine. Near the top of this period an alabaster fragment of the XIXth dynasty was discovered. Second, the Philistine period. This presents a homogeneous and unbroken culture from the end of the XIXth dynasty to the intrusion of new influences from the West. Third, the Greek period; and fourth, the Roman. The clear discrimination of the Philistine level from the earlier and the later levels is expected to do much toward the solution of the problem of the origin and character of Philistine civilization.

**BETH-SHAN.**—The Excavations of 1921.—In the *Pennsylvania Gazette*, March 3, 1922, p. 441 there is a report of the excavations carried on for the University of Pennsylvania by Clarence S. Fisher at Beisan, the ancient Beth-Shan, or Scythopolis in Palestine. The work was begun in June 1921 and continued until October. The city was at one time extensive, but the citadel was comparatively small and at least seven different cities were built upon it. This first campaign was largely devoted to uncovering the top of the mound where there were remains of an Arab city. Below it was a Byzantine city with some large churches elaborately decorated, and below this a Roman city. A deep trench was also dug to the lowest stratum which was found to date from about 1700 B. C., i.e. before the Semites entered Palestine. The most important single object discovered was "a large stela inscribed with hieroglyphic characters of about the fourteenth century." The line of the old city wall can be traced on the west and north, and ruins of temples, theatres and public buildings belonging to the Scythopolis of the classical period are to be seen covering an extensive area. The complete excavation of the site will take many years.

**JERUSALEM.**—The Temple-Mount.—In *Exp. Times*, XXXII, 1921, pp. 506-507, A. H. SAYCE discusses the Temple in the light of the latest archaeological researches, particularly the recently published report of Captain Weill, *La Cité de David* (Paris, Geuthner, 1920). Mount Zion was the rocky spur between the Kidron and the Tyropoeon valleys. The Jebusite fortress was at the southern end, the Temple-mountain was in the middle, and to the north was Ophel, separated from the Temple-mountain by a depression and a cavern containing Canaanite tombs. The name Uru-Salim, or Jerusalem, as it is written in the Amarna letters, is Babylonian, and this indicates that the town was of Babylonian origin and dated from the period of Babylonian supremacy in the west as early as the dynasties of Akkad and of Ur. The double cave under the Mosque of Omar is a sanctuary of the neolithic age, and the Temple-mountain continued to be a sanctuary of the Babylonian immigrants of the Bronze Age. In one of the Amarna letters the king says: "The city of the mountain of Jerusalem, the name of which is the city of Bel-En-Urta (*NIN-IB*) has revolted." This is the origin of the puzzling *Yahweh Yireh* of *Gen. xxii, 14*. *Yahweh* has displaced the "owner" (Semitic *ba'al*, Sumerian *en*) and *Yireh* is the etymological equivalent of *Urta*. In the geographical list of Thutmosis III *Har-el*, "the mount of God," occurs where Jerusalem would be expected, and this is the origin of *Ariel*, the name that both Isaiah and Ezekiel apply to the Temple-mountain.

## ASIA MINOR

**BOGHÁZKEUI.**—The Palace of the Chatti.—In *Ath. Mitt.* XLII, 1917, pp. 99-170 (25 figs.) V. K. MÜLLER discusses the five structures uncovered at Boghazkeui in 1906 and the following years, places the type of structure midway between the simplicity of the Mesopotamian and the complexity of the Cretan palace, and emphasizes the influence of the west and the north, rather than the east, upon the shape of the palace of the Chatti.

**CILICIA.**—A Journey in 1914.—In *Jh. Oest. Arch. I.* XVIII, 1915, Beiblatt, cols. 5-60 (22 figs.), J. KEIL and A. WILHELM give a general report of a journey made by them in 1914 in Cilicia. Starting from Alaja (the ancient Korakesion) they visited Anemurion, Aphrodisias, Seleucia on the Calycadmus, Olba,

Corycus, Elaiussa-Sebaste, Hierapolis-Kastabala and Anazarba. Various inscriptions were found. Full publication will be made later.

**EPHESUS.—Excavations in 1913.**—In *Jh. Oest. Arch. I.* XVIII, 1915, Beiblatt, cols. 77–88 (5 figs.), R. HEBERDEY reports that in 1913 an elaborate fountain building was uncovered at Ephesus. It stands on a podium with eight columns in front. Its dimensions are, width 29.20 m., length 37 m. In Christian times a small chapel was erected within the building. A much injured life size portrait head was found. *Ibid.* cols. 279–286, J. KEIL objects that the building was not a fountain, but a sanctuary. He also reports upon his examination of the “wall of Lysimachus,” part of which was built in Byzantine times, and publishes three late Greek inscriptions.

**PHOCAEA.—Recent Excavations.**—In *C. R. Acad. Insc.* 1921, pp. 119–129, F. SARTIAUX reports the resumption of researches on the site of Phocaea (see *ibid.* 1914, pp. 6–13). In the vicinity of the previous excavations have been found (1) a number of early Christian tombs; (2) a great mosaic of elegant Hellenistic design, forming part of the pavement of a peristyle surrounding an interior court; (3) a sarcophagus containing fragments of Myrina figurines; (4) a stone of palaeolithic form; (5) fragments of a gray pottery, difficult to date, but recalling Trojan ceramics. Exploration of the promontory of Phocaea has yielded fragments of pottery dating from the Mycenaean to the Roman period. A study of the geological history of the promontory shows that it was originally an island. This fact confirms a tradition preserved by Nicholas of Damascus (Müller, *Fr. Hist. Gr.* III, p. 53, fr. 387) and identifies the “island” of Bacchium described by Livy (XXXVII, 21).

**SAMOS.—Inscriptions from the Heraeum.**—Inscriptions from the Heraeum of Samos, found by the German excavators up to June, 1914, are published by M. SCHEDE (*Ath. Mitt.* XLIV, 1919, pp. 1–46; 2 figs.). They date from the Athenian conquest in 439 B.C. to Roman times, and are chiefly euergetic decrees (cf. *Ber. Kunsts.* XLI, 1920, pp. 117–131; *A.J.A.* XXV, 1921, p. 87).

## GREECE

**ACTIVITIES OF THE FRENCH SCHOOL AT ATHENS.**—In *C. R. Acad. Insc.* 1921, pp. 35–46, T. HOMOLLE presents a summary report of the activities of the French School at Athens in the year 1919–1920. One of the students, M. Demangel, has made a new study of the archaic relief in the Acropolis Museum, representing a figure entering a chariot. He believes that the person represented is Artemis, and that the relief is from a building connected with the cult of Artemis Brauronia on the Acropolis. M. Demangel has made excavations on the site of the temple of Athena Pronaia at Delphi, showing the varying extent of her precinct at different periods. In the seventh century there was a polygonal circuit wall. In the sixth century the precinct was extended towards the east and south. Fragments of ashlar wall built in the fourth century to replace polygonal wall also of the fourth century were discovered. It is proposed to identify the temple of Athena Pronaia as the so-called “temple of the perjurers,” because near it are the socles of stelae similar to those near the adjoining two treasuries, to which this name has hitherto been given, and because an inscription from one such stele was discovered, recording the confiscation of forfeited lands to the profit of the treasury. By trial diggings parts of the foundation of a circular building were found near the tholos, indi-



cating that an earlier tholos had existed on this site. M. Renaudin has recognized on a height called Kastraki, near Port Tholon, southwest of Nauplia, an important prehistoric settlement which he would identify with Asine. He has also begun the exploration of a Mycenaean necropolis at Scala Skoinochori, northwest of Argos. A catalogue of the Theran vases in the possession of the French School has been prepared by M. Renaudin. He assigns a later date to the characteristic pottery which has hitherto been attributed to the close of the Middle Minoan period and the beginning of the Late Minoan. M. Dreyfus made a journey of archaeological exploration in the region of Pangaeum, and studied inscriptions at Delphi.

**AEGIRA.—Discoveries in 1915.**—In *Jh. Oest. Arch. I. XIX-XX*, 1919, Beiblatt, cols. 1-42 (25 figs.), O. WALTER describes the ancient remains of Aegira which he explored in 1915. The town wall, which in places is finely preserved, can be followed for most of its circuit. Northeast of the acropolis is a level space, partly supported by terrace walls, upon which are remains of several buildings, among them a theatre. Some of the seats and portions of the stage buildings were visible without excavation. There were two *διαζώματα*. Northeast of the theatre was a small prostyle temple, identified as the temple of Zeus. Near the south wall were found a headless statue in armor and a large bearded head of Zeus (see below) identified as the cult statue by Euclides mentioned by Pausanias. North of this temple are several small ruined buildings. Parts of an aqueduct were noted; also part of the marble torso of a boy, and an inscription of the fourth century with the name *'Αστροιδ[ης]*, not otherwise known.

**ATHENS.—The Nike Temple.**—Results of more accurate measurements and of identifications of new blocks of the Nike Temple are given by A. K. ORLANDOS in *Ath. Mitt.* XL, 1915, pp. 27-44 (2 pls.; 11 figs.). (1) Measurements of Ross and Le Bas are corrected for crepis, intercolumniations, parastades and orthostatae. (2) A block of the profiled sub-base of the grating between columns and antae of the cella shows that the grating was put in when the temple was built. Originally there was a profiled sill in the middle opening. (3) The blocks of the cella walls were laid *φορμηδόν*, the successive layers diminishing in height. (4) The plan of the temple was not rectangular but trapezoidal, due either to carelessness or to haste. (5) Of the blocks of the frieze, *o* should be placed third from the east on the south side, and *m* and *g* third and fourth on the north side. (6) Places are assigned to two new geison blocks and to one already identified by Stevens. (7) Sima blocks have been identified; three served as bases for acroteria.

**Ostraca from the Ceramicus.**—The most important ostraca from the German excavations in the Ceramicus, together with others already known, are published by A. BRUECKNER in *Ath. Mitt.* XL, 1915, pp. 1-26 (4 pls.; 10 figs.). Most of these have to do with the party conflicts of 450-440 B.C., *i.e.*, a contest between Thucydides, son of Melesias, and Cleidippides, and an attempt to ostracize Damon, son of Damonides,—both Cleidippides and Damon being partisans of Pericles. An ostrakon marked *δημώλης* and another marked *δημώλες* (*i.e.*, "he who has lost his *δημος*"), belong to the time before Solon, and indicate early steps in the development of the Cleisthenic ostracism.

**ELIS.—Excavations in 1914.**—In *Jh. Oest. Arch. I. XVIII*, 1915, Beiblatt, cols. 61-76 (5 figs.), O. WALTER reports upon the excavations carried on at Elis

in 1914. Temple C proves to have been rebuilt in late times. North of it was a building of sun-dried brick and still farther north a temenos in which vases and terra-cottas were found; also terra-cotta heads, some of life size, a statuette of Artemis and an archaic inscription on bronze written boustrophedon. Further excavations were carried on at the stage buildings of the theatre. To the northwest some late graves were opened, in one of which was found an oval gold plate with the figure of Athena armed with shield and spear upon it.

**MYCENAE.—The Excavations of the British School.**—In *The Times Literary Supplement* (London), October 13, 1921, p. 660, A. J. B. WACE reports on the second season of study and excavation at Mycenae by the British School in Athens. (For an account of the first campaign, see *ibid.* June 24, 1920 and August 19, 1920; see also *A.J.A.* XXV, 1921, pp. 87–88.) In the region of the Grave Circle the Ramp House proved to be of megaron type; it dates from the Third Late Helladic period. Walls of the First and Second Late Helladic periods were discovered below it, and fragments of frescoes with graceful naturalistic designs. At a lower level were remains of the Middle Helladic age, including some graves, which show that the Grave Circle included only a part of the cemetery which originally existed on this site. Study of the Lions' Gate proved that the relief was cut out with the use of the saw and the drill. The lions' heads may have been of steatite. The gateway was originally roofed. On the summit of the acropolis the plan of the palace was studied. There are traces of settlement in the Early Helladic period, and of construction in the Middle Helladic period. Early in the Late Helladic a palace was built here, the home of the kings who were buried in the Shaft Graves. Of this structure only fragments of walls, frescoes, pottery, and miscellaneous debris remain. The later palace of the Late Helladic period was much more extensive, including "a large court lighting the rooms and corridors looking on it, two entrances, a large hall with columns, storerooms, staircases, and at least two storeys." A feature of striking interest is a great staircase with lobbies and landings like that of the stairway at Cnossos. New fragments of the stucco decoration of the great hall were found, fallen face downward on the pavement, and injured by the fire which destroyed the palace. From the porch of the megaron staircases and a lobby led to the domestic apartments. Here was a stepped tank, covered with red stucco. A magazine containing a number of inverted jars and much broken pottery was found. Excavations near the carriage road, south of the Treasury of Atreus, resulted in the discovery of three rock-cut tombs. The first contained a single skeleton, some terra-cottas and a carnelian sealstone showing a man vaulting over a bull. In the second were remains of several burials, many sherds, and some complete vases of the Third Late Helladic period. It is evident that such tombs were reopened from time to time for new burials, and that on these occasions objects connected with earlier burials were swept aside and broken. The largest of the three tombs has not yet been completely excavated. In the dromos were sixteen skeletons and a great quantity of pottery fragments. Another cemetery of more rudely cut tombs was discovered on the north slope of Kalkani hill. This goes back to the beginning of the Late Helladic age, and has yielded many small objects of interest, including a necklace of crystal, carnelian, glass, gold, and amber beads; painted vases, including a fine libation vase, perhaps imported from Crete; and several beautiful intaglios, two of which show a cow suckling a

calf, and two the Great Mother holding her snakes, and attended by her lions, with the symbol of the double axe. Although inhabited early in the Bronze Age, Mycenae first attained importance in Middle Helladic times (1800–1600 B.C.). At the end of this period it was dominated by Cretan culture, and in the First Late Helladic period it was a city of wealth and power. After the fall of Cnossus it was the principal centre of Mediterranean civilization (1400–1100 B.C.). The splendor of its buildings, and the technical skill revealed in their plan and construction show that this culminating period of Mycenaean power must not be regarded as a degenerate age.

**PAROS.**—**Prehistoric Houses.**—The remains of prehistoric houses on or near the acropolis of Paros are described by O. RUBENSOHN in *Ath. Mitt.* XLII, pp. 1–98 (2 pls.; 103 figs.). Both circular and rectangular foundations have been discovered. The pottery shows a development parallel with that of Phylakopi and free from Cretan influence to the time of Phylakopi I<sup>3</sup>. Then there is a break of several centuries during which the site was uninhabited. But with the late Mycenaean period the vase fragments reappear and the series is continuous down to the time of Melian ware.

**SKOINOCHORI.**—**A Prehistoric Settlement.**—In *C. R. Acad. Insc.* 1921, pp. 100–106 (4 figs.), C. PICARD reports on M. Renaudin's excavations at Skoinochori in Argolis. His investigations have proved that the site was occupied in the Helladic age, probably at a period as early as the Early Minoan. A few handmade sherds were found in the stratum immediately above virgin soil. In a later stratum were fragments of a local ware imitative of Minyan pottery dating from Middle Helladic II. At a still higher level were remains of houses of Late Helladic III (Mycenaean) date. The tombs of the necropolis connected with the town are approached by a dromos, and are cut in the rock. Their floors are of rectangular shape. There is no sign of luxury in their furnishings. One oenochoe found in a tomb is of Helladic shape, but with Minoan ornament. Most of the pottery is of Mycenaean style, some as late as that found at Tell el-Amarna. The latest burials seem to have taken place in the late Mycenaean period (Late Helladic III A); but some of the objects from the tombs are as early as Late Helladic I.

## ITALY

**ARCHAEOLOGICAL DISCOVERIES IN 1921.**—To *The Times Literary Supplement* (London), December 15, 1921, p. 842, and December 22, p. 858, THOMAS ASHBY contributes his annual report on the progress of archaeological discovery in Italy. In Rome the destruction of the Palazzo Caffarelli has brought to light again remains of the temple of Jupiter Optimus Maximus. Nineteen courses of the substructure are preserved, and are to be attributed to the original temple of the Tarquins. Excavations are being made in the peristyle southwest of the so-called House of Livia, which is really the house of the Hortensii purchased by Augustus. The cemetery of Pamphilus has been found in the Via Salaria. At Porto the hexagonal harbor basin is being cleared. A temple with three cellae, resembling that of Apollo at Veii, has been found at Lanuvium (Civita Lavinia). In a group of small buildings excavated at Mentana (ancient Nomentum) has been found a portrait head of a Greek, after an original of the fourth century B.C., and a statuette of the youthful Bacchus, of Praxitelean type. A bronze statuette of a Roman boy with a top and whip,

the first known representation of this subject in sculpture, was discovered near Mentana. At Bologna the widening of streets has led to the uncovering of a part of the main Roman street of the town. In excavation in the bed of the Reno a part of the embankment which led to the Roman bridge over the river was found. Remains of ancient thermae were discovered at Siena, in excavation for the new railway station. Thermae were also found at Tuscania, in the construction of a road. In the valley of the Gaggera near Selinus further excavations in the temenos of Demeter Malophoros have brought to light a porch and an adjacent smaller temenos, in which was a temple of unusual plan with an arched niche in the back wall. Many terra-cottas were found here; and another large deposit of votive terra-cottas was found in the west angle of the larger temenos. Most of these represent female figures. They are of four principal types: (1) Statuettes in Ionic dress, in the form of alabaster; (2) figures like the Korai of the Acropolis; (3) squat figures like those found by Orsi at Camarina and Mesma; (4) figures in the style of the fourth century B.C. At Syracuse a rock-cut cistern was found in the centre of Ortygia; a rock-cut Siculan tomb was excavated on Epipolae. A wall defending Euryelus on the northeast was discovered. The fortifications of the Portella del Fusco have been studied. Other discoveries at Syracuse include an imperial portrait head of marble, and a limestone caryatid belonging to the restoration of the theatre by Hiero II. Tombs of the Hellenistic period were found in the Canalicchio necropolis.

**ASSARO.**—A Bronze Situla.—In *Not. Scav.* XVII, 1920, pp. 335-336, P. ORSI reports the discovery of a large number of Hellenistic tombs at the foot of the hill of Assaro in Sicily. Among the few finds were a handsome bronze pail (23 cm. high; 33 cm. with the bail raised), supported on three lion's paws. The bail is formed of two serpents, whose tails are coiled behind the handles at the side. These handles are decorated with masks of Sileni with pointed ears and wavy beards, surmounted by two ivy leaves. Over these bronze leaves are two similar leaves in silver plate, one of which covers the leaf below, while the other does not. The pail represents excellent work of the Hellenistic age.

**BRINDISI.**—Ancient Glass.—In *Not. Scav.* XVII, 1920, pp. 296-297, G. BENDINELLI reports the discovery of tombs containing glass objects at "Fontana grande," one-half kilometre east of Brindisi.

**BUSCEMI.**—A Dedicatory Inscription.—In *Not. Scav.* XVII, 1920, pp. 327-329, P. ORSI publishes a new Greek inscription from the sacred grottoes at Buscemi in Sicily (see *Not. Scav.* 1899, p. 459). The inscription is a dedication to the *Θεαί Παῖδες*, either the nymphs or Demeter and Kore, and to "Αννα, an oriental deity; it dates from the Roman imperial period.

**CAMARINA.**—A Statuette of Athena.—In *Not. Scav.* XVII, 1920, pp. 329-330, P. ORSI reports the discovery at Camarina of a bronze statuette of Athena (19 cm. in height). It is cast solid, except for a cavity in the lower part, and is hence very heavy. The type is that of the grand Attic style of the fifth century; the model, either the Athena Promachos of Phidias, or more probably the Myronian type illustrated by the statue at Frankfurt a. M. and the funeral relief of the Acropolis Museum.

**CORNETO-TARQUINIA.**—Government Excavations.—In *Not. Scav.* XVII, 1920, pp. 244-276, G. CULTRERA reports on the first excavations made by the Italian government in the territory of Corneto; previous explorations

were either private or under the direction of the local authorities. At Madonna del Pianto two chambered tombs were found. The first belonged to a late period and had already been opened. It contained no paintings and yielded only fragments of pottery and five inscriptions, of which two were Etruscan. The second, larger and of a better period, contained paintings, which, however, were badly damaged. This yielded three inscriptions, of which one was Etruscan. In connection with his report the writer discusses "Questions relative to the History of Etruscan Painting," finding the division of the Etruscan tombs into three periods correct, but regarding the date and duration of the periods as uncertain. He makes a plea for an extensive and systematic exploration of the necropolis of Tarquinia. He then discusses "Questions relating to the Habitation of ancient Tarquinia." He believes that the arguments against the existence of an early city on the Piano della Regina are not decisive. He emphasizes the need of investigation of this point and of an official archaeological institute at Corneto-Tarquinia.

**FLORENCE.**—A Statue in the Archaic Style.—In *Dedalo*, II, 1921, pp. 230-239 (8 figs.), A. MINTO publishes a statue in the collection of Count Paolo Guicciardini, Florence, which has escaped the attention of students because, no doubt, of its unfortunate, distracting restorations. Only the torso is ancient. The nearest parallel to the work is to be found in the torso of Sant' Alessio, now in the Conservatori. The Sant' Alessio torso has been justly classed with the examples of that series of fragmentary *korai* from the sanctuary of Delos and attributed to the younger school of sculptors of Chios. But the Guicciardini torso exhibits a more minute, facile technical skill, and is to be considered a Roman copy of the time of Augustus.

**FORANO.**—An Inscribed Lead Pipe.—In *Not. Scav.* XVII, 1920, pp. 238-239, R. BARTOCINI reports the discovery of an inscribed lead pipe evidently belonging to a large villa, the existence of which was already known. The inscription read *Oran(ius) Cralerus*. Both names are already known.

**FORDOGIANUS, SARDINIA.**—An Augustan Inscription.—In *Not. Scav.* XVII, 1920, pp. 347-352, A. TARAMELLI publishes a fragmentary Latin inscription of the Augustan period, found near the baths of the "Forum Traiani" at Fordogianus, Sardinia. It formed part of a dedication to Augustus by the *civitates barbariae* and is assigned by Taramelli to the year 19 B.C.

**FRASCATI.**—The Via Tusculana.—In *Not. Scav.* XVII, 1920, p. 293, B. PACE reports the discovery of remains of the Via Tusculana at Frascati between the piazza of the railway station, the stairway leading to the Via del Politiano Tusculano and the last part of the Via Ponzi towards the balconata.

**GIRGENTI.**—A Greek Inscription.—In *Not. Scav.* XVII, 1920, pp. 338-339, P. ORSI reports the discovery of a fragmentary Greek inscription at Girgenti.

**GRAMMICHELE.**—Vases and Terra-cottas.—In *Not. Scav.* XVII, 1920, pp. 336-337, P. ORSI gives a brief preliminary report of discoveries at Grammichele in Sicily, in the region called Terravecchia. This was the site, in the sixth century before our era, of a Siculan town (undoubtedly Echetla), which became Greek in the fifth century. The place has yielded a large number of vases and some figurines, now in the Museum at Syracuse. Systematic excavations yielded forty-six tombs, extending in time to the middle of the fifth century. Among the finds is a large kotylos, on the foot of which is a circular

inscription of twenty-seven letters, in which D. Comparetti has read a verse from the *Ephialtes* of Phrynicus.

**LANUVIUM.**—Miscellaneous Antiquities.—In *Not. Scav.* XVII, 1920, pp. 294–296, A. GALIETI reports the discovery of various antiquities, including brick-stamps and fragmentary inscriptions.

**MEGARA HYBLAEA.**—Excavations.—In *Not. Scav.* XVII, 1920, p. 331, P. ORSI gives a brief account of the excavations of 1917 and 1918 at Megara Hyblaea, to be followed by full details in the *Monumenti Antichi*. The foundations discovered nearly forty years ago belonged to a Doric hexastyle peripteral temple 42.25 by 17.55 m. Under the foundations were found traces of a neolithic village of the type Stentinello-Matrensa. Some fine pottery was found, including a cup decorated with a large red star of nine rays. This must have been imported from some region as yet undetermined.

**MESSINA.**—A Torso of Praxitelean Type.—In *Not. Scav.* XVII, 1920, pp. 339–340, P. ORSI reports discoveries made in the spring of 1916 during the building of a new city hall at Messina. They include a fine male torso in marble, a little over life size (the trunk measures 84 cm.) and of Praxitelean type. An inscribed base was also found with a Latin inscription of the time of the Antonines.

**MINEO (MENAE).**—A Greek Inscription.—In *Not. Scav.* XVII, 1920, p. 337, P. ORSI reports the discovery of a fragmentary Greek inscription at Mineo (Menae) in Sicily.

**ORIA (LECCE).**—Three Tombs.—In *Not. Scav.* XVII, 1920, pp. 297–302, G. BENDINELLI gives an account of the discovery at Oria (Lecce) of three ancient tombs, containing a considerable number of vases. Two of these tombs were found near the road leading from the Porta Lama to the Porta Piazza; the other in the road running from Oria southeast to Torre S. Susanna. Among the vases was one with a decoration similar to the mosaic familiarly known as "Pliny's doves." Bendinelli assigns the tombs to the third century before our era.

**PALAZZOLO ACREIDE.**—A Fourth Century Relief.—In *Not. Scav.* XVII, 1920, pp. 332–333, P. ORSI publishes a high relief in fine calcareous stone, designed to decorate a large niche. It was found by peasants a little less than a kilometre from the acropolis of Palazzolo Acreide (Acræ) in Sicily. The workmanship is fine, probably of the fourth century. The upper part is badly damaged: there remain the greater part of a draped woman and of a half nude androgynous figure separated by an altar on which are the omphalos and a tripod. The figures perhaps represent Apollo and Demeter; the subject seems to be a new one.

**POLA.**—Buildings near the Amphitheatre.—In *Jh. Oest. Arch. I.* XVIII, 1915, Beiblatt, cols. 163–176 (8 figs.), A. GNIRS gives an account of the remains of buildings in the vicinity of the amphitheatre at Pola.

**A Guide to the Antiquities.**—The Austrian Archaeological Institute has published an illustrated guide to the antiquities of Pola, comprising the history of the archaeological collections of the city, an outline of the history of Pola in pre-Roman, Roman, and mediaeval times, and descriptions of the amphitheatre, the temple of Augustus and Rome, the theatre at Monte Zaro, the Porta Aurea, the Porta Ercole, the Porta Gemina, the theatre on the Capitol, the cathedral, the church of S. Maria di Canetto, and the several collections of

sculptures, inscriptions, and other antiquities. [A. GNIRS, *Pola, ein Führer durch die antiken Baudenkmäler und Sammlungen*. Vienna, 1915, A. Hölder. 176 pp.; 122 figs. 8vo.]

**RAGUSA.**—A Neolithic Settlement.—In *Not. Scav.* XVII, 1920, pp. 333-334, P. ORSI reports the discovery in December, 1916, on Monte Salia, at Ragusa in Sicily, of the village and necropolis of the neolithic Siculi who worked the quarries referred to in *B. Pal. It.* 1898, p. 165. The necropolis presented some new features; there were but eleven tombs, each containing from fifty to one hundred skeletons.

**RIETI.**—A Latin Inscription.—In *Not. Scav.* XVII, 1920, p. 239, E. DUPRÉ THRESEIDER reports the discovery of a fragmentary Latin inscription at Rieti.

**ROME.**—Discoveries in the Via Alessandro Volta.—In *Not. Scav.* XVII, 1920, p. 281, E. GATTI announces the discovery in the Via Alessandro Volta, at the corner of the Via Zabaglia, of an ancient wall and four amphora handles with inscriptions, one unpublished.

**Discoveries near the Via Labicana.**—In the Via Casilina, about 200 m. from the Porta Maggiore, four travertine pilasters have come to light, perhaps forming part of an aqueduct. Near the corner of the Via Casilina and the Viale Castrense a portion of the pavement of the Via Labicana was found, forming a slight angle with the Via Casilina. (E. GATTI, *Not. Scav.* XVII, 1920, p. 282.)

**Discoveries in the Via Mondovi.**—In the Via Mondovi, outside the Porta S. Giovanni, some ancient walls have been found belonging to a tomb; also two inscriptions, one of which is on a fragment of an Arretine vase. (E. GATTI, *Not. Scav.* XVII, 1920, pp. 282-283.)

**Discoveries on the Via Nomentana.**—On the property of Sig. Spadari, 3 km. to the left of the road, there were found a sepulchral precinct and one inscription. (E. GATTI, *Not. Scav.* XVII, 1920, p. 283.)

**Discoveries on the Via Ostiense.**—On the left of the Via Ostiense, 150 m. beyond the *cavalcavia ferroviaria*, a piece of the ancient road, running from east to west for 15 m., was found two metres below the modern street level. At the lane leading from the Via Ostiense to the *fermata ferroviaria omonima*, 1.20 m. below the present level, a bit of the same road, running in the same direction, was found. It measures 2.40 m. between the *crepidines*. At the bridge over the Almo an inscribed cippus was unearthed. (E. GATTI, *Not. Scav.* XVII, 1920, p. 283.)

**Discoveries near the Via Salaria.**—Near the villino No. 36 Via Pinciana there have been found the remains of a columbarium with six inscriptions, one of which mentions a *concinctor a scaena*; also an inscribed tile (*C.I.L.* XV, 811 f.). In making a new street between the Via Po and the Via Tevere the remains of a number of tombs were found with fifteen inscriptions. Along the Corso d'Italia, in front of the cut in the city wall corresponding to the Via Basilicata, a bit of ancient road has been found, running obliquely to the Corso d'Italia, probably belonging to the *deverticulum a via Salaria vetere ad portam Collinam* (F.U.R. tav. 3); also the remains of walls. (E. GATTI, *Not. Scav.* XVII, 1920, pp. 284-290.)

**Discoveries near the Via Viminale.**—In *Not. Scav.* XVII, 1920, pp. 276-277, E. GATTI reports the discovery of walls and *cuniculi* between the Via Viminale, Agostino Depretis, and Napoli, probably connected with the remains

unearthed in 1916. There is also a bit of ancient road, running parallel with the Via Viminale and belonging to the late Empire or early Middle Ages, as well as remains of private houses, and a fragment of a Christian inscription dating from the consulship of Mavortius in 527 A.D.

**Houses near the Via XX Settembre.**—In the Via XX Settembre, on the west side of the former Palazzo Baracchini, E. GATTI reports the discovery of the remains of private houses, fragments of statuary, architectural members, and a fragmentary inscription. (*Not. Scav.* XVII, 1920, pp. 277–279.)

**A Private House.**—On the west side of the area included between the Vie Andrea Doria, Mocenigo and Candia remains of a private house of Roman times have been found on the slope of Monte Mario to the left of the Via Trionfale. Leading to it is a *deverticulum* approaching the road from south-east to northwest. The house contained a fine mosaic pavement, 50 m. square, of about the middle of the first century of our era. A dedicatory inscription to Silvanus was also found. (E. GATTI, *Not. Scav.* 1920, pp. 290–292.)

**A Road near the Via Tiburtina.**—During excavations in the circular plot of the Pinetto a Campo Verano an ancient road was brought to light, one metre below the modern level. It runs northeast and southwest and was a *deverticulum* of the Via Tiburtina. Beneath it was a sepulchral gallery. (E. GATTI, *Not. Scav.* XVII, 1920, p. 290.)

**Sarcophagi and Vases.**—In *Not. Scav.* XVII, 1920, pp. 279–281, E. GATTI reports the discovery in the Viale Giotto, of the district of S. Saba, of a chamber with three marble sarcophagi, orientated from east to west. One of these had sculptures covering half of one long side, the other half being left unfinished. There were also found fragments of vases, including Arretine ware with inscriptions and inscribed handles of amphorae, some of which are unpublished; also a brick stamp of the greater Domitianic pottery (*C.I.L.* XV, 165).

**Tombs near the Via Portuense.**—Near the junction of the Via Portuense with the Via Magliana some cremation and inhumation tombs have been found with two inscriptions and a few small objects. (E. GATTI, *Not. Scav.* XVII, 1920, p. 284.)

**A Villa on the Via Latina.**—In *Not. Scav.* XVII, 1920, p. 282, E. GATTI reports the discovery, on the property of Comm. Maraini on the right of the Via Appia Nova, of the remains of an ancient building, apparently a villa rustica. With them were found fragments of painted stucco of good style and of veneering slabs of colored marble.

**SCHIO.**—A Neolithic Settlement.—In *Not. Scav.* XVII, 1920, pp. 236–237, A. ALFONSI reports the existence at Schio, on the hill where the castle stands, of a settlement dating from neolithic times.

**SYRACUSE.**—Recent Discoveries.—In *Not. Scav.* XVII, 1920, pp. 303–327, P. ORSI describes the discovery of Siculan tombs near the south side of the sea-wall of Epipolae. They were of an interesting form, but nothing was found in them. He also gives an account of the exploration of Castello Eurialo and other sites. At S. Lucia inscriptions and small objects were found, including fragments of a vase decorated with a representation of the twelfth labor of Heracles, signed *Atticus Naevi*. In the necropolis at Grotticelli two fragmentary inscriptions came to light; excavations in the theatre and amphitheatre yielded inscriptions and small objects; the necropolis at Canalicchio and the catacombs of Syracuse were also examined.

**Sixth Century Art.**—In *Burl. Mag.* XXXIX, 1921, pp. 210–216 (pl.; fig.),



E. D. VAN BUREN describes the results of Professor Orsi's excavations of sixth century temple remains in Syracuse. The most interesting objects found are the terra-cotta decorations. They are in a very fragmentary condition, but give, nevertheless, much new and important information concerning the temple decoration of this period.

**TAORMINA.—A Late Roman Mosaic.**—In *Not. Scav.* XVII, 1920, pp. 340-345, P. ORSI reports discoveries made at Taormina in 1917 and 1918. They include a marble tablet (51 by 34 cm. ) with a Latin inscription, acquired from a dealer in antiquities. A few feet from the railway station of Giardini-Taormina, the remains of a building with a mosaic pavement were unearthed. These had to be destroyed, but a facsimile of the interesting mosaic was made. The remains are 6 m. by 5.80; in its complete condition the mosaic perhaps measured 6 m. by 6.50. It represents the Cretan labyrinth, surrounded by a wall with towers at the corners and gates on two sides; two of the former and one of the latter had disappeared. The usual representation of Theseus and the Minotaur in the centre is lacking. One side is decorated with three dolphins. The workmanship is poor and the design puerile, and the mosaic must be assigned to the period beginning with Diocletian.

**TERRANOVA DI SICILIA.—A Hoard of Gold.**—In *Not. Scav.* XVII, 1920, p. 338, P. ORSI reports the discovery at Terranova di Sicilia, by peasants, in December, 1918, of a hoard of Macedonian *aurei* and, perhaps, some jewelry. The collection was scattered, but there have been recovered a number of gold staters of Philip (359-336) and Alexander (336-323); also a gold earring decorated with a lion's head. Other hoards had been found previously in the neighborhood.

**TINDARI.—A Hellenistic Nike.**—In *Not. Scav.* XVII, 1920, pp. 345-347, P. ORSI publishes a fragment of a Nike in Greek marble, from Tindari in Sicily, belonging to a collection made by Baron della Scala and now dispersed. The fragment is 89 cm. high and shows the lower part of the figure, which was perhaps an acroterium. Orsi regards it as a Hellenistic work, inspired by the sculpture of the second half of the fifth century.

**VERONA.—Mosaic Pavements.**—In *Not. Scav.* XVII, 1920, p. 235, A. ALFONSI describes the discovery of a mosaic pavement of a good period under the Via S. Andrea in Verona. In the Via Mazzini remains of a Roman building and a mosaic pavement were found. In *Not. Scav.* XVII, 1920, p. 236, A. DA LISCA reports the discovery of a Roman tomb near S. Stephano at Verona. It contained only a skeleton.

**VICO PISANO.—A Silver Hoard.**—In *Not. Scav.* XVII, 1920, pp. 240-243, A. MINTO reports the discovery of a hoard of Roman silver denarii, with a few quinarii, at Vico Pisano in Etruria. The coins, which were found at a depth of about 4 m., belong to the last century of the Republic. The earliest is a denarius of C. Julius Caesar and the latest a denarius struck by Augustus in honor of C. and L. Caesar. The 202 pieces represent an unusually large number of types. The existence of a Roman village at this place is known also from the discovery of tombs.

## SPAIN AND PORTUGAL

**ALISEDA.—A Treasure of Gold and Silver.**—In *B. Soc. Esp.* XXIX, 1921, pp. 96-124 (8 pls.; 9 figs.), J. R. MÉLIDA describes the very important treasure

found in Aliseda in 1920. It consists of numerous objects of gold and silver and other metals, but principally of gold. They are Phoenician and Carthaginian work ranging in date from the sixth to the fourth century B.C. Though many similar finds have previously been made in Spain, this is the most important of all both because of its size and because of the excellent quality of the workmanship displayed in the exquisite jewels. The treasure has been deposited in the Museo Arqueológico Nacional.

**BEIRA-BAIXA.**—Miscellaneous Antiquities.—In *O Archeologo Português*, XXIII, 1918, pp. 1-18 (18 figs.), J. L. DE VASCONCELOS describes objects of various periods found in Beira-Baixa, including some prehistoric antiquities, Roman pottery, glass and inscriptions, and a Visigothic lamp.

**CENICIENTOS.**—The Rock of Perescrita.—In *C. R. Acad. Insc.* 1920, pp. 103-107, P. PARIS describes a sculptured rock known as the Rock of Perescrita, near Cenicientos in the southeast of the province of Madrid. It is of interest because few monuments of antiquity have been found in this region. The fields about it are covered with fragments of coarse pottery of Roman date, though possibly of Iberian manufacture. At the top of the rock is a niche like an oven. Below this a rectangular frame encloses two representations in relief, of which the lower seems to show a figure on a horse, the upper three female figures. The latter is, perhaps, a scene of offerings. There is a short and illegible inscription at one side, which, perhaps, showed to whom the relief was dedicated.

**JAÉN.**—An Iberian Bronze.—In *B. Soc. Esp.* XXIX, 1921, pp. 130-142 (2 pls.; fig.), H. OBERMAIER publishes an Iberian bronze found in the province of Jaén or of Murcia and belonging to Dr. Aquirre. Its special interest lies in its subject matter. It represents a sacrificial scene, the only representation of such an Iberian ceremony that we have. It is, therefore, of importance in throwing light upon the religious practices of the Iberians.

**SIERRA MORENA.**—Hoard of Roman Denarii.—In October, 1920, there was discovered in the Sierra Morena, province of Jaén, on the northern confines of Andalusia, a hoard of Roman denarii, wrapped in a bent sheet of lead. The precise spot of discovery was about two miles northeast from the Centenillo silver-lead mines, which are situated about six miles northwest from the town of La Carolina. The coins numbered 617 pieces, which made up the entire hoard. The dates range from the earliest issues of Roman silver down to about 90 B.C., at about which time the burial must have taken place. The find is described in detail by HORACE SANDARS in *Num. Chron.* 1921, pp. 179-186. The burial must have been substantially contemporaneous with that of a hoard of denarii and ornaments described by Messrs. Hill and Sandars in *Num. Chron.* 1912, and in *J.R.S.* I, 1911.

## FRANCE

**LECTOURE.**—A Portrait Head.—In *Bulletin de la Société Archéologique du Midi de la France*, nouvelle série, 42, 1913, pp. 135-137 (pl.), E. DELORME describes a portrait head of the first century which was discovered with a number of other sculptural fragments at Lectoure (Gascogne). It has a certain resemblance to portraits of Tiberius, but does not represent him. The subject has not been identified.

**MARIGNAC.**—A Gallo-Roman Stele.—In *C. R. Acad. Insc.* 1921, pp. 154-158, M. GRAILLOT describes a Gallo-Roman stele found at Maurignac (Haute-Garonne). The busts of a man and his wife are carved on it in high relief of a style which is not later than the Flavian era. The man's name is Galus. That of his wife, Teixossix, is of Pyrenaean origin.

**MAS D' AZIL.**—Palaeolithic Art.—In *Bulletin de la Société Archéologique du Midi de la France*, nouvelle série, 42, 1913, pp. 139-142 (2 pls.), the Abbé BREUIL and Count H. BÉGOUEN report their discoveries in the lower passages of the cave of Mas d' Azil. They found fragmentary drawings, in red paint, of bisons, reindeer, and horses. Count Bégouen remarks that prehistoric man availed himself of accidental resemblances, in the irregularities of the cave walls, to forms of animals which he wished to depict.

**MONTESQUIEU-AVANTÈS.**—Palaeolithic Art.—In *Bulletin de la Société Archéologique du Midi de la France*, nouvelle série, 42, 1913, pp. 61-62 (4 pls.), Count H. BÉGOUEN describes some examples of palaeolithic art which he has discovered in the Caverne du Tuc d'Audoubert, near Montesquieu-Avantès, Ariège. One gallery of the cave contains drawings of horses, bisons, and a reindeer, accompanied by marks which probably represent primitive darts. Another gallery seems to have been a centre of magical ceremonies; a part of this shows strange designs like those of Gargas and the Spanish caves, complex interlaces of Aurignac date. Most remarkable of all remains of quaternary art in this cave is a large group of a male and a female bison, modelled in clay.

**PARIS.**—A Roman Road.—In *C. R. Acad. Insc.* 1921, pp. 85-90 (fig.), Dr. CAPITAN reports that in recent excavations for a gas conduit in Rue St. Jacques, Paris, some sandstone slabs of a Roman pavement were found. They belong to the latest repair (in the fourth century) of the road from Lutetia to Genabum.

**TOULOUSE.**—A Roman Aqueduct.—J. CHALANDE reports the discovery at Toulouse of the socle of a pillar of the Roman aqueduct which brought the water of Ardenne Haute to the city. (*Bulletin de la Société Archéologique du Midi de la France*, nouvelle série, 43, 1914, pp. 171-172.)

## SWITZERLAND

**GENEVA.**—Miscellaneous Antiquities.—In *Bulletin de l'Institut National Genevois*, XLI, 1914, pp. 331-355 (32 figs.), B. REBER describes antiquities discovered between the Église de la Madeleine and the Place Langemalle at Geneva in excavations incidental to the construction of new buildings. Some traces of prehistoric settlement were found, and many fragments of Gallic and Roman pottery and other small antiquities of Roman date. A fragmentary inscription commemorates a man named Trebonianus.

## AUSTRIA

**BREGENZ.**—A Roman Brick Kiln.—In *Jh. Oest. Arch. I.* XIX-XX, 1919, Beiblatt, cols. 49-66 (12 figs.), A HILD describes a Roman brick kiln found at Bregenz in 1912. Some of the bricks found bear the name CARINVS. Forty-six bronze coins dating between 340 and 380 A.D. were discovered.

**EBREICHS DORF.**—Roman Monuments.—In *Jh. Oest. Arch. I.* XVIII, 1915, Beiblatt, cols. 219-232 (4 figs.), F. RUZICKA describes four Roman tombstones and an altar built into the castle at Ebreichsdorf.

**FLAVIA SOLVA.**—Recent Excavations.—In *Jh. Oest. Arch. I.* XIX–XX, 1919, Beiblatt, cols. 135–156 (13 figs.), W. SCHMID reports upon the excavations at Flavia Solva, near Leibnitz, from 1913 to 1916, with plans of the streets and buildings. Various objects of minor importance were brought to light, including architectural plaster fragments and pieces of wall frescoes.

**GRÄDL.**—A Prehistoric Site.—Discoveries at a prehistoric site near Langenlois-Haindorf in the vicinity of Grädl are described by A. HRODEGH in *Mitt. Anth. Ges.* LI, 1921, pp. 40–43 (2 figs.). The objects discovered are assigned to these periods: the Unjetitz, the Lausitz, the late Hallstatt, and La Tène.

**HANKENFELD.**—A Neolithic Grave.—In *Mitt. Anth. Ges.* LI, 1921, pp. 46–47, J. BAYER reports the discovery at Hankenfeld of a prehistoric grave with pottery of neolithic date. It seems to be the first neolithic burial to be found south of the Danube in the East Alpine region.

**LOTSCHITZ.**—Report on Recent Excavations.—In *Jh. Oest. Arch. I.* XIX–XX, 1919, pp. 107–134 (6 figs.), F. LORGER reports upon his excavation of the buildings in the Roman camp at Lotschitz in 1916 and 1917. There were found 204 inscribed bricks bearing the words *leg(io) II Italica Ampliatus, leg(io) II Italica Auspicatus, leg(ionis) II Italicae Fabianus*, etc.

**SALZBURG.**—A Prehistoric Settlement.—In *Mitt. Anth. Ges.* LI, 1921, pp. 31–39 (4 figs.) M. HELL describes the discovery of a prehistoric settlement on the Hellbrunner Berg south of Salzburg. The finds were mostly of the late neolithic and early bronze periods, but show no regular stratification.

**STILLFRIED AN DER MARCH.**—Excavations in 1916.—In *Jh. Oest. Arch. I.* XIX–XX, 1919, Beiblatt, cols. 67–106 (8 figs.), O. MENGHIN describes the excavations at Stillfried an der March in 1916. Fragments of prehistoric and Roman pottery were discovered. The site was occupied in neolithic times, but attained its greatest importance in the early part of the Hallstatt period. The Roman settlement was most important from the second to the fourth century A.D.

## SWEDEN

**ADELSÖ.**—Antiquities.—The archaeological investigations on the island of Adelsö in Lake Mälär are the subject of a paper by H. RYDH in *Forvännen*, XII, 1917, pp. 90–96 (9 figs.; map). Graves excavated at Hovgarden belong to the Viking period. Other early graves were opened at Stenby and Stra Dalby. On the Skanberg is a prehistoric fortification, surrounding the citadel, and having on the south side an entrance masked by an outer wall.

**GÖTEBORG.**—Rock Drawings.—In *Forvännen*, XII, 1917, pp. 115–126 (7 figs.), G. HALLSTROM describes forty-six drawings on rocks in southern Göteborg and Bohuslän. Ships are the most common subjects, but animals and men are also represented.

**SKÅNE.**—Graves of the Stone Age.—In *Forvännen*, XII, 1917, pp. 67–88 (46 figs.), F. HANSEN describes the contents of a number of graves of the Stone Age which he investigated at Skåne and in Langeland (Denmark). Stone objects and pottery were discovered.

**STORKÅGE.**—A Find of Bronzes.—In *Forvännen*, XII, 1917, pp. 147–172, 203–225 (19 figs.) E. HJÄRNE describes a group of bronzes found near Storkåge and now in the museum of Skelleftea in the province of Västerbotten. It includes horseshoe-shaped ring-fibulae with enamel inlays, two bow fibulae.

a spiral arm ring, parts of neck rings and finger rings. The enamelled fibulae are the first of this type to be found in Sweden. Similar fibulae have been found in Finland, the Baltic provinces, and Russia. The other objects of this deposit also point to eastern connections. It is to be dated in the first half of the fourth century A.D., and shows that trade existed between Wästerbotten and the Baltic countries in this period.

**VÄRMLAND.**—Prehistoric Antiquities.—In *Fornvännen*, XII, 1917, pp. 1-35 (26 figs.), T. J. ARNE describes the exploration of prehistoric sites in Värmland in the summers of 1906, 1915, and 1916. A few objects of the Bronze Age were found. Of the stone tumuli of this period the greater number had been plundered. At Norby a cemetery with twenty graves of the La Tène period was excavated. The graves were incineration trenches covered with small stones. A cemetery at Runneval belongs to the time between the Roman Era and the period of migrations, about 400 A.D. Nine of the ninety-four graves here were excavated, and a few small objects of clay, bone, glass, and iron were found.

**WENDEL.**—The Grave of King Ottar.—Investigation of a burial mound at Husby in Wendel seems to confirm the tradition that it is the grave of King Ottar, who died in the first half of the sixth century. In the mound was a heap of stones which served as a foundation for the funeral pyre. Human bones, a gold coin of the emperor Basiliscus (476-477 A.D.), and fragments of gold, silver, bronze, glass, and pottery were found. The type of burial is like that of the Old Uppsala graves. (S. LINDQVIST, *Fornvännen*, XII, 1917, pp. 127-143; 15 figs.)

## RUSSIA

**PETROGRAD.**—The Museum of the Hermitage.—In *R. Arch.*, fifth series, XIV, 1912, pp. 165-171 ANDRÉ JULIEN reports that the Museum of the Hermitage has suffered no losses since 1914. There has been a complete reorganization, the museum has been extended to include the Winter Palace, many private collections have been deposited in the museum, numerous gifts have been received, some of which are important, and many objects have come into the museum by confiscation. The staff is well organized and is working faithfully, not only in the arrangement and care of the museum and its contents, but also in the preparation of handbooks and learned treatises.

## GREAT BRITAIN

**AMESBURY.**—A Stone Axe-hammer.—In connection with the discovery of prehistoric burials at Amesbury, reported by Sir LAWRENCE WEAVER in *The Antiquaries Journal*, I, 1921, pp. 125-126, and commented on by R. SMITH, *ibid.* pp. 126-130 (4 figs.), a stone axe-hammer of interesting shape was found. It apparently belongs to the Bronze Age, since its form is imitative of early copper implements.

**CAMBRIDGE.**—Acquisitions of the Fitzwilliam Museum.—Among recent acquisitions of the Fitzwilliam Museum are: (1) A collection of 150 scarabs; a horse's head from an Assyrian relief brought from Nineveh by Layard (gift of Sir Herbert Thompson); (2) A small Roman sarcophagus finely decorated (gift of Lord Carmichael); (3) many coins bequeathed by F. W. Hasluck; a gold

coin of the Aulerici Ebuovici (gift by Mr. W. Finch); (4) six specimens of Corean pottery (gift of Mr. W. M. Tapp); (5) a Parisian breviary, written about 1370 for Louis d' Evreux, Count of Etampes, and a large miniature of the Ferrarese school (*R. Arch.* XIV, 1921, p. 192, from the *Annual Report of the Museum*).

**FRILFORD.**—**Romano-British and Anglo-Saxon Burials.**—In *The Antiquaries Journal*, I, 1921, pp. 87–96 (3 figs.), L. H. DUDLEY BUXTON reports the results of excavation at Frilford of a cemetery site on which investigations were made by Mr. Akerman and Dr. Rolleston, 1864–1868. Forty Romano-British graves, cut in oölite, were discovered. Coffin nails and coins were found in these, but few fragments of pottery. Five Anglo-Saxon graves were opened, containing some small pins, gilt brooches, beads, and other small objects. None of the Anglo-Saxon cremations which Dr. Rolleston reports were found, nor were there any of the unoriented graves which he mentions.

**GRIME'S GRAVES.**—**Palaeolithic Engravings.**—In *The Antiquaries Journal*, I, 1921, pp. 83–86 (fig.), A. L. ARMSTRONG reports discoveries at Grime's Graves, Norfolk, indicating the continuous occupation of this site from palaeolithic times to the Iron Age. The most important finds were two pieces of flint crust, on one of which a deer or elk is represented, on the other the head of a hind. These were discovered in connection with implements of the Le Moustier period, in a level immediately overlying glacial sand.

**LONDON.**—**Accessions to the British Museum Collection of Coins.**—Greek coins acquired by the British Museum in 1920 are described in part by G. F. HILL in *Num. Chron.* 1921, pp. 161–178 (2 pls.). The total number of Greek coins acquired was 2,970, as against 2,076 in 1919. Part of these were from the Earle Fox bequest, and from the collection of coins of the Achaean League formed by the late Gen. Malcolm G. Clerk. Among the coins described are an *as* of Hatria (wt. 341.8g.), like Haeblerin I, p. 204, No. 5, but without any visible value-mark on the reverse; a so-called "Marathon" decadrachm of Athens (eight other specimens known, but one of these probably false); and a unique oriental imitation of an Athenian coin.

**Greek Coins from the Dardanelles.**—E. S. G. ROBINSON describes in *Num. Chron.* 1921, pp. 1–25 (pl.), thirty-eight Greek coins recently acquired by the British Museum from a collection formed in the Dardanelles region. They are mostly of the Roman imperial period, but include several new and a number of the less well-known varieties. From the occurrence of the very uncommon type of a beardless Asclepius on a copper of Prusias ad Hypium, added to other considerations, he suggests that didrachms of this type previously attributed to Arne-Cierium (Thessaly) should be assigned to Cierus-Prusias (Bithynia).

**A Tetradrachm of Aspeisas.**—A coin, recently acquired by the British Museum, has the types of the Alexander the Great coinage, but is unique in displaying on the reverse "the only example in the earlier Alexander series of a name [AΞΠΕ|ΞΟΥ] given at full length." Aspeisas is nowhere mentioned in literature, but an Aspisas is said by Diodorus (XIX, 55) to be a Persian made satrap of Susiana in place of Seleucus by Antigonos in 316 B.C. Apparently the satrap was this Aspeisas, and the coin was struck at Susa, 316–312 B.C. (E. S. G. ROBINSON, *Num. Chron.* 1921, pp. 37–38; pl.)

**NUNEATON.**—**Roman Denarii.**—Twenty-nine denarii were recently found

in a granite quarry at Nuneaton. They probably formed part rather than the whole of a hoard. One was of the familiar eagle-galley type of Mark Antony; the rest ranged in date from Septimius Severus to Julia Mamaea. They are described in detail by H. MATTINGLY in *Num. Chron.* 1921, pp. 145-149.

**OXFORD.**—Acquisitions of the Ashmolean Museum in 1920.—In *R. Arch.*, fifth series, XIV, 1921, pp. 191 f., S. R. gives a list of the more important acquisitions of the Ashmolean Museum in 1920. It includes objects of Egyptian (a funerary vase of about the second century B.C. and many objects from Napata in Nubia), Asiatic (Hittite cylinder, etc.), Aegean, Greek (chiefly Attic vases), Italian (terra-cotta heads from Orvieto, Etruscan objects from a tomb near Chiusi, etc.), prehistoric and British origin, and also some relatively modern works of art.

### NORTHERN AFRICA

**CARTHAGE.**—Punic Graves.—In *C. R. Acad. Insc.* 1921, pp. 95-100, Père DELATTRE reports the excavation of a number of Punic graves on the hill of Juno at Carthage. Both cinerary and inhumation burials were found, accompanied by pottery, jewelry, and other small objects.

**CYRENAICA.**—Archaeological Notes.—In *Notiziario Archeologico*, I, 1915, pp. 67-239 (87 figs.), E. GHISLANZONI, after reviewing briefly the physical characteristics and the history of the Cyrenaica, as well as the history of modern investigation in this region, describes under several topographical headings the antiquities which have come to the notice of archaeologists since the Italian occupation of Tripoli. At **Berenice** (Benghazi) some mounds near the ancient Lake Tritonis probably belong to the ruins of the temple of Aphrodite mentioned by Strabo. Some architectural fragments, and three Roman portrait statues have been found in the city. Of the many rock-cut tombs in the vicinity a common type is approached by a short flight of steps, and shows niches in the walls for burials. Of the great quantity of pottery and terracottas found in these tombs the greater part is of Roman date, and none is earlier than the Ptolemaic period. At **Teuchira** there are no visible Greek remains. The conspicuous city walls belong to the period of Justinian. At **Barce** there are slight architectural remains. A Panathenaic amphora of the fourth century B.C. was excavated in this region. At **Ptolemais** are fine ashlar walls of one of the city gates, and remains of great covered reservoirs. The great masses of confused ruins indicate that more destruction was caused by earthquake than by barbarian invasion. An object of some artistic interest which has been found here is a fragment of a sarcophagus with a relief, possibly of Roman date, but of Greek style, representing a combat of Greeks and Amazons. Two rude inscribed reliefs commemorate gladiators. At **Apollonia** there has been considerable destruction of ancient remains since the visit of Smith and Porcher in 1860. The apse of the principal Christian basilica is still recognizable. The city was supplied with water by an aqueduct of which considerable parts are preserved. The best preserved monument of the city is the theatre. A statuary fragment found here is from a figure of the Tyche of Apollonia. Its drapery is similar in style to that of the Hera Barberini. At **Cyrene** the most conspicuous monuments are the tombs of its necropolis. Among the sculptures found in the region of the fountain and temple of Apollo the Aphrodite is already famous. Others are two archaic korai, headless

(Fig. 1); a torso of Hermes; and a statue of a satyr with the infant Dionysus. On the south slope of the Wady Bil Gadir, where the American expedition discovered several draped figures of Roman date, numerous other figures of similar type have been found, as well as many terra-cottas representing seated female figures. In the southwestern part of the city are the ruins of two great reservoirs. A remarkably well-preserved covered reservoir is found at Saf-Saf, the site of an ancient suburb of Cyrene.

**MAHDIA.**—Marble Candelabra.—In *R. Arch.*, fifth series, XIV, 1921, pp. 1-12 (fig.), A. MERLIN and L. POINSSOT describe and discuss several marble candelabra found in the sea near Mahdia and now in the Bardo Museum. Two

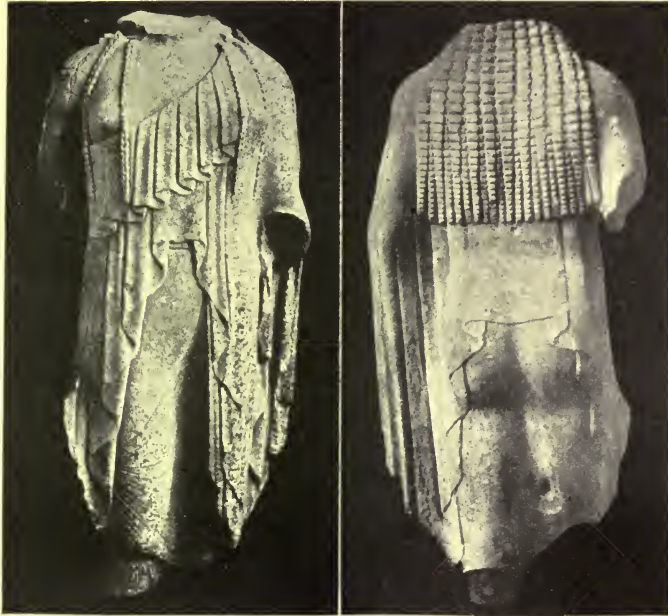


FIGURE 1.—ARCHAIC FEMALE FIGURE: CYRENE.

only are in fairly good condition. The most complete are 1.85 m. in height and are composed of a three-sided base and a shaft made up of superposed plates separated by baskets of foliage. The leaves and the ornamentation of the bases indicate that these candelabra are imitations of metal work. Several works of similar style are cited. The marble candelabra, as well as their metal prototypes, are products of the neo-Attic school, and the types of their ornamentation—acanthus, griffin, palmette, lotus, spiral, etc., go back to the Ionic art of the seventh and sixth centuries B.C.

**TIPASA.**—A Mosaic Inscription.—In *C. R. Acad. Insc.* 1920, pp. 387-391, E. ALBERTINI reports the discovery at Tipasa of the remains of an apsidal structure, the vestibule of which has a mosaic inscription of five hexameter



lines, indicating that the dedicator had adapted a previously existing building to use as a Christian church, and had decorated it with mosaics. The inscription is to be dated about 350 A.D.

**TRIPOLI.**—The Arch of Marcus Aurelius.—In *Notiziario Archeologico*, I, 1915, pp. 15-34 (4 pls.; 8 figs.), G. BONI and L. MARIANI report and illustrate in detail the recent measures taken by the Italian engineers to free the quadri-frontal arch of Marcus Aurelius at Tripoli from modern structures and to consolidate and preserve the ancient monument.

**TRIPOLITANA.**—Archaeological Notes.—In *Notiziario Archeologico*, I, 1915, pp. 37-64 (25 figs.; 2 maps), S. AURIGEMMA sketches the history of the Tripolitana in ancient times, through the periods of Punic and Roman domination, and discusses the ancient monuments of the three principal cities of this district. In the city of Tripoli there are few monuments extant. The arch of Marcus Aurelius is the most important. A number of rock-cut tombs northwest of the city have yielded a variety of small objects of Roman date. A cemetery at Ain Zara illustrates the Christian period of Tripolis. **Leptis Magna**, the chief port of this region in ancient times, shows many more monuments. The grandiose ruins northwest of the Wady Ebda belong to the palace of Septimius Severus, who was a native of Leptis Magna. There are also remains of a quadrifrontal arch, an aqueduct, and a circus on this site. The mausoleum of Gasr el-Duirat is a model of its kind, and exemplifies provincial art in all its complex variety. There are considerable remains of the ancient fortifications designed to protect the port and the coast. At **Sabrata**, which was the grain port of antiquity, are imposing monuments: the city wall, an amphitheatre, and enormous heaps of unidentified ruins. Many ancient monuments are found at places remote from the principal cities. A Roman building near the coast at Zliten contains the finest mosaics yet discovered in Africa. In variety of design and brilliance of color they are equal to the best work of the imperial period. The composition includes representations of fishes, of animals, of gladiatorial combats and hunting scenes. In the more deserted parts of Tripoli, especially on the plateau and in the defiles of the mountains of Gebel are many monuments which testify to the prosperity of the country before the Arab invasion.

## UNITED STATES

**NEW YORK.**—Egyptian Sculptures.—The Metropolitan Museum of Art reports the acquisition by purchase of a number of important Egyptian sculptures, including a fine representation in diorite of Senusert III as a sphinx, a group in diorite showing Sahure, a King of the Vth dynasty, accompanied by the nome-figure of Coptos, and a basalt statuette of the XXVIth dynasty, representing the priest Harbas holding a figure of Osiris. (*B. Metr. Mus.* XV, 1920, pp. 128-131; 4 figs.)

**An Egyptian Statuette.**—Of interest for its provenance as well as for its artistic value is a statuette of "the nurse Satsneferu" recently acquired by the Metropolitan Museum. The statuette was found at Adana, in southeastern Asia Minor. It is assigned to the XIIIth dynasty on epigraphical grounds and because of the name of its original owner. (*H. E. W., B. Metr. Mus.* XVI, 1921, pp. 208-210; fig.)



FIGURE 2.—HEAD OF YOUTH: NEW YORK.

eighty vases, seventeen terra-cottas, and a remarkable archaic statuette in amber, representing a woman carrying a child. *Ibid.* pp. 32-39 (6 figs.), Miss Richter describes some of the bronzes mentioned above. The most important are (1) a statuette of a diadumenos (Fig. 4), showing the influence of Lysippos; (2) a realistic statuette of a negro boy; (3) a Hellenistic statuette of a tragic actor, in a dramatic posture; (4) an archaic handle in the form of a youth bent backward; (5) a statuette of Harpoerates; (6) a statuette of a bull, of fifth century style. The collection includes not only other works of art, but a number of surgical and other instruments. *Ibid.* pp. 225-229 (5 figs.), Miss Richter publishes seven Roman portraits lately acquired by the Metropolitan Museum. They are good examples from several periods: the Republican, the Augustan, the second century, and the third century, A.D.

**A Replica of the Venus Genetrix.**—In *B. Metr. Mus.* XVI, 1921, p. 20, G. M. A. R(ICHTER) reports that the Metropolitan Museum exhibits as an anonymous loan an excellent replica of the Venus Genetrix, sup-

**Classical Accessions of the Metropolitan Museum.**—In *B. Metr. Mus.* XVI, 1921, pp. 9-14 (6 figs.), G. M. A. R(ICHTER) reports that the Metropolitan Museum has acquired an important series of sculptures: (1) a head of a youth (Fig. 2), in the Attic-Ionic style of about 500 B.C.; (2) a torso of a young athlete, to be dated between the Olympia temple sculptures and the Parthenon; (3) a torso of a youth, of the later Polyclitan school; (4) a statuette of a boxer (Fig. 3) made under the influence of Scopas; (5) a torso of a boy, Praxitelean; (6) a grave monument with a farewell scene in low relief, of the fourth century B.C.; (7) a small torso of a stooping Aphrodite, of Roman date; (8) a Hellenistic statue of an old fisherman. The Museum has also purchased a number of sculptures of Roman style, including a sarcophagus-relief representing the death of Meleager, and several architectural fragments; also a series of more than a hundred ancient bronzes,



FIGURE 3.—STATUETTE OF BOXER: NEW YORK.

posed by some archaeologists to be a copy of the statue of Aphrodite in the Gardens by Alcamenes.

**Terra-cottas from Crete.**—In *B. Metr. Mus.* XVI, 1921, pp. 168–170 (3 figs.), M. E. C. reports that the Metropolitan Museum has received as a loan from the Archaeological Institute of America a series of terra-cottas of the seventh century B.C., discovered by Dr. Halbherr in his excavations at Praesos in Crete (see *A. J. A.* IX, 1894, pp. 543–544; XI, 1896, p. 579; second series, V, 1901, pp. 281–283, 371–392).

**Jewels of the T'ang Period.**—In *B. Metr. Mus.* XVI, 1921, pp. 17–18 (4 figs.), S. C. B. R. reports that the Metropolitan Museum has acquired a series of Chinese gold jewels and silver ornaments of the T'ang period.

**Pottery Lohans.**—In *B. Metr. Mus.* XVI, 1921, pp. 15–16 (fig.), S. C. B. R. reports the acquisition by the Metropolitan Museum of a Chinese pottery figure of one of the sixteen Lohans or disciples of Buddha, from the caves of the Eight Lohan Mountain near Ichou. The head is not restored, as are some heads of other Lohans found on this site. The figure is of more than life size, and was built up on an iron frame of which parts are still visible. *Ibid.* XVI, 1921, p. 120 (fig.), the purchase of a second Lohan from the same series is announced.

**A Buddhist Painting.**—In *B. Metr. Mus.* XVI, 1921, pp. 124–126 (fig.), S. C. B. R. describes a Buddhist painting of Chinese or Korean origin, recently given to the Metropolitan Museum. It shows Buddha accompanied by disciples and Bodhisattvas, musicians and attendants with banners. The style is related to that of the paintings of Khotan in Chinese Turkestan.

**An Exhibition of Sword Guards.**—In *B. Metr. Mus.* XVI, 1921, pp. 142–144 (fig.), B. D(EAN) reports the exhibition at the Metropolitan Museum of a collection of a hundred Japanese sword guards, some of which are as early as the fourteenth century.

**NORTHAMPTON.**—**Acquisitions of the Hillyer Art Gallery.**—Among a number of recent accessions to the Hillyer Art Gallery of Smith College, reported in a list published under the title "Fifth Special Exhibition, Season of 1920–1921: The New Accessions" are the following antiquities: (1) an Egyptian bronze mirror with an ivory handle; (2) an Attic black figured amphora, on each side of which, in a "reserved" panel, is represented a quadriga; (3) a fragment of a terra-cotta relief representing a Victory sacrificing a bull.



FIGURE 4.—STATUETTE OF DIADOU-  
MENOS: NEW YORK.

**PROVIDENCE.—T'ang Mirrors.**—In *B. Rhode Island School of Design*, IX, 1921, pp. 36-38 (2 figs.), L. E. R(OWE) describes two Chinese bronze mirrors of the T'ang period which are now in the collection of the Rhode Island School of Design.

## EARLY CHRISTIAN, BYZANTINE, MEDIAEVAL, AND RENAISSANCE ART

### GENERAL AND MISCELLANEOUS

**CAIRO.—Fostat Pottery.**—In *Burl. Mag.* XXXIX, 1921, pp. 11-18 (11 figs.), W. A. STEWART discusses the recent finds of pottery in that area of Old Cairo known as Fostat. The pottery covers the period from Early Christian times to the fifteenth century. Almost all of it shows foreign influence, and it can be determined that in some cases the pieces were imported from Persia, while in others they were made by Persian artisans in Cairo.

### ITALY

**FERRARA.—A Ravennate Sarcophagus.**—A sarcophagus excavated in Ferrara in 1920 is published by C. RICCI in *Rass. d'Arte*, VIII, 1921, pp. 253-260 (12 figs.). Renaissance coats of arms carved on it indicate that it was not buried so long ago as might have been suspected. But the sarcophagus itself is clearly an early work. It is shown to belong to a group carved in Ravenna in the first half of the fifth century, a group retaining classical features throughout. On the front of the sarcophagus are the figures of six apostles in niches flanking a central niche containing the enthroned Christ. On each end are two other apostles in niches, and, to complete the twelve, two sheep on the back symbolize the last two apostles.

**FLORENCE.—A Fourteenth Century Processional Cross.**—An unusually splendid silver processional cross decorated with enameled paintings, recently acquired by the Bargello, Florence, is published by C. GAMBA in *Dedalo*, II, 1921, pp. 219-221 (pl.; 2 figs.). The general design of the cross, as well as the character of the enameled decorations, indicates the region of Siena as its provenance. Simone Martini is the painter most nearly approached by the author of the enamels.

**Tapestries by Bachiacca.**—The work of a minor artist, Francesco Bachiacca, particularly as it is shown in two series of tapestries recently hung in the Uffizi, is discussed by M. TINTI in *Dedalo*, I, 1921, pp. 803-817 (pl.; 12 figs.). One of the series represents the months, the other grotesques. Both were done toward the end of the artist's life, in the middle of the sixteenth century. While Bachiacca was not a first rate artist and while he borrowed freely from other masters, there is a liveliness and spontaneity about his work (partly due, no doubt, to the contact with real life into which his Bohemian habits brought him) which gives them an unmistakable personal note.

**MILAN.—Antonello da Messina.**—In *L'Arte*, XXIV, 1921, pp. 71-73 (pl.; fig.), A. VENTURI adds a painting and a drawing to the known works of Antonello da Messina. The painting, a portrait of a monk in the collection of Achillito Chiesa at Milan, belongs to about 1475, when the artist had lost every trace of Flemish influence. Venetian *sfumato* and the artist's own indication of volume are characteristic features of the picture. The drawing (in the Albertina at

Vienna, where it is labeled Marescalco) represents the bust of a youth and is the only authentic drawing by Antonello.

**A Relief by Jacopo della Quercia.**—In *Dedalo*, II, 1921, pp. 149–153 (pl.; 2 figs.), I. B. SUPINO publishes a hitherto unknown work in the Ojetti collection which may confidently be attributed to Jacopo della Quercia, in the period in which he was working on the door of S. Petronio at Bologna. The relief came from the villa of Corsano in Val d'Elsa and represents the Madonna and Child, to whom S. Antonio is presenting a prelate. It was apparently in the form of a lunette originally, decorating the archivolt of a door. It is one of the finest examples of the master's work that have come down to us.

**RAVENNA.—The New Portrait of Danté.**—In *Gaz. B.-A.* IV, 1921, pp. 252–254 (3 figs.), P. ANTONY-THOURET publishes an excerpt from a letter written by Corrado Ricci in which the latter shows that neither iconography, nor history, nor traditions confirm the belief that the newly discovered fresco in S. Francesco at Ravenna is a portrait of Dante.

**The Funerary Church of Dante.**—The important features of the older forms of the church of S. Francesco at Ravenna as brought to light in the recent restorations in honor of the Dante centenary are briefly summarized by S. MURATORI in *Rass. d'Arte*, VIII, 1921, pp. 298–314 (15 figs.). The most interesting, popularly, at least, are the frescoes that have been uncovered, particularly the supposed portrait of Dante.

**RIMINI.—Another Portrait of Dante.**—In a study of the frescoes uncovered a few years ago in the apse of S. Agostino in Rimini F. FILIPPINI in *Boll. Arte*, I, 1921, pp. 3–20 (21 figs.) gives evidence for the recognition of Dante among the characters represented. Through similarity to the work on the altarpiece of the Miracles of S. Giuliano, Rimini, the frescoes are attributed to the signer of that altarpiece, Bitino da Faenza. It seems likely that they were done in the second decade of the fifteenth century at the order of Fra Girolamo di Leonardo. Now at that time Fra Leonardo had just come from the Council of Costanza, where his friend, Fra Giovanni da Sarravalle, had in his commentary on Dante's Divine Comedy filled everyone with enthusiasm for that poet. What more natural than that in the new decorations at Rimini prominent place should be given to Dante, watching in company with Petrarch and lords of the house of Malatesta the miracle of the resuscitation of Drusiana?

**ROME.—Two Works by Benozzo Gozzoli.**—Two examples of Gozzoli's work during his sojourn in Rome and Lazio from 1456 to 1458 are published by R. PAPINI in *Boll. Arte*, I, 1921, pp. 36–38 (3 figs.). One, found six or seven years ago in SS. Domenico e Sisto, Rome, is probably to be identified as the fragmentary central portion of a large composition of the Madonna "with many saints" referred to by Vasari. The tutorship of the master Fra Angelico is still evident in it. But wholly in Gozzoli's own individual manner is the second painting, a head of Christ discovered a short time ago by the author of the article in the monastery of Sta. Chiara in Piperno. It is probably a fragment of a tabernacle.

**An English Mediaeval Embroidery in the Vatican.**—In *Burl. Mag.* XXXIX, 1921, pp. 121–128 (3 pls.), A. LINDBLOM publishes an elaborate example of English embroidery, an *opus Anglicanum* in the form of a cope, from the reign of Edward I. It is exhibited in the Borgia apartments of the Vatican. The deep crimson and gold of the work form a more perfect harmony than one may

find in almost any other extant piece of the thirteenth and fourteenth century, and the work is equally important for its perfect preservation and its delicate workmanship.

**SYRACUSE.**—**Unpublished Syracusan Paintings.**—In *L'Arte*, XXIX, 1921, pp. 111–115 (3 figs.), E. MAUCERI publishes three fifteenth century paintings in Syracuse, showing their relationship with other groups of paintings where it is not possible to discover their authors.

**TIVOLI.**—**The Deposition of Tivoli.**—In *Dedalo*, II, 1921, pp. 79–89 (pl.; 8 figs.), F. HERMANIN writes on the splendid group of wooden statues, composing the Descent from the Cross, recently restored and regrouped in the cathedral at Tivoli. The work is connected stylistically with other Romanesque sculptures of the same province but surpasses them in largeness of conception and liveliness of expression. It belongs to that thirteenth century trend of art which culminated in the work of Pietro Cavallini.

**TRENT.**—**The Sacramentarium of the Church of Trent.**—The sacramentarium recently returned to the city of Trent from the Palatine library of Vienna is the subject of an article by G. GEROLA in *Dedalo*, II, 1921, pp. 221–230 (4 figs.). The decorations of the manuscript pages (British in origin of inspiration) are less interesting than the binding. This was restored in the sixteenth century, but it still contains on the outside the tenth century ivory figure of a saint and on the inside fragments of sixth or seventh century figured cloth (Fig. 5).

**VENICE.**—**Andrea del Castagno.**—A proof of the hitherto hypothetical sojourn of Andrea del Castagno in Venice is given by G. FIOCCO in *L'Arte*, XXIV, 1921, pp. 85–89 (2 figs.). A close inspection of the frescoes in the apse of the church of S. Zaccaria in Venice reveals the hand of Andrea in the style of the work. Even his signature is found and the date 1442. Francesco da Faenza is indicated in the inscription as a co-worker; to him may be assigned the putti and other decorative motives.

## FRANCE

**ELNE.**—In *Bulletin de la Société Archéologique du Midi de la France*, nouvelle série, 42, 1913, pp. 85–88 (pl.), F. GALABERT publishes the inscription from the tomb of the Abbé Gaubert (d. 1234) of the monastery of Saint-Genis des-Fontaines, near Elne (Pyrénées-Orientales). It consists of fourteen lines in leonine hexameters, with some metrical irregularities.

**PARIS.**—**A Medallion of Filippo Strozzi.**—In *Gaz. B.-A.* IV, 1921, pp. 203–210 (pl.; 3 figs.), J. BABELON publishes a medallion with the portrait of Filippo Strozzi, of which there is a mediocre example in the Cabinet of Medals, Paris. Evidence is given for the attribution of the work to Benedetto Majano, author of the Strozzi bust in the Louvre.

**Little Known Paintings by Rembrandt.**—In *Gaz. B.-A.* III, 1921, pp. 213–218 (pl.; 3 figs.), A. BRÉDIUS publishes three pictures by Rembrandt. A self portrait painted in about 1630 is in the collection of the Countess Delaborde. The portrait of a man reading, hitherto known only in copies, belongs to Count Demandoex Dedons, Marsailles, and is signed and dated 1645.—The third picture is a little sketch in the author's collection which comes from the Wynn Ellis sale, where it figured as a study for the Munich painting of the Erection of the Cross. Its more profound conception, however, and the nature of its variations from the Munich painting prove that it is a later work.

TOULOUSE.—Five Shrines.—In *Bulletin de la Société Archéologique du Midi de la France*, nouvelle série, 42, pp.122-132 (pl.; 5 figs.), A. AURIOL describes shrines of five saints preserved at the church of Saint-Senin in Toulouse. All are in the form of a rectangular chest surmounted by a cover shaped like



FIGURE 5.—CLOTH BINDING OF SACRAMENTORIUM: SIXTH OR SEVENTH CENTURY: TRENT.

a steep roof. They are made of walnut wood and covered with plates of silvered copper. All show architectonic ornament, with panels framing figures in relief. They are dated in the sixteenth century, but have undergone repairs since that date.

#### HOLLAND

AMSTERDAM.—The Annunciation by Matteo Civitale.—In *Art in America*, IX, 1921, pp. 202-205 (pl.), W. R. VALENTINER publishes a terra-cotta figure of the Virgin in a private collection in Amsterdam which he believes to be the

companion piece of the beautiful Angel of the Annunciation by Matteo Civitale in the Metropolitan Museum, New York.

#### GERMANY AND AUSTRIA

**HANOVER.**—A Painting by Botticelli.—In *L'Arte*, XXIV, 1921, pp. 137-138 (fig.), A. VENTURI publishes a painting of the Annunciation in the Kestner Museum, Hanover, which he places among the late works of Botticelli. It was formerly ascribed to the school of that master.

**MUNICH.**—Three Ivory Reliefs.—In *Münch. Jb.* XII, 1921, pp. 38-45 (4 figs.), R. BERLINER publishes three ivory reliefs representing scenes from the history of Christ, which were obtained by the Bavarian National Museum in 1917. They clearly belong to the same series as those numbered 4 to 16 in the second volume of Goldschmidt's *Elfenbeinskulpturen*. But even these new additions by no means complete the cycle of subjects which must originally have been represented by the group. The work is apparently by a German artist under Byzantine influence and belongs to the Othonian period.

**The Madonna with the Rose Bush.**—In *Münch. Jb.* XI, 1921, pp. 2-12 (7 figs.), P. M. HALM writes on the stone group of the Madonna standing before a rose bush in which the Child sits, a work acquired in 1916 by the Bavarian National Museum. The prominence given to the rose bush is the most interesting feature of the work; the reference is apparently to the prophetic words of Isaiah (xi, 1 and 2). Comparison with other sculptures dates the group in the period from 1360 to 1380, and its authorship is to be sought in the Regensburg school.

**VIENNA.**—A Madonna by Correggio.—In *L'Arte*, XXIV, 1921, p. 172 (fig.), A. VENTURI publishes a Madonna and Child with St. John in the Hofmuseum of Vienna, which he attributes to Correggio.

#### ROUMANIA

**The Excavations at Curtea of Argesch (Roumania).**—In *R. Arch.*, fifth series, XIII, 1821, pp. 1-23 (pl.), G. I. BRATIANU describes discoveries in the church of St. Nicholas (Domnese) in the ancient capital of Walachia. Under the relatively modern paintings of the interior, a series of five Byzantine frescoes has been found. Details of costume fix the date of the frescoes in the fourteenth century. On a column the figure of a warrior is painted, in a costume of that period. An inscription earlier than the paintings gives the date 1352 for the death of "the great Voivode Basarab." Fourteen tombs were found within the church, the chief of which contained the remains of a man whose costume resembled that of the painted figure. An elaborate gold fastening of his girdle has a curious architectural form resembling a castle, in the great central opening of which is a swan with a woman's head. A trefoil and two fleurs de lis are seen in three small openings below. The work seems to belong to the school of Transylvania (Cluj-Kolosvar). Several other interesting works of metal were found in the tombs. The relief known as the "Satru of Radu Negru," legendary founder of the Walach Princedom, was formerly in the church of St. Nicholas and is now in the National Museum at Bucharest. It is a recumbent figure—a fashion borrowed from Western Europe. The events of the history of Roumania in the twelfth, thirteenth and fourteenth centuries are



briefly recounted. The great Hungarian and Catholic penetration of Walachia belongs to the period from about 1340 to 1375. The person buried in the chief tomb in St. Nicholas was probably the great Voivode Basarab, not the somewhat later Radu Negru. Excavations are to be continued. (See also N. Jorga in *C. R. Acad. Insc.* 1921, pp. 22-26.)

#### GREAT BRITAIN

**BRISTOL.**—A Byzantine Psalter.—In *Burl. Mag.* XXXVIII, 1921, pp. 119-128 and 282-289 (4 pls.), M. P. PERRY publishes a hitherto unnoticed Byzantine psalter in the possession of the Western College at Bristol. The manuscript may be dated in the eleventh century; it belongs to the so-called "Monastic-theological" group. Besides two full-page illuminations, it is illustrated by a series of even more interesting marginal vignettes, the subject matter and iconographical significance of which are here discussed.

**COVENTRY.**—A Fifteenth Century Oak Chair.—In *Burl. Mag.* XXXIX, 1921, pp. 170-177 (2 pls.; fig.), H. CIESCINSKY describes the remnants of a fine old chair in St. Mary's Hall, Coventry, which is almost unique as a good example of secular chairs as early as the fifteenth century. Originally the chair was probably in the form of a triple throne and was inspired from ecclesiastical sources.

**LONDON.**—A Stucco after Verrocchio.—In *Burl. Mag.* XXXIX, 1921, pp. 131-138 (2 pls.), E. MACLAGAN publishes a badly damaged stucco relief recently acquired by the Victoria and Albert Museum, which it seems possible to consider a copy moulded from Verrocchio's now lost bronze representing the head of Alexander. Even in its fragmentary condition one may see that it is a much stronger, abler type of work than is the marble relief of "Scipio" in the Louvre. The latter is undoubtedly a later imitation of either one of the stucco casts of the bronze or the bronze itself. The Darius, a companion piece to the Alexander head, probably inspired Leonardo's drawing of the head of a warrior (in the British Museum).

**An Early English Embroidery.**—In *Burl. Mag.* XXXIX, 1921, pp. 9-10 (fig.), Mrs. A. CHRISTIE publishes an early fourteenth century embroidered representation of the Crucifixion recently acquired by the Victoria and Albert Museum. It probably once formed the front of a burse.

**Roman Drinking Glasses.**—In *Burl. Mag.* XXXIX, 1921, p. 9 (fig.), P. GANZ publishes an ancient glass (from the Engel Gros collection) found in 1883 at Boulogne in the so-called "lower town." Engraved groups of figures upon the glass represent scenes from the life of Christ. A similar goblet found at Cologne is in the Sloane collection of the British Museum. Both belong to the Christian Roman period, showing the primitive barbaric style of the art of the Roman legions of North Africa and Syria in the fourth and fifth centuries A.D.

**Notes on Dürer.**—In *Burl. Mag.* XXXIX, 1921, pp. 177-184 (2 pls.), C. DODGSON publishes a small painted portrait (owned by Mr. S. Wilensky), which he identifies as the work of Dürer. L. Justi finds that the head fits into Dürer's scheme of proportions. A second attribution to Dürer consists of a leaf of the Netherlands sketch book lately acquired by the British Museum. It represents still life objects, furniture and jugs.

**A Panel of the Crucifixion.**—In *Burl. Mag.* XXXIX, 1921, pp. 53-54 (pl.),

T. BORENIUS publishes an important thirteenth century painting of the Crucifixion belonging to Mr. Henry Harris. It is of special interest as showing the old Byzantine tradition beginning to be affected by contact with the influence of Giotto.

**A Copy of a Rembrandt.**—In *Burl. Mag.* XXXIX, 1921, pp. 18–23 (4 figs.), A. BREDIUS publishes a painting of an elderly man (belonging to the author of the article) which is such masterly work and so closely similar to paintings by Rembrandt that it is believed to be a copy by Ferdinand Bol after a lost Rembrandt.

**A Florentine Predella.**—In *Burl. Mag.* XXXIX, 1921, p. 154 (pl.), T. BORENIUS writes on a hitherto unpublished predella, owned by M. Bernard d'Hendecourt, which is important because of its large size and fine artistic quality. The iconography is very unusual. The style suggests as its author Compagno di Agnolo.

**A Portrait by Holbein.**—A portrait of a man recently discovered in England, which may be assigned to the early period (about 1517) of Hans Holbein the younger is published by P. GANZ in *Burl. Mag.* XXXVIII, 1921, pp. 210–221 (pl.). The portrait was probably painted at Lucerne and very likely represents Jacob von Hertenstein, the powerful protector of the artist.

**An Italian Wooden Statuette.**—In *Burl. Mag.* XXXIX, 1921, p. 157 (pl.), E. MACLAGAN publishes a wooden statuette of the Virgin and Child recently acquired by Mr. Henry Harris. The work probably belongs to the Sienese school of the fifteenth century. The French Gothic influence, which is so evident in it, probably came both directly and indirectly, through the school of the Pisani.

#### UNITED STATES

**BOSTON.**—A Catalanian Fresco.—A Byzantine fresco recently acquired by the Museum of Fine Arts is announced in the *B. Mus. F. A.* XIX, 1921, p. 59 (fig.). The fresco comes from the apse of the small Romanesque church of Sta. Maria de Mur in Catalonia.

**Twelfth Century Intaglios.**—In *B. Mus. F. A.* XIX, 1921, pp. 54–56 (6 figs.), B. I. GILMAN describes an unusually interesting set of engravings recently acquired by the Museum of Fine Arts. They were made in 1863 from the copper intaglios that decorate the twelfth century *Corona Lucis* in the cathedral at Aix-la-Chapelle.

**CAMBRIDGE.**—A Crucifixion by Fra Angelico.—In *Burl. Mag.* XXXIX, 1921, pp. 209–210 (3 pls.), T. BORENIUS publishes a Crucifixion lately acquired by the Fogg Art Museum. It is an important example of the work of Fra Angelico, dating, probably, from the middle of the fifteenth century. Its closest parallel is offered by the Crucifixion in the Louvre. The Dominican kneeling at the foot of the cross is probably to be identified as Juan de Torquemada.

**Acquisitions of the Fogg Museum.**—In *Art in America*, X, 1921, pp. 43–45 (6 figs.), F. M. PERKINS publishes two paintings recently acquired by the Fogg Art Museum. The first of these is an Ascension by the artist whom Sirén has christened "Maestro del Bambino Vispo." The correctness of the attribution is evidenced by a comparison with a painting by that master in the Johnson collection and with some examples of his art recently acquired by the Bos-

ton Museum of Fine Arts. The second Fogg Museum painting represents the Nativity and is by Bicci di Lorenzo.

**CHICAGO.**—**Niccolò di Pietro Gerini.**—In *Art in America*, IX, 1921, pp. 148–155 and 233–240 (4 figs.), R. OFFNER describes two groups of the Madonna and Child (one in the Martin A. Ryerson collection, Chicago, the other in the Boston Museum of Fine Arts), which are attributed to Niccolò di Pietro Gerini. He also gives a chronological list of other works attributable to this artist.

**NEW YORK.**—**Two Constantinopolitan Paintings.**—Two paintings of the Madonna in New York collections (one belonging to Otto Kahn, the other to Carl Hamilton) form the basis of B. BERENSON'S study in *Dedalo*, II, 1921, pp. 285–304 (2 pls.; 11 figs.) of mediaeval painting in Constantinople as contrasted with that of Italy. The author admits that the study falls outside his own field and that his conclusions rest in some measure upon personal intuitions rather than upon certain proofs. Nevertheless, he gives a number of reasons. In the first place, he argues that the work could not have been done elsewhere than in Constantinople. Sirén's attribution of one of the panels to Cavallini is untenable, and Cimabue, Duccio, and others are out of the question. It was only in Constantinople that such perfected technique, such splendid color, such mosaic-like effects were attained in mediaeval painting. The two examples are clearly by the same master and must belong to the twelfth century. They come from Spain, where they were probably taken after the conquest of Constantinople.

**A Portrait by Rogier van der Weyden.**—In *Art in America*, IX, 1921, p. 188 (fig.), M. J. FRIEDLANDER publishes a hitherto almost unknown portrait of a man recently acquired by Mr. Michael Dreicer, New York, which is attributed to van der Weyden. As is usual in this artist's work, the head is expressive of severe, earnest piety.

**An Unpublished Painting by Titian.**—In *Art in America*, IX, 1921, pp. 223–225 (pl.), F. M. PERKINS publishes a painting in the Blumenthal collection, New York, which has long been attributed to Titian. The author concurs with this attribution but disagrees with the subject usually assigned to the painting; he believes that it represents Adonis rather than Diana.

**A Portrait by Botticelli.**—In *Art in America*, X, 1921, pp. 26–30 (fig.), B. BERENSON publishes a portrait of a young man in the collection of Mr. Carl W. Hamilton, New York, which he attributes to Botticelli and describes as more "Botticellian than any other Botticelli in existence" (Fig. 6).

**Sculpture by Giovanni Pisano.**—In *B. Metr. Mus.* XVI, 1921, pp. 145–146 (3 figs.), J. B. publishes a new accession of the Metropolitan Museum, a pilaster with the symbols of three evangelists. This, along with the two pilasters with angels blowing trumpets acquired a few years ago, seems to have come from a pulpit parapet by Giovanni Pisano, probably the famous pulpit made between 1301 and 1310 for the Duomo of Pisa.

**Early Christian Gold Glass.**—In *B. Metr. Mus.* XVI, 1921, pp. 170–175 (3 figs.), C. L. A. describes the representative collection of fourteen pieces of Early Christian gold glass which has come into the possession of the Metropolitan Museum during the last few years. The designs etched in the gold, of interest iconographically rather than artistically, include profane as well as religious subjects.

**A Tondo by Luca della Robbia.**—In *B. Metr. Mus.* XVI, 1921, pp. 224–225

(fig.), J. B. describes an enameled terra-cotta tondo of Prudence by Luca della Robbia, which was recently bought by the Metropolitan Museum. This tondo is among those which Professor Marquand has suggested may have been originally designed for the Pazzi Chapel of S. Croce, Florence.

**Mediaeval Sculptures.**—Among the recent additions to the mediaeval collections of the Metropolitan Museum are two examples of French mid-twelfth



FIGURE 6.—PORTRAIT OF A YOUNG  
MAN: NEW YORK.  
(FROM ART IN AMERICA.)

century work, a stone column-stature representing a king of Judah and a capital with scenes from the Temptation of Christ. In contrast to the naturalism and liveliness here combined with the earlier Romanesque decorative quality, a second capital, belonging to the late eleventh century, exhibits that decorative quality without the naturalism. The exact provenance of none of these sculptures is known. (J. B., *B. Metr. Mus.* XVI, 1921, pp 48-52; 3 figs.)

**A Painting by Pieter Bruegel the Elder.**—A painting of the Harvesters, lately acquired by the Metropolitan Museum as a work of the school of Bruegel the Elder is discussed by B. B. in *B. Metr. Mus.* XVI, 1921, pp. 96-103 (5 figs.). The style of the work leads to the conjecture that it might be the work of Pieter Bruegel himself, and a thorough cleaning has revealed a signature which proves the validity of this conjecture. The picture undoubtedly belonged with a series representing the months, some of which are now in the Kunsthistorisches Hofmuseum, Vienna.

**Renaissance Stained Glass.**—Two windows of Flemish sixteenth century workmanship recently acquired by the Metropolitan Museum are published by J. B. in *B. Metr. Mus.* XVI, 1921, pp. 46-47 (2 figs.). The work represents

the transition between the mosaic glass of the Gothic period and the translucent panes of the High Renaissance.

**Mantegna's Risen Christ.**—In *B. Metr. Mus.* XVI, 1921, pp. 77–80 (3 figs.), W. M. I., JR. publishes a print of Mantegna's engraving of the Risen Christ recently acquired by the Metropolitan Museum. The print is entirely different from others one sees of this plate. Apparently it is the only one that has survived from the perfect state of the plate; others lack its fine finish.

**A Sculpture by Juliot.**—A characteristic work by Jacques Juliot the Elder recently acquired by the Metropolitan Museum is published in *B. Metr. Mus.* XVI, 1921, pp. 135–136 (fig.). The relief, representing the Dormition of the Virgin, is to be dated about 1550; it shows the late development of the school of Troyes in the period of transition from Gothic to Renaissance.

**A Triptych by Andrea di Vanni.**—In *Art in America*, IX, 1921, pp. 180–188 (pl.), F. M. PERKINS publishes a portable triptych belonging to Ex-Senator Clark, New York, which is signed by Andrea di Vanni. It is of particular interest because it is clearly one of the earliest works so far known as unmistakably by Vanni, and it is also one of the finest. Its date must fall in the decade between 1375 and 1385.

**A Work by the Master of the Marble Madonnas.**—In *Art in America*, X, 1921, pp. 39–40 (fig.), S. RUBINSTEIN publishes a relief of a Madonna and Child in the Mortimer Schiff collection, New York, which she attributes, on the basis of its similarity to works published in an earlier study (see *Art in America*, April, 1919, pp. 104–110), to the Master of the Marble Madonnas.

**A Painting by Hans Suess.**—In *B. Metr. Mus.* XVI, 1921, pp. 133–134, it is announced that the Metropolitan Museum has purchased a painting of the Ascension by Hans Suess, better known as Hans Kulmbach, a pupil and assistant of Dürer. The composition resembles that of a woodcut of the subject in Dürer's *Little Passion*, 1509–1511.

**Italian Laces.**—In *B. Metr. Mus.* XVI, 1921, pp. 29–32 (2 figs.) F. M. describes some of the early Italian laces and altar cloths which have recently come to the Metropolitan Museum from the collection of Madame Ida Schiff.

**English Furniture.**—In *B. Metr. Mus.* XVI, 1921, pp. 146–151 (5 figs.), M. R. R. describes examples of English oak furniture recently acquired by the Metropolitan Museum. They range in date from the fourteenth century to the seventeenth.

**PHILADELPHIA.**—**A Pair of Donors by Jan Provost.**—M. J. Friedlander's attribution of the portrait of a donor in the Johnson collection to Jan Provost as opposed to Berenson's attribution of the same to Andrea Solario is substantiated by G. RING's publication in *Art in America*, X, 1921, pp. 16–20 (2 figs.) of the figure of a donatrix in an Italian private collection. The latter painting is clearly the companion piece of the donor's portrait; the size, general arrangement, and, particularly, the distinctive backgrounds fit together perfectly. Doubt of the northern origin of the female portrait is impossible, and all the characteristics of the work of Jan Provost are plainly seen in it. The two portraits must have originally formed parts of a large altar piece.

**PROVIDENCE.**—**A Madonna by Andrea Pisano.**—In *Art in America*, IX, 1921, pp. 225–232 (3 figs.), R. VAN MARLE publishes a marble statuette of the Madonna and Child recently acquired by the Rhode Island School of Design at Providence. The author attributes it to Andrea Pisano and conjectures that it was probably executed to stand above Andrea's bronze door of the Florentine baptistry.

## AMERICAN ARCHAEOLOGY

### GENERAL AND MISCELLANEOUS

**RECENT PUBLICATIONS.**—*Pueblo Bonito* by George H. Pepper (*Anthropological Papers, American Museum of Natural History, N. Y., XXVII, 1920, 398 pp.; 12 pls., colored; 155 figs.*) is a complete and exhaustive treatise based on explorations between 1896 and 1899, during which time 198 rooms in this extensive pueblo, the most important in northwestern New Mexico, were excavated. Full technical descriptions of the finds are of special importance in characterizing the culture of the ancient inhabitants. The building stood five stories high, and contained twice as many rooms as have been excavated. Its length was 667 feet. The masonry is partly rubble, partly ornamented mosaic. Every type of pueblo architecture is exhibited, the structure having grown by accumulation of population. A *Golden Breastplate from Cuzco, Peru*, is by M. H. SAVILLE (*Indian Notes and Monographs, 1921, 8 pp.; 2 pls.*). *String Records of the Northwest*, by J. D. LEECHMAN and M. R. HARRINGTON, *ibid.* 1921 (64 pp.; 6 pls.; fig.), deals with the custom of keeping biographical records by means of knots tied in strings. The paper is illustrated by specimens from southern British Columbia and from Washington. These records correspond only roughly to the "quipu" system, well known in South America, which is based on a numerical, not a chronological principle. *Material Culture of the Menomini*, by A. B. SKINNER, *ibid.* 1921 (478 pp.; 107 pls.; 74 figs.), is the most comprehensive recent volume on any Algonkian people. Skinner treats the culture of the Menomini inhabiting Wisconsin in systematic order: Religion, Social Organization, Societies, Housing, Dress, Food and its preparation, Means of Transportation, Handicraft, Archaeology and Ethnogeography. He advances some new speculations on Algonkian ethnical relationships and describes some hitherto unrecorded ethnological features. From every point of view the work, as the outcome of studies among the Menomini extending over eleven years, is a standard reference to the culture of the Central Algonkian. Other recent publications are 'The Cultural Transformation of the Copper Eskimo,' by DIAMOND JENNESS, *Geographical Review, XI, 1921, pp. 541-550 (fig.)* and *Ethnology of the Kwakinth based on data collected by George Hunt*, by FRANZ BOAS, Part 2 (*35th Annual Report, Bureau of American Ethnology, 1913-14*). This, the second part, now completes the exhaustive treatment of Kwakinth archaeo-ethnology. The texts and translations deal with Social Divisions, Family Histories, Songs, and conclude with addenda.

## ABBREVIATIONS

*Abh.*: Abhandlungen. *Allg. Ztg.*: Münchener Allgemeine Zeitung. *Alt. Or.*: Der alte Orient. *Am. Anthr.*: American Anthropologist. *A. J. A.*: American Journal of Archaeology. *A. J. Num.*: American Journal of Numismatics. *A. J. Sem. Lang.*: American Journal of Semitic Languages and Literature. *Ami d. Mon.*: Ami des Monuments. *Ant. Denk.*: Antike Denkmäler. *Ann. Arch. Anth.*: Annals of Archaeology and Anthropology. *Ann. Scuol. It. At.*: Annuario della r. Scuola Archeologica di Atene e delle Missioni Italiane in Oriente. *Ant. J.*: The Antiquaries Journal. *Arch. Arch. Anz.*: Archäologischer Anzeiger. *'Αρχ. Δελτ.*: 'Αρχαιολογικόν Δελτίον. *'Αρχ. 'Εφ.*: 'Αρχαιολογική 'Εφημερίς. *Arch. Rec.*: Architectural Record. *Arch. Rel.*: Archiv für Religionswissenschaft. *Arch. Miss.*: Archives de Missions Scientifiques et Littéraires. *Arch. Stor. Art.*: Archivio Storico dell' Arte. *Athen.*: Athenaeum (of London). *Ath. Mitt.*: Mitteilungen d. d. Archäol. Instituts, Athen. Abt.

*Beitr. Assy.*: Beiträge zur Assyriologie. *Ber. Kunsts.*: Amtliche Berichte aus den Preuss. Kunstsammlungen. *Berl. Akad.*: Preussische Akademie der Wissenschaften zu Berlin. *Berl. Phil. W.*: Berliner Philologische Wochenschrift. *Bibl. Stud.*: Biblische Studien. *Bibl. World.*: The Biblical World. *B. Soc. Esp.*: Boletín de la Sociedad Española de Excursiones. *Boll. Art.*: Bollettino d'Arte. *Boll. Num.*: Bollettino Italiano di Numismatica. *Bonn. Jb.*: Bonner Jahrbücher: Jahrbücher des Vereins von Altertumsfreunden im Rheinlande. *B.S.A.*: Annual of the British School at Athens. *B.S.R.*: Papers of the British School at Rome. *B. Arch. C. T.*: Bulletin Archéologique du Comité des Travaux hist. et scient. *B. Arch. M.*: Bulletin Archéol. du Ministère. *B.C.H.*: Bulletin de Correspondance Hellénique. *B. Cleve. Mus.*: Bulletin of the Cleveland Museum of Art. *B. Inst. Gen.*: Bulletin de l' Institut National Genevois. *B. Inst. Ég.*: Bulletin de l'Institut Égyptien (Cairo). *B. Metr. Mus.*: Bulletin of the Metropolitan Museum of Art, New York. *B. Mus. Brux.*: Bulletin des Musées Royaux des arts décoratifs et industriels à Bruxelles. *B. Mus. F. A.*: Museum of Fine Arts Bulletin, Boston. *B. N. Y. Hist. Soc.*: New York Historical Society Quarterly Bulletin. *B. Num.*: Bulletin de Numismatique. *B. R. I. Des.*: Bulletin of the Rhode Island School of Design. *B. Soc. Anth.*: Bulletin de la Société d'Anthropologie de Paris. *B. Soc. Midi Fr.*: Bulletin de la Société Archéologique du Midi de la France. *B. Com. Rom.*: Bullettino d. Commissione Archeologica Comunale di Roma. *B. Arch. Crist.*: Bullettino di Archeologia Cristiana. *B. Pal. It.*: Bullettino di Paletnologia Italiana. *Burl. Mag.*: Burlington Magazine. *B. Soc. Ant. Fr.*: Bulletin de la Société des Antiquaires de France. *Byz. Z.*: Byzantinische Zeitschrift.

*Chron. Arts*: Chronique des Arts. *Cl. Phil.*: Classical Philology. *Cl. R.*: Classical Review. *C. R. Acad. Insc.*: Comptes Rendus de l'Académie des Inscriptions et Belles-Lettres. *C.I.A.*: Corpus Inscriptionum Atticarum. *C.I.G.*: Corpus Inscriptionum Graecarum. *C.I.L.*: Corpus Inscriptionum Latinarum. *C.I.S.*: Corpus Inscriptionum Semiticarum. *Cron. B. A.*: Cronaca delle Belle Arti.

*Eph. Ep.*: Ephemeris Epigraphica. *Eph. Sem. Ep.*: Ephemeris für Semitische Epigraphik. *Exp. Times*: The Expository Times.

*Gaz. B.-A.*: Gazette des Beaux-Arts. *G.D.I.*: Sammlung der griechischen Dialekt-Inschriften.

*Ind. Notes*: Indian Notes and Monographs. *I. G.*: Inscriptiones Graecae (for contents and numbering of volumes, cf. *A. J. A.* IX, 1905, pp. 96-97). *I.G.A.*: Inscriptiones Graecae Antiquissimae, ed. Roehl. *I.G. Arg.*: Inscriptiones Graecae Argolidis. *I. G. Ins.*: Inscriptiones Graecarum Insularum. *I.G. Sept.*: Inscriptiones Graecae Septentrionalis. *I.G. Sic. It.*: Inscriptiones Graecae Siciliae et Italiae.

*Jb. Arch. I.*: Jahrbuch d. d. Archäol. Instituts. *Jb. Kl. Alt.*: Neue Jahrbücher für das klassische Altertum, Geschichte und deutsche Litteratur und für Pädagogik. *Jb. Kunsth. Samm.*: Jahrbuch der Kunsthistorischen Sammlungen des allerhöchsten Kaiserhauses. *Jb. Phil. Päd.*: Neue Jahrbücher für Philologie und Pädagogik (Fleckeisen's Jahrbücher). *Jb. Preuss. Kunsts.*: Jahrbuch d. Preuss. Kunstsammlungen. *Jh. Oest. Arch. I.*: Jahreshefte des oesterreichischen Archäologischen Instituts. *J. Asiat.*: Journal Asiatique.

*J.A.O.S.*: Journal of the American Oriental Society. *J. B. Archaeol.*: Journal of the British Archaeological Association. *J. B. Archit.*: Journal of the Royal Institute of British Architects. *J. Bibl. Lit.*: Journal of Biblical Literature. *J.E.A.*: Journal of Egyptian Archaeology. *J.H.S.*: Journal of Hellenic Studies. *J. Int. Arch. Num.*: Διεθνής Ἐφημερίς τῆς νομισματικῆς ἀρχαιολογίας, Journal international d'archéologie numismatique (Athens). *J.R.S.*: Journal of Roman Studies.

*Kunstchr.*: Kunstchronik.

*Mb. Num. Ges. Wien.*: Monatsblatt der Numismatischen Gesellschaft in Wien. *Mh. f. Kunstw.*: Monatshefte für Kunstwissenschaft. *Mél. Arch. Hist.*: Mélanges d'Archéologie et d'Histoire (of French School in Rome). *Mél. Fac. Or.*: Mélanges de la Faculté Orientale, Beirut. *M. Inst. Gen.*: Mémoires de l'Institut Genevois. *M. Am. Acad. Rome*: Memoirs of the American Academy in Rome. *M. Soc. Ant. Fr.*: Mémoires de la Société des Antiquaires de France. *Mitt. Anth. Ges.*: Mitteilungen der anthropologischen Gesellschaft in Wien. *Mitt. Or. Ges.*: Mitteilungen der deutschen Orient-Gesellschaft. *Mitt. Pal. V.*: Mitteilungen und Nachrichten des deutschen Palästina-Vereins. *Mitt. Vorderas. Ges.*: Mitteilungen der vorderasiatischen Gesellschaft. *Mon. Ant.*: Monumenti Antichi (of Accad. d. Lincei). *Mon. Piot.*: Monuments et Mémoires pub. par l'Acad. des Inscriptions, etc. (Fondation Piot.) *Mün. Akad.*: Bayerische Akademie der Wissenschaften, München. *Mün. Jb. Bild. K.*: Münchener Jahrbuch der bildenden Kunst. *Mus. J.*: The Museum Journal of the University of Pennsylvania.

*N.D. Alt.*: Nachrichten über deutsche Altertumskunde. *Not. Arch.*: Notiziario Archeologico. *Not. Scav.*: Notizie degli Scavi di Antichità. *Num. Chron.*: Numismatic Chronicle. *Num. Notes*: Numismatic Notes and Monographs. *Num. Z.*: Numismatische Zeitschrift. *N. Arch. Ven.*: Nuovo Archivio Veneto. *N. Bull. Arch. Crist.*: Nuovo Bullettino di Archeologia cristiana.

*Or. Lit.*: Orientalistische Literaturzeitung. *Or. Lux.*: Ex Oriente Lux.

*Pal. Ex. Fund.*: Quarterly Statement of the Palestine Exploration Fund. *Πρακτικά*: Πρακτικά τῆς ἐν Ἀθήναις ἀρχαιολογικῆς ἐταιρείας. *Proc. Soc. Ant.*: Proceedings of the Society of Antiquaries.

*Rass. d'Arte*: Rassegna d'Arte. *R. Tr. Eg. Assyr.*: Recueil de travaux relatifs à la philologie et à l'archéologie égyptiennes et assyriennes. *Rend. Acc. Lincei*: Rendiconti d. r. Accademia dei Lincei. *Rep. f. K.*: Repertorium für Kunstwissenschaft. *R. Assoc. Barc.*: Revista de la Asociación artístico-arqueologica Barcelonesa. *R. Arch. Bibl. Mus.*: Revista di Archivi Biblioteche, y Museos. *R. Arch.*: Revue Archéologique. *R. Art. Anc. Mod.*: Revue de l'Art ancien et moderne. *R. Art Chrét.*: Revue de l'Art Chrétien. *R. Belge Num.*: Revue Belge de Numismatique. *R. Bibl.*: Revue Biblique Internationale. *R. Ép.*: Revue Épigraphique. *R. Ét. Anc.*: Revue des Études Anciennes. *R. Ét. Gr.*: Revue des Études Grecques. *R. Ét. G.*: Revue des Études Juives. *R. Hist. Rel.*: Revue de l'Histoire des Religions. *R. Num.*: Revue Numismatique. *R. Or. Lat.*: Revue de l'Orient Latin. *R. Sém.*: Revue Sémitique. *R. Suisse Num.*: Revue Suisse de Numismatique. *Rh. Mus.*: Rheinisches Museum für Philologie, Neue Folge. *R. Abruzz.*: Rivista Abruzzese di Scienze, Lettere ed Arte. *R. Ital. Num.*: Rivista Italiana Numismatica. *R. Stor. Ant.*: Rivista di Storia Antica. *R. Stor. Calabr.*: Rivista Storia Calabrese. *R. Stor. Ital.*: Rivista Storia Italiana. *Röm.-Germ.Forsch.*: Bericht über die Fortschritte der Römisch-Germanischen Forschung. *Röm.-Germ. Kb.*: Römisch-Germanisches Korrespondenzblatt. *Röm Mitt.*: Mitteilungen d. d. Archäol. Instituts, Röm. Abt. *Röm. Quart.*: Römische Quartalschrift für christliche Altertumskunde und für Kirchengeschichte.

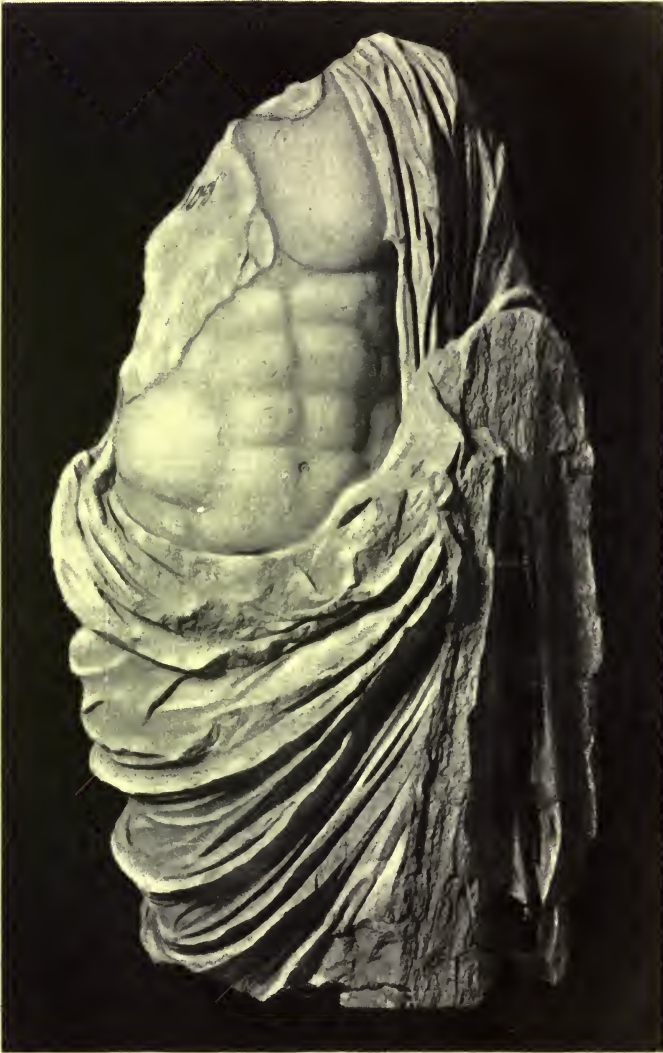
*Sächs. Ges.*: Sächsische Gesellschaft (Leipsic). *Sitzb.*: Sitzungsberichte. *S. Bibl. Arch.*: Society of Biblical Archaeology, Proceedings.

*W. kl. Phil.*: Wochenschrift für klassische Philologie.

*Z. D. Pal. V.*: Zeitschrift des Deutschen Palästina-Vereins. *Z. Aeg. Sp. Alt.*: Zeitschrift für Aegyptische Sprache und Altertumskunde. *Z. Alttest. Wiss.*: Zeitschrift für Alttestamentliche Wissenschaft. *Z. Assyr.*: Zeitschrift für Assyriologie. *Z. Bild. K.*: Zeitschrift für Bildende Kunst. *Z. Ethn.*: Zeitschrift für Ethnologie. *Z. Morgenl.*: Wiener Zeitschrift für die Kunde des Morgenlands. *Z. Morgenl. Ges.*: Zeitschrift der deutschen Morgenländischen Gesellschaft. *Z. Mün. Alt.*: Zeitschrift des Münchener Alterthumsvereins. *Z. Num.*: Zeitschrift für Numismatik.







TORSO FROM CORINTH.

A GROUP OF ROMAN IMPERIAL PORTRAITS  
AT CORINTH

IV. THE FOUR TORSOS

[PLATE I]

A.—COLOSSAL SEMI-NUDE MALE TORSO

WITH one possible exception the four mutilated statues to be discussed in the present article seem to have formed part of the great imperial group of portraits at Corinth, the more important members of which have already been considered. All were found in the same area above and to the south of Pirene, and one only was discovered beyond the limits of the Roman basilica so often mentioned.<sup>1</sup> On grounds of style and technique it is plain that three at least of these statues must have belonged to the group as originally constituted, while the other may well have done so. I shall discuss these works in their apparent order of importance in the group, beginning with a colossal male figure in heroic pose (PLATE I). This came to light at a great depth in the northwest quarter of the basilica, where it rested very little above hard-pan. It was overlaid by a thick stratum of fragments of early mediaeval tile and ruined walls of the same period, and had apparently suffered much the same treatment at the hands of the Byzantine wreckers as that accorded the Lucius.<sup>2</sup> It was found lying slightly tilted on the left shoulder and side.

As already mentioned, the statue is of colossal scale, and is preserved from the base of the neck nearly to the knees, its total height being 1.52 m.;<sup>3</sup> the right arm, shoulder, and whole right side of the chest is broken away, and the left forearm is also lacking. At the top of the median line of the chest there appears a roughly worked cup-shaped depression, clearly the bottom of a

<sup>1</sup> Cf. *A.J.A.* XXV, 1921, p. 143, fig. 1.

<sup>2</sup> Cf. *A.J.A.* XXV, 1921, pp. 338 f.

<sup>3</sup> Further dimensions: maximum width across front .82 m., from navel to ground .90±m., from navel to bottom of cutting for insertion of head .55 m.

hollow socket fashioned to receive the neck-base of a head cut from a separate block. The upper portion of the left breast is also scarred, while the deeply cut folds of the drapery are much damaged, particularly the heavy vertical mass before the left leg, the folds crossing the abdomen, and those upon the right thigh; many small fragments of the drapery were found near the statue where they had been scattered and forgotten by the wreckers, thus escaping the mediaeval lime kiln. Although the feet and lower part of the legs are lacking, there came to light a huge shattered plinth of Pentelic marble with two colossal bare feet attached, and the remains of a supporting tree-trunk, all cut from a single block; this was found in a jumbled mass of debris of the Roman period at about the same depth and only a few meters distant from the statue itself. The whole front of the plinth is broken roughly away, the right foot is shattered nearly to the instep, while the heel only of the left is preserved. In consideration of the place where it was found, the material, and the size of the feet,<sup>1</sup> this basis must certainly have supported the great male figure, although the actual joining of the two cannot be effected. Upon the upper surface of the plinth, and particularly beneath the instep of the right foot, there exist traces of a red painted stucco.

The material from which the great figure is cut, though similar to that of the other members of the group, is of a considerably finer texture and better grade; the only trace of a flaw is that discoverable along the plane of the break through the left forearm.

The statue is a semi-nude male figure clad only in a richly draped *himation* or *pallium*. From the left shoulder the drapery passes diagonally downward across the back, is thence brought forward in complicated folds across the right hip and abdomen, and is caught up over the extended left forearm whence it falls in heavy masses along the left leg. The figure stood apparently with its weight on the right leg and with the left slightly advanced. Many analogies may be quoted for the pose and general handling of the drapery, the type being clearly that traditionally assigned to

<sup>1</sup> The right foot is more than .37 m. long. Dimensions of the basis itself are: width across front .86 m., slightly wider than the figure itself,—depth from front to rear .65 m., thickness .135 m., greatest height, from bottom, to top of tree-trunk, .35 m.

Zeus<sup>1</sup> as well as to Aesculapius.<sup>2</sup> Unlike the other members of the group the work now before us shows distinct traces of weathering, particularly over the right hip and along the drapery of the thigh and leg on the same side, where the characteristic golden brown tint of weathered Pentelic marble appears quite plainly. The reverse of the figure is, as usual, very summarily treated, yet from indications furnished by the working of the drapery it seems that the statue was not set squarely against a wall or within a niche, but was posed with the right side considerably advanced. The drapery itself in its remarkably skilful arrangement, in the free and versatile handling of the complicated folds, and in its masterly surface texture, is by far and away the best to be found in the entire Corinthian group; indeed, it is safe to say that we have here a direct harking back to the famous drapery of the Parthenon pediments<sup>3</sup>—perhaps even a conscious imitation—although the archaism is plainly disclosed in the complexity of the folds, the depth of the undercutting, and the restlessness combined with a touch of stiffness which is so characteristic of a late and eclectic art. This impression is heightened by the modelling of the torso itself, which, though correct and remarkably well done—far better even than that of the Gaius—is entirely lacking in fluidity, and gives the same suggestion of hardness and academic method peculiar to the Corinthian works already discussed.<sup>4</sup>

The technique throughout is much more careful and studied than in any of the other pieces, and although evidence of drilling is apparent in the drapery it is in general very skilfully concealed. The flesh surfaces are smoothly worked and unpolished, but of so fine and careful a finish that but slight traces of tooling of any sort can be discovered; it is clear, however, that the technique is of the same sort as that which appears in the other statues of the group, whence we may conclude that all the pieces so far considered are contemporaneous or nearly so.

<sup>1</sup> Cf. Reinach, *Rep. de la Stat. Grec. et Rom.*, Zeus in the Louvre, I, p. 158, pl. 311, No. 683; also Froehner, *Notice de la Sculp. Antiq. du Louvre*, 32, 5; Zeus in Dresden, Reinach, *op. cit.* I, p. 188, pl. 401, No. 680; also Hettner, *Antikensammlung zu Dresden*, 225.

<sup>2</sup> Cf. Aesculapius in Rome, Reinach, *op. cit.* I, p. 287, pl. 545, No. 1146; *ibid.* I, p. 297, pl. 560 A, No. 1160 D; also Matz-Duhn, *Antike Bildwerke in Rom*, 58.

<sup>3</sup> Cf. the drapery of the "Three Fates" in the British Museum, Brunn-Bruckmann, *Denkmäler*, pl. 190.

<sup>4</sup> Cf., for example, with *A.J.A.* XXV, 1921, pls. X and XI, also fig. 1, p. 339.

It is scarcely necessary to point out that in this work we have another interesting example of eclecticism,—an eclecticism, however, which differs markedly from the usual neo-Attic type; indeed, the handling of the drapery is alone sufficient to put this figure in a class by itself. Although difficult to judge of the bodily proportions from the mutilated trunk, I yet think it probable that they followed closely those of the Gaius, allowance of course being made for the fact that we have here to do with a more mature and powerfully developed form; the groin line, for example, with the heavy roll of flesh above the hip, in both works receives a similar treatment, while the actual surface modelling of the thorax discloses the same system of proportions.<sup>1</sup> In the more powerful rendering and detailed musculature we may, perhaps, detect a stronger influence from the old Peloponnesian athletic type, yet it seems on the whole more plausible to account for this merely on grounds of the greater importance to the group of the personage represented. Indeed, the differences to be noted between this figure and the others of the group are variations of degree and not of kind, and are to be accounted for by the assumption that we have here the central and most important figure of the entire assemblage,—an assumption strongly seconded not only by the colossal scale of the work but also by the god-like, heroic guise under which the subject is represented.

As to the person shown by this portrait—and it certainly was a portrait—we have no means of reaching a definite decision; nevertheless it seems to me that it admits of fairly plausible conjecture. As we have seen, all the evidence points to the fact that this statue formed part of the great imperial group of portraits erected in all probability between 1 and 5 A.D.,—it was found within the same building as the others, is of similar material and technique, and belongs to the same school. Other portraits of the group have been identified as Augustus, Tiberius, Gaius, and Lucius,—none of them preëminent in scale or workmanship, and each two falling naturally into pairs of companion pieces. If, therefore, neither Augustus nor Tiberius is indicated as the central and important figure of this imperial group, who else could be logically expected to occupy such a position at this particular period of history and in this particular city? Obviously, none other than the Divine Julius himself.

<sup>1</sup> Cf. with *A.J.A.* XXV, 1921, pl. X, and fig. 1, p. 339.

In support of this conjecture many considerations are to be adduced other than that of the mere heroic proportions and god-like type of the figure,—the latter serving, of course, to indicate that the personage represented had departed this life and taken his place among the immortals. It is well known for example, that the Corinthians of the first century looked upon Julius Caesar as the founder and especial patron of their city, the great deified mortal who had restored the city to its old time wealth and importance after the bitter century of decay which followed upon the terrible sack and destruction of Mummius.<sup>1</sup> It was in 46 B.C. that Caesar determined to rebuild Corinth and sent thither a numerous colony consisting of his veterans and freedmen,<sup>2</sup> whereupon even its name was changed, appearing henceforth on coins and inscriptions as COLONIA IVLIA CORINTHVS, also LAVS IVLI CORINTHVS, and later COLONIA IVLIA CORINTHVS AVGVSTA. It is quite unthinkable, therefore, that the Divine Julius should have been omitted from such a group at Corinth, and even more improbable that the central and important position therein should have been reserved for other than himself alone. We are hence justified in wishing to recognize in this fine heroic statue the remains of a great portrait of Julius Caesar, deified, and shown forth under the aspect perhaps of Zeus the Thunderer, or of the Isthmian Poseidon.

In conclusion it is interesting to note that the cup-shaped depression at the base of the neck of the figure (cf. *supra*, p. 131) may be considered as proof that another portrait head was substituted for that of Julius at a later period of the empire when such piracy of portraiture was common enough. It is extremely improbable that, at the early date when the statue was erected, the figure should have been prepared *de novo* with the head inset and of a separate block of marble.

#### B.—SMALLER SEMI-NUDE MALE TORSO

A somewhat smaller male torso of semi-nude heroic type, not differing greatly from that of the statue just discussed, was found in the north aisle of the same basilica at a somewhat higher level (Fig. 1). When discovered it was resting on its side and imbedded

<sup>1</sup> Cf. Strabo, VIII, p. 381; Pausanias, II, 1, 2, and VII, 16, 7; Florus, II, 16; Velleius Paterculus, I, 13; Cicero, *Pro Leg. Man.* 5, etc.

<sup>2</sup> Cf. Strabo, *loc. cit.*; Pausanias, *loc. cit.*; Dio, XLIII, 50; also Pliny, *N. H.* IV, 4, 5, etc.



FIGURE 1.—TORSO FROM CORINTH.



in the lower courses of an early mediaeval wall erected upon the ruins of the Roman structure. It had not, apparently, been moved any great distance from the place where it originally fell, but, together with shattered blocks and fragments of the earlier building, had been laid hold of by the mediaeval builders because it happened to be on the spot and ready to hand.

Though by no means colossal, the statue is considerably over life size, and is preserved from the upper part of the chest to a point slightly above the knees, its total height being 1.18 m.;<sup>1</sup> the arms, shoulders, and top of torso have been hacked away, as has the front of the left leg, together with the adjacent drapery. A cup-like hollow similar to that noted in the larger figure appears here also, where it doubtless served a similar purpose. The shoulders and upper part of the chest seem to have been represented as covered by a *chlamys* which was probably fastened on the right shoulder by a brooch; the drapery was thence carried backward over both shoulders and passed downward over the buttocks leaving the whole left side, thigh, and upper leg bare; on the right side, however, a heavy mass of folds is brought around from the back and carried forward over the right hip and thigh, the main body of the stuff passing from right to left and downward across the lower part of the abdomen to the left hip, where it was supported apparently by the left hand. On the right side the lower folds are draped over the right leg and caught up at the crotch in a most curious manner. In fact the entire scheme of drapery is most unusual; it would seem practically impossible to arrange an actual *chlamys* in any such fashion upon a standing figure.<sup>2</sup> The statue is cut from Pentelic marble of the same sort as that used for the other members of the group.

Because of the poor preservation of the work it is difficult to determine its pose with any degree of accuracy. The weight, however, seems to have been carried on the left leg, while the right was probably advanced and flexed at the knee; the left

<sup>1</sup> Further dimensions; maximum width at hips .55 m., from navel to ground .69 m., from navel to bottom of cutting for insertion of neck .43 m.

<sup>2</sup> This method of wearing the *chlamys* is rare even in seated figures,—cf. Tiberius in the Museo Chiaramonti, Amelung, *Sculp. des Vat. Mus.*, I, taf. 60, and Reinach, *op. cit.* I, p. 568, pl. 925, No. 2352. I have found only one analogy to this type of drapery in a standing figure, *i.e.*, an imperial figure in the Museo Torlonia, Reinach, *op. cit.* II, p. 572, No. 5; *Album of the Museo Torlonia*, No. 118, and Visconti, *Catalogo del Museo Torlonia*.

hand, as already noted, must have supported the drapery at the thigh, while the right arm seems to have been raised and, perhaps, supported on a long lance or staff. Whether this restoration be correct or not, the pose indicated was common enough in the sculpture of the period and is found with slight variation in many replicas.<sup>1</sup> As in the other members of the group, the rear of the figure is but roughly blocked out, while the few traces of weathering still observable also indicate that it stood originally under cover and against a wall.

The technique is in general similar to that noted in the other works, although the flesh surfaces are, perhaps, not so smoothly finished. The modelling is correct and fairly good, but because of the rough usage suffered by the figure, it produces an impression of lack of detail combined with the usual hardness and academic tone. The drapery, though facile, is rather summarily treated; no considerable undercutting seems to have been attempted, and the whole effect is quite stiff and neo-Attic. In fact, the technical and stylistic considerations—*e.g.*, groin-line, prominent muscle above hips, modelling of the rib-muscles beneath the right breast, etc. (cf. Fig. 1 and PLATE I)—all indicate clearly that this statue is of the same period and school as the other members of the group; they make it equally plain that the figure was intended to represent a subordinate personage in that the work is less careful and less detailed, in which respect it finds its closest analogy in the Lucius.

We can only conjecture as to the person this statue represented. Although in scale it ranks about with the Augustus and is thus considerably larger than the Gaius, the workmanship would seem to indicate, as mentioned above, that the figure was of secondary importance in the group; furthermore, the heroic pose and scanty drapery probably show that the portrait was of a personage already dead and among the immortals at the time of the erection of the group. In view of these slight indications it is, perhaps, presumptuous even to hazard a guess; nevertheless I would suggest that it may well have been a portrait of Agrippa.

### C.—SMALLER ARMORED TORSO

A mail-clad torso of smaller scale than that just discussed was discovered in a mediaeval wall a few meters southwest of the

<sup>1</sup> Cf. the work already quoted, Reinach, *op. cit.* II, p. 572, No. 5, also I, p. 560, pl. 912 A, No. 2331 A; I, p. 562, pl. 916, No. 2398 C; I, p. 573, pl. 936, No. 2383, etc.

basilica (Fig. 2). The figure was built carefully into the wall, back outward, and resting on its right side at a depth of little more than two meters beneath the surface.

The statue, of good Pentelic marble similar to that used for the other members of the group, is the smallest of the lot—no more than life size,<sup>1</sup>—and is preserved from the neck nearly to the knees; it stood with the weight on the right leg, the left thrust forward and slightly bent at the knee. The right arm, now lacking, was raised and attached in a separate piece at the shoulder, while the left, which is missing from the middle of the upper arm, seems to have hung naturally at the side. The pose was, perhaps, that of the *allocutio*, that traditionally assigned to representations of a commander addressing his troops.<sup>2</sup> The figure is shown as clad in full panoply consisting of a bronze cuirass moulded to reproduce the forms of the torso beneath, and a kilt of heavy leathern flaps about the loins; beneath the armor is worn a sleeveless chiton which must have fallen about to the knees, while over the left shoulder appears a roll of drapery which doubtless represented the *chlamys* or *paludamentum*; the stuff is gathered rather closely upon the left shoulder, and seems either to have fallen thence straight down the back free of the body, or else to have been wound about the left forearm.<sup>3</sup> An ornamental sword-belt or *cingulum* passes twice about the body and is knotted just above the navel, the free ends being then tucked up in symmetrical loops on either side, while above in the middle of the chest is worked a conventional *gorgoneion* in low relief. Fringing the lower rim of the cuirass is an intermediate row of short tasselled leathern straps, an ornamental *motif* which is repeated in slightly different form about the armholes beneath the epaulets. The drapery upon the left shoulder is considerably battered, as are also the gorgon's face, the tassels and loops of the sword-belt, and the two lion heads—the lower turned upside down—which served to make fast to the breastplate the forward end of the right

<sup>1</sup> Dimensions: total height 1.10 m., from neck to navel .40 m., from navel to lower rim of cuirass .145 m., from navel to bottom of kilt .43 m., maximum width across the shoulders *ca.* .60 m.

<sup>2</sup> Cf. the Augustus of Prima Porta in the Vatican, Amelung, *op. cit.* II, taf. 2, No. 14; Hadrian in the British Museum, Reinach, *op. cit.* I, p. 582, pl. 944, No. 2420; also Bernoulli, *Römische Ikonographie*, II, 2, p. 109, No. 14; an imperial figure in Turin, Reinach, *op. cit.* I, p. 599, pl. 973, No. 2309, etc.

<sup>3</sup> Cf. the references just cited.



FIGURE 2.—SMALL ARMORED TORSO: CORINTH.

epaulet.<sup>1</sup> The breasts are prominent and clearly indicated. To judge from the cutting at the neck, the original portrait head was probably broken away and another of the inset variety substituted at a later date, a change similar to that which seems to have been effected in the case of the semi-nude figures discussed above.

In style and technique this statue agrees perfectly with the other members of the group. Although no flesh surfaces are exposed, the characteristically hard and generalized modelling appears in the forms of the cuirass, while the drapery is rendered in the manner with which we are now so familiar.<sup>2</sup> The surfaces throughout are less smoothly finished than in any of the other figures, the workmanship less careful, and, as usual, the rear is but roughly blocked out; almost no traces of weathering are observable. It is plain, therefore, that the statue stood under cover and in such a position that the back was not exposed to view. On the outer edge of the left sleeve of the tunic appear two *puntelli* very similar to those found in a corresponding position on the Gaius as already described.<sup>3</sup>

It is useless to speculate as to the person represented by this portrait,—but judging from the small scale of the figure and its distinctly inferior finish, we may be sure that it stood for an individual of minor importance in the imperial family, perhaps Agrippa Posthumus.

#### D.—FIGURE CLAD IN ELABORATE ARMOR

The discussion of the great cuirassed figure now before us (Figs. 3 and 4), the final member of the Corinthian group so far known, has for several reasons been chosen to conclude the series. Although apparently a typical representative of the large and well known class of statues which figure the panoplied worthies of the

<sup>1</sup> For another example of such a detail cf. a bust of Hadrian in the Vatican, Amelung, *op. cit.* Tafelband I, taf. 12, No. 81, Textband I, p. 97.

<sup>2</sup> Cf., for example, the drapery on the left shoulder with that in a corresponding position on the Gaius and the Lucius, *A.J.A.* XXV, 1921, pls. X and XI; note the very similar arrangement of folds, the same deep undercutting worked largely with the drill, and the striking resemblance in texture.

<sup>3</sup> Cf. the article on Gaius and Lucius, pp. 343 f. Regarding these *puntelli* upon the present work, Dr. C. W. Blegen writes me from Athens “. . . they appear to me more doubtful (than those of the Gaius). It is of course possible that they are *puntelli*, but I should rather interpret them as buttons or heads of pins, or some sort of decoration at the corners of the sleeve.”



FIGURE 3.—TORSO IN ELABORATE ARMOR: CORINTH.

Roman Empire, it is nevertheless unique in many respects and in others differs from the great majority of like works of the period. It shows further a style and technique which seem in a way to set it apart from the other members of the group, although these differences are, perhaps, more apparent than real.

It was discovered within the Roman basilica not far from its southwest angle at a depth of about three meters and, as in the case of the smaller cuirassed torso, had been built into a massive substructure of early mediaeval date composed of rough and

heavy blocks, all apparently reused material from the ruins of the earlier building. It reposed on its left side facing into the wall, and hence upon discovery the back alone was exposed to view.

The figure is of Pentelic marble very like that used for the Gaius, while in scale it coincides almost exactly with the statues of the two youths; it is preserved from neck to knees and measures as it stands about 1.50 m.<sup>1</sup> The weight of the figure is carried on the left leg, while the right is slightly advanced and bent at the knee; the right arm, now lacking, was attached in a separate piece just below the shoulder, and seems to have been bent at the elbow and extended forward and to the right. It was at any rate quite clear of the body. The left arm, hanging naturally at the side, is preserved to the middle of the forearm and is crooked slightly to support the drapery which here passes across it. The pose and gesture are of common occurrence in Roman sculpture.<sup>2</sup> The torso is sheathed in a most elaborate cuirass upon the front of which is worked in high relief a fairly common *motif*, that of two winged victories setting up a trophy,<sup>3</sup> while above is a broad *gorgoneion* encircled by two serpents knotted together at the crown.<sup>4</sup> A further and most unusual elaboration is seen in the repetition of the trophy *motif* upon the right epaulet where, due to the limited field, but a single Victory is figured. The kilt which protects the lower half of the body is also very elaborate, and is composed of the usual two ranges of leathern straps, the upper very short and used merely for decorative effect; the individual straps are richly fringed, and in places were deeply undercut and rendered most carefully in detail. This *motif* is as usual repeated in slightly different form about the armhole beneath the

<sup>1</sup> Dimensions: neck to waist line .49 m.; waist line to bottom of kilt .40+ m.; maximum width of figure *ca.* .75 m.; height of trophy on breastplate .345 m.; height of larger Victories .32m.; height of Victory on right shoulder .19 m.; width of *gorgoneion* .15 m.; width of cutting for the neck .21 m., depth .17 m.

<sup>2</sup> Cf. Marcus Aurelius in Rome, Reinach, *op. cit.* I, p. 587, pl. 953, No. 2447, and Bernoulli, *op. cit.* II, 2, p. 166, No. 2; Domitian in the Vatican, Bernoulli, *op. cit.* II, 2, p. 55, No. 1, taf. XIX; etc.

<sup>3</sup> Cf. Trajan in the Louvre, Reinach, *op. cit.* I, p. 171, pl. 338, No. 2114; Wroth in *J.H.S.*, 1886, p. 132, No. 46; *Mon. Scelti Borghesi*, I, 35; Torso at Agram, *J.H.S.* 1886, p. 132, No. 45; *Arch. Epig. Mith. aus Oester. Ungarn*, 1885, IX, pl. II; Colossal statue in Turin, Bernoulli, *op. cit.* II, 1, p. 335, No. 20,—Dütschke, *Ant. Bildw. in Ober-italien*, IV, p. 39, No. 55; etc.

<sup>4</sup> Cf. Fig. 4. The *gorgoneion* is a very common decoration in works of this type.

right epaulet. Under the armor the usual tunic is worn, appearing only at the shoulders and as a short skirt below the bottom of the kilt. The *paludamentum* completes the costume; from a complicated mass of folds resting low upon the left shoulder it passes diagonally downwards across the back to the right hip, where a fold spreads widely below the main supporting roll. The latter then crosses the front of the body just below the row of shorter straps and is carried up and over the left forearm to a point behind the elbow; thence it seems to have fallen down the left side at least as far as the bottom of the tunic.<sup>1</sup> As would seem to have been the case with the three torsos just considered, the original portrait head was probably broken away and the cavity at the neck prepared to receive another likeness of considerably later date; at any rate the cutting at the neck is not original.

Although in general well preserved, the torso is somewhat battered and worn in detail; numerous fragments of the drapery are missing, particularly at the left arm, and upon the front of the kilt two of the straps are broken away entirely and others are badly chipped. On the breastplate itself the outer wings of the Victories have suffered considerably, the whole surface is abraded, and many of the details are blurred. The right leg of the statue is preserved to just below the knee, while the left, which was strengthened at the rear by a heavy supporting tree-trunk, the top of which is still in place, is broken off about .10 m. higher up. At a considerably later date, however, there came to light in the northeast section of the basilica at a level not much above hardpan the lower part of a left leg which certainly belongs to this figure. The leg is preserved from the knee down, is supported against a roughly worked tree-trunk, and stands upon a plinth in part preserved, the upper surface of which is covered with a red painted stucco similar to that noted in the case of the Gaius<sup>2</sup> and the colossal male torso.<sup>3</sup> Although the front of the foot is broken away, enough is preserved to show that it was clad in a high military sandal or buskin which extended more than half way to the knee and was fastened at the top by a broad thong wound thrice about the leg and tied in front.<sup>4</sup> From the same

<sup>1</sup> For a very similar handling of the *paludamentum*—at least across the front of the body—cf. the Augustus of Prima Porta, Reinach, *op. cit.* II, p. 574, No. 6.

<sup>2</sup> Cf. article on Gaius and Lucius, p. 340.

<sup>3</sup> Cf. *supra*, p. 132.

<sup>4</sup> Dimensions: from plinth to knee .59 m., tree-trunk .05 m. higher,—width of calf ca. .13 m.,—height of buskin .27 m.



section of the basilica in which the statue itself was found and at about the same level, there came to light a left hand grasping a sword-hilt. The hand had been broken off just above the wrist, the tip of the second finger was missing, and the hilt itself was rather battered; a large seal-ring was represented as worn on the fourth finger. Judging from the scale,<sup>1</sup> the material, the sword-hilt, and the place of discovery of this fragment, I think it probable that it belonged originally to the great cuirassed figure.<sup>2</sup> As in the other statues of the Corinthian group, those parts of the figure which were not intended to be seen were neglected consistently, and hence this statue also must have been placed against a wall or within a niche.

Before proceeding to a discussion of the style and technique of this work I wish briefly to call attention to several of its more striking peculiarities. Of these the most important is the shape of the cuirass at its lower edge where, instead of being adapted to the trace of the groin-line and thus extended downward to cover the abdomen as in the great majority of cases,<sup>3</sup> it is carried straight across at the waist. This type appears to be primarily Hellenistic, although it is found occasionally in Roman art where it seems to have been reserved for officers of high rank;<sup>4</sup> it is very rare, however, except in the early imperial period. Another unusual detail is to be observed in the peculiar stepped form given to the bottom of the epaulet. A final point of great interest is raised by a consideration of the helmets which are represented as resting at the base of the trophy erected by the two Victories (cf. Fig. 4). These helmets, although apparently quite commonplace, are of altogether unique form,—at least so far as I am able to judge at the present moment; they appear entirely unlike the contemporary Greek and Roman headpieces, and may well be of a foreign type rarely if ever represented in art. In itself this question is naturally of slight importance, but when we pause to consider that in a number of the more elaborately sculptured

<sup>1</sup> It measures .25 m. from the tip of the fingers to the break at the wrist.

<sup>2</sup> Dr. Blegen, at my request, was kind enough to re-investigate this point also. Although admitting that the hand is suitable as far as size and workmanship are concerned, he doubts that it belongs to the torso, since it would seem to give an awkward position for the arm and hand holding the sword.

<sup>3</sup> As, for example, in a statue of Hadrian in the British Museum, Reinach, *op. cit.* I, p. 582, pl. 944, No. 2420.

<sup>4</sup> Cf. W. Deonna, *Stat. de Terre Cuite dans l'Antiquité*, p. 168 f., and fig. 12; also Reinach, *op. cit.* II, p. 578, Nos. 2, 3.



FIGURE 4.—DESIGN ON BREASTPLATE: TORSO: CORINTH.

cuirasses of the period a perfectly definite historical or personal allusion is to be detected in the scenes and objects represented,<sup>1</sup> the possibilities latent in this apparently trivial detail are at once plain. It is my intention, however, to develop this subject in a subsequent paper dealing with the sculptural representation of arms and armor in the imperial period.

To consider now our statue as a whole (Fig. 3), one would at first sight incline to date it much later than the opening years of the first century A.D., chiefly because of the decidedly coloristic

<sup>1</sup> It is well known, for example, that the return of the ensigns of Crassus is commemorated on the cuirass of the Augustus of Prima Porta; cf. Daremberg et Saglio, *Dict. des Antiq. Grec et Rom.*, s.v. 'Tropaeum.'

manner in which the drapery is rendered, the deep undercutting of the flaps of the kilt, and the numerous indications of the use of the drill to produce lines or spots of shadow not purely plastic. Upon closer study, however, it seems to me apparent that these differences, as between, for example, the Gaius and the present work, are inherent in the subject rather than in the technique, since the flesh surfaces in each case show exactly the same treatment,—the same tooling, similar modelling, and the same general finish. This conclusion is borne out by the proportions of the figure itself, and even more strikingly by those of the Victories upon the breastplate. In the latter the slender neo-Attic proportions are perfectly evident, together with the rather stiff and mannered drapery, and the very self-conscious air of the figures themselves. A characteristic trick, and one of which the sculptor was apparently very fond, is seen in the baring of the outer leg of each of the Victories. In spite, therefore, of the quite evident differences exhibited by this work, a more intimate study of its style and technique places it securely in the same period and group with the Gaius and Lucius,—a conclusion amply corroborated by its place of discovery and the material of which it is made.

Here again it is, perhaps, useless to speculate as to the person originally figured by this portrait, yet to judge from the scale and the elaboration of the work, he must have been of considerable importance in the imperial family. In view further of his evident distinction in a military way, it seems plausible to suggest that he may well have been the elder Drusus, brother of Tiberius, a man who won fame as a leader of Roman armies and who died in 9 B.C. while conducting a campaign in Germany.

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## STRUCTURAL IRON IN GREEK ARCHITECTURE

AN allusion to the employment of structural iron in Greek architecture would naturally impress us as paradoxical. We are accustomed, to be sure, to the small iron members which the Greek stone-masons substituted for mortar as a bonding material between blocks of stone. Such small members may readily be classified to form three groups: first, there were iron clamps to fasten together stones in the same course; second, there were iron dowels to fasten stones to the course below them; and third, there were iron braces, primarily to brace stones in position while they were being doweled, but never afterwards removed.<sup>1</sup> Yet while, at first thought, we might be tempted to regard Greek structural iron as consisting solely of dowels and clamps (a few of us might remember the braces), it is not with these that we are now concerned; I wish to discuss quite another phase of the subject, a phase more analogous to the modern use of structural steel.

We are accustomed to regard Greek construction as a simple piling up of stones, their superstructures as a simple piling up of beams. Such, for instance, is the general conclusion of the French critic Choisy. Yet, if we pause for consideration, most of us will remember instances which show a technical knowledge far in advance of what Choisy's words would imply, a technical knowledge such as Durm dismissed as "quite impossible, . . . in the manner of the late Baroque period."<sup>2</sup> For lack of space I must omit the whole field of masonry construction, with such delicate problems as those of balancing, of hollowing to diminish weight, of increasing the thickness at the weakest point. There are marble flanged beams at Samothrace which might have served as patterns for steel beams being made today in the rolling mills of Pennsylvania. I must limit myself rather to a smaller but more incongruous field, incompatible with our general notions of

<sup>1</sup> Concerning dowels and clamps, see Stevens, in Fowler and Wheeler, *Handbook of Greek Archaeology*, pp. 104-107; concerning braces, see Orlandos, 'Preliminary Dowels,' *A.J.A.* XIX, 1915, pp. 175-178.

<sup>2</sup> Durm, *Baukunst der Griechen* (1910), pp. 403, 545.

Greek architecture, that of construction in iron.<sup>1</sup> I shall cite merely a few instances, some new, others already well known, but so arranging them as to show the degree of Greek attainment in this direction.

Let me begin with some very simple instances. The acroteria at the angles of the gables, in the oldest temple of Athena on the Acropolis, as identified a few years ago by Schrader,<sup>2</sup> are merely thin slabs of marblé, jointed together with mortise and tenon, a form of construction which, like that of the temple as a whole, reminds us strongly of carpentry in wood. These board-like slabs, leopards at the lower corners, a Gorgon on each apex, would hardly have stood without assistance, and this was supplied in the form of long iron stay-ropes or braces, which sloped from the back of each figure down to the roof behind.

Another example of reinforcement occurred in the Theban Treasury at Delphi. The foundations of this structure, constructed of a soft limestone, were laid upon a steep slope at a point swept by the miniature river which poured down the Sacred Way on rainy days. Such foundations, though purposely made very thick (5 ft.), were in need of reinforcement, and this was provided by great iron bars, 41 ft. long on each flank, and about  $18\frac{1}{2}$  ft. long at each end of the building,

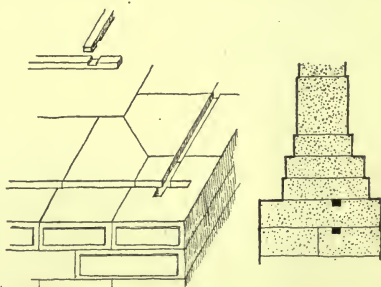


FIGURE 1.—FOUNDATION OF THEBAN TREASURY: DELPHI.

overlapping at the corners and hooked over each other in such a way as to provide a firm rectangular frame measuring about  $39\frac{3}{4} \times 17\frac{1}{4}$  ft. in plan. The bars themselves were  $3\frac{1}{4}$  inches high and 4 inches wide, the width being the greater because the purpose was to prevent lateral displacement. Of these bars nothing

<sup>1</sup> An 'Essai sur l'existence d'une architecture métallique antique' was published many years ago by Charles Normand (*Encyclopédie d'Architecture*, 3rd series, II, 1883, pp. 61-80; cf. *R. Arch.*, 3rd series, VI, 1885, pp. 214-223). So far as Greek architecture is concerned, however, M. Normand speaks only of dowels and clamps, and of decorative accessories which lie outside our province.

<sup>2</sup> Schrader, *Archaische Marmor-Skulpturen im Akropolis-Museum zu Athen*, pp. 5-16; Dickens, *Catalogue of the Acropolis Museum*, I, Nos. 122, 551-555, 701.

now remains except the grooves which formed their beds in the top course of the foundation, and the weathered traces on the bottom of the lowest step of the crepidoma, which rested directly upon the bar and was doweled to it (Fig. 1).<sup>1</sup> And there are indications of a similar system of reinforcement in the second course of the foundation.

Quite different in purpose, acting rather as beams, were the well-known examples found in the great temple of Zeus at Agragas, in Sicily. Here each bay of the architrave, on account of its

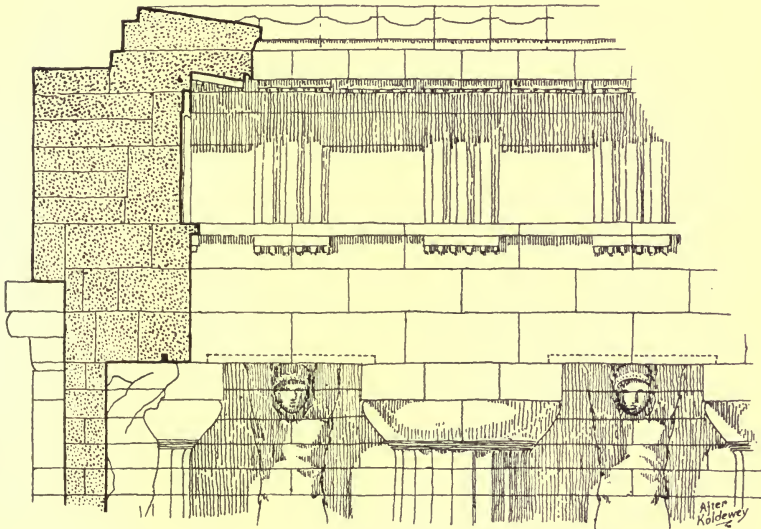


FIGURE 2.—ENTABLATURE OF OLYMPIEUM: ACRAGAS.

great length, about 26 ft.  $7\frac{3}{4}$  inches between the centres of columns, was subdivided into three by vertical joints, one such joint coming exactly at the centre of the clear span (Fig. 2). While the intervals between the columns are filled with walls, the faces of these screen walls, in their upper portions at least, lay considerably behind the centres of the columns; and early attempts to restore the temple, on paper, did not make very clear

<sup>1</sup> It is the fact that the hard limestone superstructure was doweled to the bar that proves that the bar could not have been of wood, as was thought by earlier observers (*B.C.H.* 1910, p. 190; *B.C.H.* 1911, p. 160; *Berl. Phil. Woch* 1911, col. 1615). For my restoration of iron bars, see *B.C.H.* 1912, pp. 453-455.

the method by which the overhanging portion of the architrave would have been supported. For the architrave, with its joint at the centre of the free span, projected 6 ft. 7 inches beyond the face of the screen wall. It was here that the figures of Atlantes, 25 ft. 2 inches high, hitherto assigned to positions within the temple, were eventually located by Koldewey and Puchstein.<sup>1</sup> Even with this arrangement, which is undoubtedly the correct one, the outer face of the architrave remains unsupported. But along the lower surface of these outer architrave blocks runs a groove, 4 inches wide and  $8\frac{1}{2}$  inches high. Durm still regards this as a rope cutting for use while the blocks were being hoisted,<sup>2</sup> even though Koldewey and Puchstein had already pointed out the fact that the cuttings did not continue for the entire length of the stone, but reached only  $21\frac{1}{2}$  inches beyond the edge of the abacus, giving a total length of  $14\frac{1}{2}$  ft. Cockerell had thought that these cuttings were for beams of hard wood,<sup>3</sup> but Hittorff recognized traces of iron rust.<sup>4</sup> We have, therefore, a clear case of an iron beam laid across the interval between the capitals of the columns, with the stone superstructure built upon it. On account of the form of construction, this iron beam was necessarily in the exposed soffit of the stone architrave; but it would have been possible to conceal it by means of stucco. Thirty-eight of these beams would have been required in the peristyle.

At one point in the Erechtheum at Athens we find a similar form of construction: the lintel of the subterranean doorway leading to the crypt under the North Porch, though only 20 inches high and 3 ft. 6 inches wide, carries the entire north wall of the building across a span of 2 ft. 5 inches. This lintel was reinforced by inserting in its bottom an iron bar, sealed with lead while the lintel was still loose and upside down on the ground; the iron beam, furthermore, is still in place, and, therefore, its height and length cannot be ascertained. It would have been far better to have placed the iron in the top of the marble lintel, not merely because it would thus have been concealed from view (for in this subterranean doorway we are not concerned with

<sup>1</sup> Koldewey and Puchstein, *Die Griechischen Tempel in Unteritalien und Sicilien*, pp. 158-162.

<sup>2</sup> Durm, *Baukunst der Griechen* (1910), pp. 402-404.

<sup>3</sup> *Antiquities of Athens*, V, ch. I, p. 8 and pl. 5.

<sup>4</sup> Hittorff and Zanth, *Architecture antique de la Sicile*, pp. 310, 566, pl. 89, fig. 5.

finish), but because of a vital constructive defect. The marble, more brittle than the iron, naturally cracked before the weight of the superincumbent wall could be transmitted to the more flexible iron beam.

Far more scientific is the system adopted in the Propylaea at Athens. Here the Ionic architrave of the main hall is, in section, composed of two marble blocks each about 20 inches thick and 2 ft.  $9\frac{1}{2}$  inches high, set on edge, back to back. Each supports marble ceiling beams coming not merely above the Ionic columns but also exactly at the centre of the span (Fig. 3). The total weight of half of one of these ceiling beams with its load of coffers was  $6\frac{2}{3}$  tons. Here again the architect did not trust his marble. Therefore on the top of the Ionic architrave he cut a groove nearly  $5\frac{1}{2}$  inches deep and 3 inches wide, and half the length of the architrave, just 6 ft.; the groove has a shoulder cut at each end, about  $3\frac{1}{4}$  inches long, and rising 1 inch above the bottom of the groove. In this groove, as was discovered by Mr. Balanos, the architect in charge of the modern reconstruction,<sup>1</sup> was placed a solid rectangular iron beam, which transmitted the weight of the central ceiling beam to the two shoulders 5 ft.  $5\frac{1}{2}$  inches apart, where it could be cared for by the capitals of the Ionic columns. It is to be noted that the length of the iron beam was made as short as would be consistent with this purpose; by terminating it at a distance of 3 ft. from each end of the architrave, it was possible to use a lighter section than would have been the case had the iron reached from end to end of the marble architrave. And since, in this interval between the shoulders, the groove was cut 1 inch deeper than the bottom of the iron beam, the latter, not being sealed with lead, was perfectly free to deflect under the weight of the marble ceiling beam. Of these iron beams, of which sixteen were employed in the hall, only the rusted traces now appear in the grooves. To ensure the transmission of the weight directly to the iron beam, two copper plates about 2 inches square were placed on the iron beam and upon these rested the marble beam; the stains of the copper are still visible on the bottom of the marble. The central portion of the Ionic architrave, therefore, supported nothing but its own weight.

Since in this case we know all the details of weights and dimensions, it may be of interest to quote the results. That the Greeks

<sup>1</sup> Balanos, *Actes du seizième Congrès International des Orientalistes*, 1912, p. 44; cf. Karo, *Arch. Anz.* 1912, p. 236.



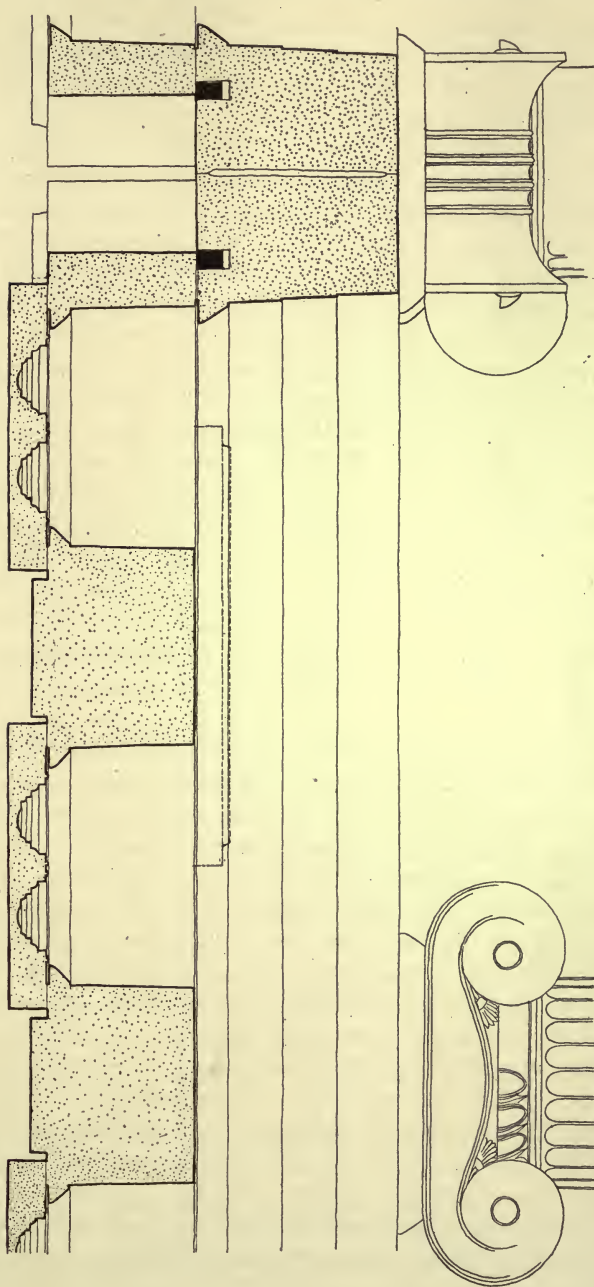


FIGURE 3.—IONIC CEILING OF PROPYLAEA: ATHENS.

were timid with regard to stone construction, and erred on the side of safety, is a fact that has long been apparent.<sup>1</sup> This is another case in point. If an Ionic architrave of this character were being erected at the present day, we should not object to a maximum fibre stress (the tension occurring in the outermost particles at the bottom of the architrave) amounting to as much as 120 pounds per square inch of section. Now if Mnesicles, the architect of the Propylaea, had taken no precautions at all, and had not inserted the iron beam, the maximum stress in the Ionic architrave would have been only 103 pounds per square inch, a stress with which the marble would have been quite able to cope.<sup>2</sup> But on account of timidity he inserted the iron beam, and thereby reduced the maximum stress in the marble to 57 pounds per square inch, about half of the modern allowance. Such was the stress in the marble below the iron beam, but how about the iron beam itself? Here modern practice would not justify a greater maximum stress than 12,000 pounds per square inch; in the Propylaea, however, the actual stress was 17,500 pounds per square inch. In iron, therefore, it would appear that Mnesicles was far from timid; but his timidity may be attributed to ignorance. There was, however, no question of collapse; he used one third rather than one quarter of the breaking strength of wrought iron.

It was with such marble ceilings that the Greek architects appear to have experienced the greatest difficulties, which they overcame, to their own satisfaction at least, by the use of concealed iron beams. The result, in the case of the Propylaea, was eulogized as follows by Pausanias: "The portal has a roof of white marble, and for the beauty and size of the blocks it has never yet been matched."<sup>3</sup> Let us now turn to another example which Pausanias regarded with almost equal admiration: at Bassae, as he states, is "the temple of Apollo Epicurius, built of stone, roof and all; of all the temples in the Peloponnesus, next to the one at Tegea, this may be placed first for the beauty of the stone and the symmetry of its proportions."<sup>4</sup> Again emphasis is laid on the employment of stone throughout, and with reason; for the temple at Bassae, the first work of Ictinus, dating from about 450

<sup>1</sup> Carpenter, *The Esthetic Basis of Greek Art*, pp. 159, 260.

<sup>2</sup> In the marble ceiling beams themselves the maximum fibre stress rose even to 185 pounds per square inch, considerably more than the limit of present day practice.

<sup>3</sup> Pausanias, I, 22, 4.

<sup>4</sup> Pausanias, VIII, 41, 7-8.

B.C., marks the beginning of the substitution of marble ceilings for the wooden ceilings hitherto used in external porticoes.

At Bassae, therefore, the marble ceiling was an experiment and in its design the timidity of the architect is quite apparent. The end porticoes, furthermore, are exceptionally deep, two full intercolumniations; for the columns and antae of the inner porches are aligned with the third column on each flank of the peristyle. As a result, the maximum clear span of the ceiling beams of the external portico, from the inner face of the entablature of the façade to the outer face of the pronaos, amounts to 13 ft.  $2\frac{1}{4}$  inches. Now the ceiling beams, of marble, were assigned a width of 2 ft.  $2\frac{3}{8}$  inches and a height of  $12\frac{3}{4}$  inches, so that if they had been solid they would have weighed 5,460 pounds in the clear span; they carried, furthermore, ceiling coffers weighing (on the outermost beams) about 220 pounds per running foot, contributing an additional load of 2,900 pounds. Under such circumstances, the maximum fibre stress, the tension at the bot-

tom of the ceiling beam, would have amounted to 231 pounds per square inch, twice as much as we should regard as permissible. Ictinus, too, was unfavorably impressed by the result, and attempted to remedy the situation by hollowing the tops of the ceiling beams, transforming them into mere shells, about 4 inches thick on each side and only  $3\frac{1}{4}$  inches thick at the bottom (Fig. 4). In other words, he removed more than half of the section of the ceiling beam, reducing its weight, in the clear span, from 5,460 to 2,630 pounds.

What was the exact purpose of this reduction of the weight? Cockerell, without further reflection, merely remarked that "these are hollowed, in order to diminish their weight . . . and secure their duration, which was not the case in those of the Propylaea."<sup>1</sup> But analysis of the resulting forces shows that by such a process Ictinus would not have improved the situation in

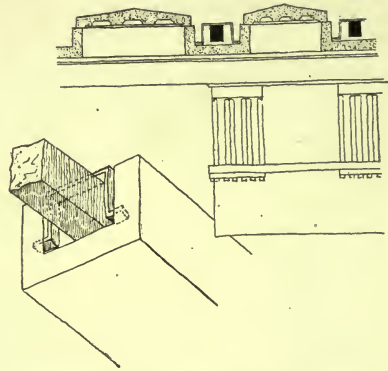


FIGURE 4.—PERISTYLE CEILING:  
TEMPLE AT BASSAE.

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<sup>1</sup> Cockerell, *Aegina and Bassae*, pp. 51, 54.

the least. The beam is lightened, to be sure, but it is also weakened to such a degree that the maximum fibre stress is still 227 pounds per square inch, practically identical with what it was before the so-called precaution was taken. This is not the way in which a Greek would have worked; he would rather have retained the full section of the marble beam, stiffening it by adding a tall flange or ridge along the top which increased its height but was invisible from below. We must seek another explanation of the hollowing of the beam. And such an explanation is suggested by the striking similarity (of course not apparent to Cockerell) between this marble beam section and modern forms of terra-cotta and stone used for the casing of steel beams. At Bassae, as in so much of our modern work, we have apparent marble beams which were in reality mere shells, the true supports of the ceiling having been iron beams which formed their core. The purpose of the reduction of the weight, by omitting more than half of the section of the marble beam, was, of course, to diminish the load carried by the iron beam, so that this, in turn, could be made lighter. There must have been hangers or straps of some sort, in order to secure the marble casing to the iron beam. And of such iron beams, of simple rectangular section, about 15 ft. in length, there must have been eighteen examples at Bassae, or even more if we can follow Pausanias literally and assume that the ceilings of the inner porticoes and of the cella were likewise of marble. Of actual remains of these iron beams, however, we have no traces.<sup>1</sup>

Another type of iron beam employed by the Greeks is the cantilever, a beam of which one end is firmly imbedded in a wall, while the other end is unsupported, even though the load may be placed upon this free end. The load is counterweighted by the wall in which the other end is imbedded. The most notable examples occur in the Parthenon, where in the pediment floors we find, near the centre, grooves varying in width from  $4\frac{1}{2}$  to 11 inches, extending from the face of the tympanum almost to the front edge of the cornice (Fig. 5). In some cases they are at right angles to the face of the tympanum, while others are oblique. There are five of these grooves in each pediment, all grouped near the centre; and their purpose obviously was to contain iron cantilever beams, which should support the heavier statues at the middle of the pediment, and thus take the weight off the overhanging portion of the

<sup>1</sup> The broken fragments of the hollowed marble beams should reveal, if carefully examined, traces of some method of attachment to the iron.

marble cornice.<sup>1</sup> In order to permit them to function in this manner, the cantilevers were laid directly on the top of the marble cornice, and ran back under the tympanum, according to the traces of rust, for 12 or 16 inches; to fit over them, corresponding cuttings were worked in the bottoms of the tympanum slabs, which thus straddled and firmly weighted the inner ends of the beams. It is from the cuttings in the tympanum blocks that we learn the height of the cantilevers, between  $2\frac{1}{2}$  and 5 inches.<sup>2</sup> Directly under the face of the tympanum, the pediment floor is sharply cut down to a depth of about 2 inches, and for a width corresponding to that of the iron cantilever; here, therefore, was the point of support of the cantilever, well inside the face of the entablature below. About 5 inches outside the face of the tympanum, and, therefore, practically over the face of the entablature below, is an additional drop of about  $\frac{1}{2}$  inch, so that the outer end of the cantilever was free to bend as much as  $2\frac{1}{2}$  inches before coming in contact with the cornice. Probably, however, they were not intended to bend so much; for we must assume that the marble statues did not rest loosely upon the cantilevers, but were grooved to a depth of about 1 inch to prevent lateral displacement; and thus if the cantilever were deflected even as much as  $1\frac{1}{2}$  inches the statue would begin to throw its weight upon the marble cornice. As it happens, the statues from the central portions of the pediments are not sufficiently preserved to reveal their adjustment to the cantilevers. Nor are the cantilevers themselves preserved; nothing now remains but the cuttings and the traces of rust. These cantilevers were concealed from view by the fact that they terminated about

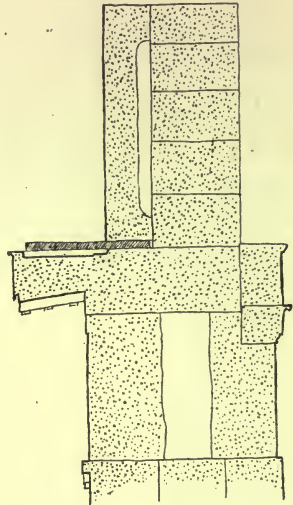


FIGURE 5.—PEDIMENT FLOOR OF THE PARTHENON.

<sup>1</sup> These beam cuttings are discussed by Penrose, *Athenian Architecture*, pp. 46-47, pl. 18; Michaelis, *Parthenon*, pp. 152, 172, 189, pl. 6-7; Sauer, *Antike Denkmäler*, I, pp. 49-51, pl. 58 A-C; Lethaby, *Greek Buildings*, p. 74.

<sup>2</sup> Two additional cuttings in the tympanum blocks of the west pediment, north of the five grooves, were apparently never used, since there are no traces of rust and no corresponding grooves in the pediment floor.

2 ft. 9 inches outside the face of the tympanum, and so about 5 inches behind the face of the cornice. But they were not protected from the elements, if we may judge from the abundant traces of rust; though possibly they were originally coated with molten lead.

Another example of cantilever construction is to be found in a late temple at Acragas, the so-called Temple of Castor and Pollux. Here the sima above the cornice is of remarkably heavy proportions; and since the material

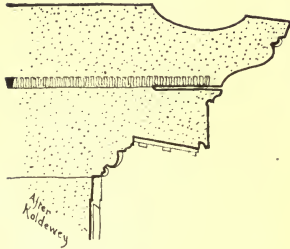


FIGURE 6.—CORNICHE OF THE TEMPLE OF CASTOR AND POLLUX: ACRAGAS.

employed was a coarse limestone, elaborate precautions were taken lest the overhanging portion of the cornice be split off (Fig. 6). In the first place, the entire top of the cornice itself, from the nosing to a line about 16 inches behind it, was cut down to a depth of nearly  $\frac{1}{2}$  inch. Then, to ensure the relief of the cornice, slender iron cantilevers, nearly  $2\frac{1}{2}$  inches high, widening toward the top, were dovetailed at intervals into the bottom of the sima, running from back to front, or, in the case of the angle blocks, diagonally, but always terminating about  $3\frac{1}{2}$  inches from the face of the sima in order that they might remain concealed.<sup>1</sup>

From these isolated instances it is possible to conclude that the Greeks did not hesitate, whenever they were doubtful of the stability of masonry, to employ concealed structural iron very much as we are doing in modern times. That they had any precise knowledge of the properties of wrought iron it is difficult to assume. For in the Propylaea, at least, they strained it beyond a limit which we should regard as justifiable, and this in order to relieve marble which was actually quite capable of supporting the load. It is, to be sure, false construction; it would not be commended by the purist; but the Greeks were, after all, quite human, and from the study of their experiments, their failures and subterfuges, we can learn almost as much as from their successes.

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<sup>1</sup> For this example, see Koldewey and Puchstein, *op. cit.* p. 179.

THE ICONOGRAPHY OF THE SACRIFICE OF ISAAC  
IN EARLY CHRISTIAN ART

A NARRATIVE with such possibilities for instruction as that of the Sacrifice of Isaac was not to be neglected by the Church. Here was an instance of faith rewarded, a proof that souls trusting in divine mercy should have renewed and continued life, and an assurance that the course of safety lay in placing themselves in the hands of God. *Ei enim qui fideliter sacrificat dies lucet, nox nulla est.*<sup>1</sup> The transcendent importance of the story, however, rested in the fact that as set forth in the twenty-second chapter of Genesis it presented, to the early churchman's symbol-seeking mind, an almost exact parallel to the passion of Christ. *Isaac ergo Christi passuri est typus.*<sup>2</sup>

The Church Fathers, Irenaeus,<sup>3</sup> Tertullian,<sup>4</sup> Ephraim,<sup>5</sup> Isidore of Seville,<sup>6</sup> and others too numerous to cite, occupied themselves with studying the parallel and enlarging upon it. Like Christ Isaac was a beloved only son offered as a consummate yet willing sacrifice by his father. The place of sacrifice in both instances was upon a hill. *Signa Isaac sibi vexit, Christus sibi patibulum crucis portavit.*<sup>7</sup> The thorns of the bush in which the ram was caught represented the thorns of Christ. No smallest detail that might contribute to the parallel escaped the eager interpreter. The ram in the bush was Christ on the Cross, Isaac was Christ in the Eucharist.

The most potent acknowledgment of similarity between the sacrifices was the introduction of the Sacrifice of Isaac into the Mass, where there is repeated mention of it. When the priest extends his hands over the host he prays: *Supra quae propitio ac sereno vultu respicere digneris et accepta habere, sicuti accepta*

<sup>1</sup> Ambrose, *De Cain et Abel* I, cap. VIII.

<sup>2</sup> Ambrose, *De Abraham* I, cap. VIII.

<sup>3</sup> *Adversus Haereses* IV, cap. V.

<sup>4</sup> *Liber adv. Judaeos*, Rome, 1737, cap. X.

<sup>5</sup> *In Genes*, Opera I, *Liber adv. Judaeos*, cap. X, p. 77.

<sup>6</sup> *Allegoriae* n. 20.

<sup>7</sup> Ambrose, *De Abraham* I, cap. VIII.

*habere dignatus es munera pueri justi Abel et sacrificium Patriarchae nostri Abrahæ.* In the sequence of Corpus Christi there is reference to the story. On Holy Saturday the third "prophecy" read between the lighting of the Paschal Candle and blessing of the Font is based on the Sacrifice of Isaac.

As is to be expected, a story regarded as of such importance by the Church had frequent representation in Early Christian art. It is depicted on Early Christian monuments of all classes; frescoes, sarcophagi, mosaics, glasses, gems, and lamps.

The purpose of this article is to list the existing representations upon these monuments, to isolate the types or schools indicated



FIGURE 1.—SACRIFICE OF ISAAC: FRESCO IN CATACOMB OF SS. PIETRO E MARCELLINO: ROME.

by the variations of the iconography and incidentally to show the bearing of the data thus gained on the question of the provenance of a little monument of prime importance in the history of Early Christian art, viz. the ivory pyx in Berlin.

The earliest artistic renderings of the scene are found among Roman catacomb frescoes, which may be regarded as reflecting the primitive or Hellenistic base upon which Early Christian representations were constructed.

#### THE CATACOMB FRESCOES

Not including fragments, examples of the scene in the catacomb frescoes fall roughly into three divisions. The first of these contains paintings showing the approach to the Sacrifice in which Abraham leads Isaac, bearing faggots, towards the altar as on a fresco of the Coemeterium Maius (No. 2); or Isaac approaches with the bundle of sticks, Abraham having preceded him to the



place of offering. An example of the latter version is found in Priscilla (No. 6).

The second or orant division of the Sacrifice frescoes includes two paintings. In one of these, in a catacomb under the Vigna Massimo (No. 10) Abraham is upon a pedestal and Isaac stands near at hand, both figures in orant attitude. They are again found as orants in a well-preserved S. Callisto fresco (No. 9); here the ram is shown and also a bundle of faggots to indicate a scene of immolation.

These types, not being illustrative of the sacrifice itself, were not perpetuated though the detail of Isaac carrying the sticks appears later as an adjunct to representations of the scene. The type that survived was a third one exemplified by a third century painting (Fig. 1) in SS. Pietro e Marcellino (No. 14).

The general features of this third division are that Abraham is shown about to sacrifice Isaac while the latter stands or kneels on the ground beside the altar. Sometimes Abraham grasps Isaac by the hair. Occasionally the ram is added to the scene and in the later paintings the Hand of God emerges from above.

This as the earliest and at the same time the commonest form of the scene in Early Christian Art, undoubtedly reflects its original visualization and may be called the Hellenistic type. The strength of tradition which it represents is attested by its occasional emergence in Byzantine iconography, but it is chiefly found, after its first appearance in the catacombs, on sarcophagi of western type of Rome, Gaul, and Spain, persisting also, as the list of monuments shows, on objects of widely diversified material and provenance.

#### THE HELLENISTIC TYPE

An examination of the story as depicted on these sarcophagi and other art objects shows but little variety in form. The Hellenistic tradition of simplicity and lack of realism holds true throughout. On the Roman sarcophagi Abraham wears either



FIGURE 2.—SACRIFICE OF ISAAC: SARCOPHAGUS IN S. AMBROGIO: MILAN.

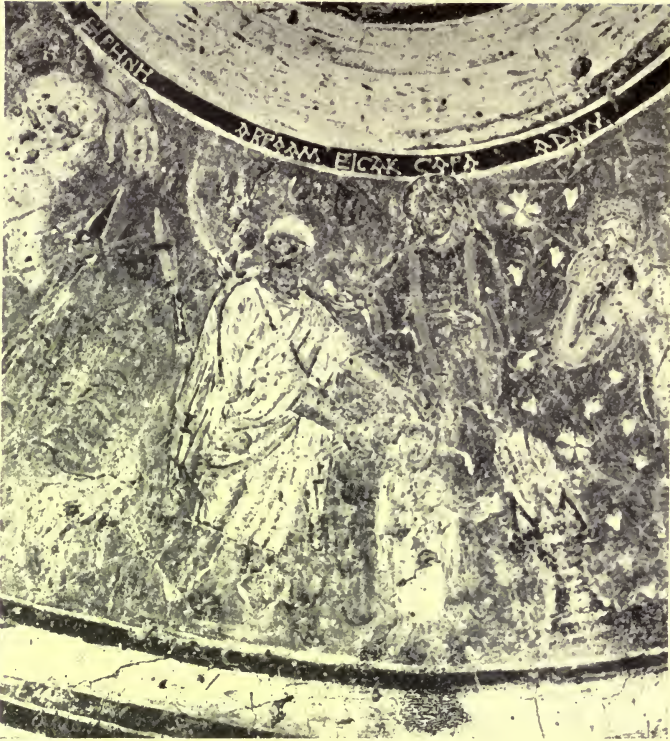


FIGURE 3.—SACRIFICE OF ISAAC: FRESCO AT EL BAGAWAT.

tunic and *pallium* or *exomis*. Usually he is bearded. Holding the knife in his right hand, with his left he often grasps the head of Isaac who kneels on the ground or stands beside the lighted box-shaped altar with hands shackled as Christ's were in the apocryphal version of the Crucifixion.<sup>1</sup> Frequently the Hand of God is introduced, in which case Abraham turns his head towards it as on a Lateran sarcophagus from the Cemetery of Lucina (No. 59) and the ram is almost invariably present.

For the most part the Gallic sarcophagi render the scene as it appears on the Roman monuments but with a more unvarying completeness of detail. Certain differences in form of the scene, however, are apparent. On the Gallic sarcophagi, more often than on the Roman, Abraham is beardless. On the former he always wears short draperies, usually the *exomis*, except on a

<sup>1</sup> *Evang. Nicodemi*, ed. Tischendorf, p. 282.

curious sarcophagus at Mas-d'Aire (No. 45) where he and Isaac are dressed in short, belted tunics, and in the scene upon two other examples at St. Maximin (Nos. 81 and 82) where he is clad in long draperies and the general execution suggests the handiwork of some Eastern workman employed in a local atelier.

The monuments showing this type of the Sacrifice of Isaac, are of western origin with very few exceptions, and the type itself appears first in the catacombs of Rome. It may be regarded then as the western version of the Hellenistic type and as such to be distinguished from another, evidently derived from the same prototype, but differing persistently in one detail. This variant of the Hellenistic type appears, with but two exceptions (Nos. 101 and 111) solely upon sarcophagi which show strong Eastern influence in style and iconography and particularly in their preservation of the old Asiatic architectural decoration of the front (arcades, divided by columns or trees; alternating gables and arches; horizontal entablatures; mixtures of all three). These have been regarded by Wulff as exported *en bloc* from some centre of southeastern Asia Minor.<sup>1</sup> In any case they are clearly distinguished by style and their peculiar iconography from the Western type of sarcophagus with uninterrupted frieze, and are in some way connected by the same characteristics with Asia Minor.<sup>2</sup>



FIGURE 4.—ALTAR FROM ALEXANDRIA.

#### THE ASIATICHELLENISTIC TYPE

The Abraham of this type always wears long draperies. He grasps the knife with his right hand and turns his face towards the Hand of God emerging from above which is an omnipresent detail

<sup>1</sup> *Altchristliche und Byz. Kunst*, p. 110.

<sup>2</sup> I am confirmed in this by C. R. Morey whose study of the Asiatic sarcophagi of columnar type in the imperial period, to be published shortly, has convinced him that the Christian columnar types are continuations of the various forms of the well-known Sidamara sarcophagi of Asia Minor.

in this form of the scene. Sometimes his left hand rests upon Isaac's head. The presence or absence of ram and tree are insignificant variations as in the Hellenistic type. The detail which differentiates the Asiatic-Hellenistic from the western Hellenistic representations is that Isaac is always on the altar instead of

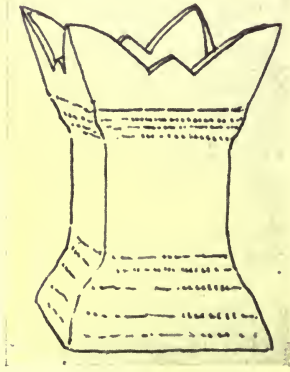


FIGURE 5.—TERRA-COTTA  
ALTAR OF IMPERIAL  
PERIOD: ALEXANDRIA.

standing or kneeling on the ground; the representation thus follows, with that preference for literal rendering usually found in Eastern iconography, the *posuit eum* (Isaac) *in altare* of Gen. XXII. In the scene of sacrifice on a sarcophagus of the "city gate" variety (Fig. 2) in S. Ambrogio at Milan (No. 105) and upon two others in Paris (No. 106) and the Grotte Vaticane (No. 108) closely resembling it, Isaac kneels upon an altar of pagan form decorated with vase and patera. Other renderings of the scene as upon a gable-and-arch sarcophagus in the Lateran (No. 109) and a seven niche example at Madrid (No. 103), show

him sitting upon the altar.<sup>1</sup>

Another transformation of the original Hellenistic type was effected in Egypt. Following the nomenclature established by E. B. Smith in his *Early Christian Iconography* I have called this the Alexandrian-Coptic type, since its examples are partly from Alexandria and belong in part to the Coptic art of Upper Egypt.

#### THE ALEXANDRIAN-COPTIC TYPE

Of Coptic frescoes at El Bagawat illustrating the story of the sacrifice only one (Fig. 3), in the Chapel decorated with Biblical Scenes (No. 112) remains complete. In it Abraham, bearded and frontal, wears flowing white draperies. He grasps the knife with his right hand and rests his left upon the head of Isaac who is clad in a white tunic and stands holding a small box. In the background is Sara with a similar box and behind Abraham ap-

<sup>1</sup> In the Sacrifice of Isaac upon an Eastern carved gem in the Bibliothèque Nationale described as of the Early Christian period by Chabouillet in his *Cat. gén. et raisonnée des Camées*, p. 191. Isaac is lying upon the altar.

pears the Hand of God. On the ground stands the altar, the form of which is important as found only in the Alexandrian-Coptic type and its derivatives. The altar is cup-shaped and denticulated on its upper edge, corresponding in form to an actual grave-altar found in Alexandria itself (Fig. 4), and almost identical with a terra-cotta altar found in a tomb of the imperial period, also at Alexandria, which is described by Thiersch ('Zwei Gräber der röm. Kaiserzeit in Gabbari Alexandria' in *Bull. Soc. Arch. d'Alexandrie* 1900, 3, p. 21), as "ein Altärchen . . . mit dem für den Isiskult bezeugten Zackenrand" (Fig. 5).<sup>1</sup> The remains of a similar altar, this time placed upon a platform approached by steps, are found in the scene of sacrifice as shown on an ivory pyx of the fifth century in the Bologna Museum (No. 116), which, in its figures suggests the fresco (Fig. 6). Abraham, bearded, faces the left. He holds the knife in his right hand and rests his left on the head of Isaac, undraped here. At Abraham's right are the



FIGURE 6.—SACRIFICE OF ISAAC: PYX IN MUSEO CIVICO: BOLOGNA.

ram and an acacia (?) tree. Very like the scene on this ivory is that upon another pyx of later date in the Museo delle Terme (No. 117) though in it Isaac wears a short tunic and the altar, intended to imitate the Bologna form, takes the shape of a pillar upon stepped base and terminates in a denticulated capital. The ram which is below a tree at Abraham's right appears again, with an angel added to the scene; all these details are curiously detached like words awaiting combination into a sentence. This pyx is of rougher workmanship than the Bologna ivory and of even cruder execution is a bone fragment, from Alexandria, in the Kaiser Friedrich Museum at Berlin (No. 115) which shows only the figures of Abraham and Isaac. It is, however, so palpably a replica of the examples mentioned that despite incompleteness it must be admitted to this group, adding thus another indication as to the provenance of the type.

<sup>1</sup> This form of altar is also identified as Alexandrian by Rostowzew (*Röm. Mitt.* 1911, p. 66), who cites further examples (figs. 33, 37, 38).

Although these three monuments have a distinct connection with the El Bagawat fresco the discrepancies suggest that a link is missing. The link is supplied by another ivory of finer craftsmanship than those cited, viz. the Berlin pyx (No. 114) which gives the prototype from which the others were derived (Fig. 7). In the rendering of the scene of sacrifice on this pyx Abraham, bearded and in flowing draperies holds the knife in his right



FIGURE 7.—SACRIFICE OF ISAAC: PYX IN BERLIN.

hand while with his left he grasps the head of Isaac, undraped, who with hands shackled behind his back and with legs crossed, stands in frontal posture upon the steps leading up to the cup-shaped, and denticulated altar. At Abraham's right are the ram and an angel while the Hand of God emerges from above.

Thus we arrive at a sequence,—the El Bagawat fresco, the Berlin pyx, the Alexandrian fragment, the Bologna ivory, and the Terme pyx,—completely illustrating the evolution of the Alexandrian-Coptic type. In this series of monuments the iconography of the scene maintains consistently the characteristic features of the type: the bearded Abraham in flowing draperies, the frontal Isaac, and the cup-shaped and denticulated altar. Their similarity to the Coptic El Bagawat fresco shows the other four monuments to be of Egyptian origin, as, indeed, is already indicated by the Alexandrian provenance of the Berlin fragments. The type of altar used in the scene of sacrifice upon them confirms the connection with Alexandria and thereby is furnished the first evidence of definite character on which the Berlin pyx can be assigned to that city.

## THE PALESTINIAN-COPTIC TYPE

A sixth century miniature of the Etschmiadzin Evangeliary (No. 118), imitating some model like the scene on the Berlin pyx, shows a Sacrifice of Isaac of the Alexandrian Coptic type and is very Coptic in style, but certain added details stamp it as the work of an Eastern artist of another centre who may have been imitating an Egyptian model.

Isaac wears a long tunic, which is a new feature in the scene, and stands on the steps leading up to the denticulated and cup-shaped altar. Abraham is of the Eastern Hellenistic type, in long draperies, but wears the nimbus which is a common characteristic of figures in other scenes of Palestinian-Coptic iconography (Fig. 8).<sup>1</sup> The ram, at Abraham's right, is rendered as usual except that it wears a collar.



FIGURE 8.—SACRIFICE OF ISAAC: MINIATURE OF THE ETSCHMIADZIN EVANGELIARY.

Thus far the differences between this representation and those of the Alexandrian-Coptic type are minor variations. The Etschmiadzin scene of sacrifice possesses, however, one added iconographic feature which never appears in the pure Alexandrian-Coptic type. This detail, a cypress tree, seems to be of Syro-Palestinian origin, as it appears again in the Sacrifice of Isaac upon a lamp from Jerusalem (No. 119) where the scene is otherwise similar to Alexandrian-Coptic representations. Abraham, bearded and in long draperies, with head turned toward the Hand of God emerging

<sup>1</sup> E. Baldwin Smith: *Early Christian Iconography*, Tables IV and V.

from the sky, stands ready to sacrifice Isaac. Isaac is undraped and, owing probably to the shape of the lamp, kneels upon the ground. At Abraham's right is the cypress tree and balancing it on the other side of the scene is an apparent imitation of the Alexandrian altar standing on the ground, behind which is a pillar, possessing possibly some local significance.



FIGURE 9.—SACRIFICE OF ISAAC: MOSAIC IN S. VITALE: RAVENNA.

#### THE BYZANTINE TYPE

Representations of the Sacrifice of Isaac reached their greatest elaboration of detail in Byzantine art, but they are rather combinations of details gathered from the Early Christian types which had preceded them than new forms. This is, perhaps, due to the infrequency of the scene in the early Byzantine period because the Crucifixion, which it had symbolized, began to appear upon monuments at this time.

In a sixth century mosaic, in S. Vitale at Ravenna (No. 121), the scene is rendered in the Asiatic-Hellenistic manner with Isaac on the altar (Fig. 9). The Hand of God appears from above.



Abraham, bearded and in flowing draperies, is about to sacrifice Isaac and grasps him by the hair. The ram stands at Abraham's right. In a seventh century miniature of the Vatican Codex of Cosmas Indicopleustes (No. 123) a nimbed and heavily draped Abraham grasps Isaac by the hair, as he kneels on the ground, but the scene here is more detailed than in S. Vitale. Above and at Abraham's right are the Hand of God and a ray of light. At his left is the ram tethered to a bush. Adjoining the scene is Isaac approaching with the faggots, and two servants with a mule, showing the customary Byzantine attempt to follow closely, in art, the written description of scenes. On an amulet in Paris (No. 120) and again in a miniature of the twelfth century Vatican Octateuch (No. 122) Abraham grasps Isaac by the hair and the ram is tethered to a bush. These features though they may be found in other types of the scene are particularly characteristic of the Byzantine iconography of the sacrifice.

Further discussion of the sacrifice as rendered in later periods does not lie within the province of this study but it is interesting to observe that a cursory examination of western monuments down to the fifteenth century seems to show an almost universal adoption of the Asiatic-Hellenistic Isaac on the altar in representations of the scene. From the sixth to the eleventh century the sacrifice was seldom reproduced in art, but during the four centuries following that period it had renewed and widespread popularity in representation, owing no doubt to a revival of interest in its symbolic connotations.

LIST OF MONUMENTS<sup>1</sup>

## Catacomb Frescoes

## Type I

- (1) Rome, Cat. "dei Giordani," IV Century, Wilpert: Pitt. 327-22.
- (2) Rome, Coemeterium Maius, IV Century, Wilpert: Pitt. 326-17, Tav. 222-1.
- (3) Rome, S. Ermete, III Century, Wilpert: Pitt. Tav. 114.
- (4) Rome, SS. Marco e Marcelliano, IV Century, Wilpert: Pitt. 326-16, Tav. 216-2.
- (5) Rome, SS. Pietro e Marcellino, III-IV Century, Wilpert: Pitt. 323-3, Tav. 73.
- (6) Rome, Priscilla, III Century, Wilpert: Pitt. 323-4, Tav. 78-2.
- (7) Rome, S. Tecla, IV Century, Wilpert: Pitt. 327-19, Tav. 235.
- (8) Rome, Trasono, IV Century, Wilpert: Pitt. 325-11, Tav. 164-2.

## Type II

- (9) Rome, S. Callisto, Cappella dei Sacramenti, II Century, Wilpert: Pitt. 323-2, Tav. 41-2.
- (10) Rome, Vigna Massimo, IV Century, G. II, pl. 69-3.

## Type III

- (11) Rome, Domitilla, IV Century, Wilpert: Pitt. 326, Tav. 201.
- (12) Rome, Domitilla, IV Century, Wilpert: Pitt. 325-13, Tav. 196.
- (13) Rome, Coemeterium Maius, IV Century, Wilpert: Pitt. 327-18, Tav. 220.
- (14) Rome, SS. Pietro e Marcellino, III Century, G. II, pl. 48-1 (Fig. 1).
- (15) Rome, SS. Pietro e Marcellino, IV Century, Wilpert: Pitt. 324-8, Tav. 129.
- (16) Rome, SS. Pietro e Marcellino, IV Century, Wilpert: Pitt. Tav. 188-1.
- (17) Rome, Priscilla, Cappella Greca, II Century, Wilpert: F., pl. 10.

## Fragments

- (18) Rome, S. Callisto, IV Century, De Rossi, III, pl. VIII, 1.
- (19) Rome, Domitilla, IV Century, Wilpert: Pitt. 326-15, Tav. 201-3.

<sup>1</sup>ABBREVIATIONS USED IN LIST OF MONUMENTS

BOCK = Bock: *Matériaux pour servir à l'archéologie de l'Égypte chrétienne*; CABROL = Cabrol: *Dictionnaire de l'archéologie chrétienne et de liturgie*; DE ROSSI = De Rossi: *Roma Sotteranea cristiana*; FURTWÄNGLER = Furtwängler: *Antike Gemmen*; G. = Garrucci: *Storia dell'arte cristiana*; GR. = Grousset: *Catalogue des sarcophages chrétiens de Rome*; KISA = Kisa: *Das Glas im Altertum*; KRAUS = Kraus: *Geschichte der christlichen Kunst*; LE BLANT: A. = Le Blant: *Les sarcophages chrétiens antiques de la ville d'Arles*; LE BLANT: G. = Le Blant: *Les sarcophages chrétiens de la Gaule*; M. = Marucchi: *I monumenti del Museo cristiano Pio-Lateranense*; SCAVI = Scavi di *Antichità dei Lincei*; STRZYGOWSKI: B. = Strzygowski: *Byzantinische Denkmäler*; STRZYGOWSKI: H. = Strzygowski: *Hellenistische und Koptische Kunst*; STUHLFAUTH = Stuhlfauth: *Die Altchristliche Elfenbeinplastik*; VENTURI = Venturi: *Storia dell'arte Italiana*; VÖGE = Vöge: *Kgl. Museen zu Berlin, Zweite Auflage, Die Elfenbeinbildwerke*; WILPERT: Pitt. = Wilpert: *Pitture delle Catacombe Romane*; WILPERT: F. = Wilpert: *Fractio Panis*; WULFF = Wulff: *Kgl. Museen zu Berlin, Beschreibung III*.

- (20) Rome, Domitilla, IV Century, Wilpert: Pitt. 324-9, Tav. 139-1.  
 (21) Rome, Generosa, V Century, Wilpert: Pitt. 327-21.  
 (22) Rome, SS. Pietro e Marcellino, III Century, Wilpert: Pitt. 324-6, Tav. 105-2.

## The Hellenistic Type

- (23) Arles, Mus., Sarcophagus, IV-V Century, G. V, pl. 310-4.  
 (24) Arles, Mus., Sarcophagus, IV-V Century, G. V, pl. 366-3.  
 (25) Arles, Mus., Sarcophagus, IV-V Century, G. V, pl. 378-3.  
 (26) Arles, Mus., Sarcophagus (frag.), IV-V Century, Le Blant: A., p. 54.  
 (27) Astorga, Cath., Sarcophagus, IV-V Century, G. V, pl. 314-6.  
 (28) Athens, Lamp, IV-V Century, Max Bauer: *Tonlampen*, p. 35.  
 (29) Bagnols, Astier Coll., Sarcophagus, IV-V Century, G. V, pl. 378-4.  
 (30) Cairo, Mus., Relief (frag.), IV-V Century, Strzygowski: H., No. 8759, pl. 163.  
 (31) Carthage, Lamp, IV Century, *Röm. Mitt.*, 1898, pl. X, 10.  
 (32) Carthage, Mus. Lavigerie, from Kasrin, Terra-cotta Slab, IV-V Century, *Mus. de l'Algérie*, III, p. 9, pl. II-4.  
 (33) Catania, Mus. Recupero, Glass, IV-V Century, G. III, pl. 171-2.  
 (34) Cività Castellana, Sarcophagus, IV Century, G. V, pl. 319-3.  
 (35) Clermont, Sarcophagus (frag.), IV-V Century, Le Blant: G., pl. XVII-3.  
 (36) Florence, Gherardesca Coll., Glass, IV-V Century, G. III, pl. 169-4.  
 (37) Fordongianus (Sardinia), from, Lamp, IV Century, *Scavi*, 1903, p. 487, fig. 13.  
 (38) Girona, Cath., Sarcophagus, IV-V Century, G. V, pl. 374-3.  
 (39) Gotha, Mus., Gem, "Early Christian," Furtwängler, II, p. 246, 55.  
 (40) Grosseto, Mus., Glass (frag.), IV Century, *B. Arch. Crist.*, 1882, pl.

## VIII.

- (41) Lausanne, Mus., Lamp, V Century, *R. Arch.*, 1875, p. 3.  
 (42) London, British Mus., from Cologne, Glass Dish, III-V Century, Kisa, III, p. 893.  
 (43) Lucq-de-Béarn, Sarcophagus, IV-V Century, Le Blant: G., pl. XXVII, 1.  
 (44) Madrid, Ayuntamiento, Sarcophagus, IV-V Century, G. V, pl. 376-3.  
 (45) Mas-d'Aire (Landes), Sarcophagus, IV-V Century, G. V, pl. 301-3.  
 (46) Mende, Sarcophagus, IV-V Century, Le Blant: G., p. 76, No. 93.  
 (47) Narbonne, Mus., Sarcophagus (frag.), V Century, G. V, pl. 396-7.  
 (48) Narbonne, Mus., Sarcophagus (frag.), V Century, G. V, Appendix, No. 19.  
 (49) Paris, Basilewsky Coll. from Podgoritsa, Albania, Glass, IV Century, *B. Arch. Crist.*, 1877, pl. V-VI.  
 (50) Paris, Bibl. Nat. Ms. Peirese, Sarcophagus, V Century, G. V, Appendix, No. 2.  
 (51) Pisa, Camposanto, Sarcophagus, IV-V Century, G. V, pl. 364-3.  
 (52) Rome, from Esquiline, Glass (frag.), V Century, *B. Arch. Crist.*, 1884-85, p. 92.  
 (53) Rome, from Catacombs, Carved Nut, IV? Century, Cabrol, *s.v.* Abraham, col. 116.  
 (54) Rome, Lead Cup Base, III? Century, *B. Arch. Crist.*, 1879, p. 133 and pl. XI, 4.  
 (55) Rome, from, Bronze Ring, IV? Century, G. VI, pl. 478-23.

- (56) Rome, Grotte Vaticane, Sarcophagus of Junius Bassus, IV Century, G. V, pl. 322-2.
- (57) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 312-1.
- (58) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 318-1.
- (59) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 358-1.
- (60) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 358-3.
- (61) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 359-1.
- (62) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 364-2.
- (63) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 367-1.
- (64) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 367-2.
- (65) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 367-3.
- (66) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 376-4.
- (67) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 384-3.
- (68) Rome, Lateran, Sarcophagus, IV Century, G. V, pl. 402-5.
- (69) Rome, from S. Lorenzo, Sarcophagus, IV Century, G. V, pl. 360-1.
- (70) Rome, Sarcophagus, IV-V Century, *B. Arch. Crist.*, 1883, p. 87.
- (71) Rome, S. Sotere, Stamp, IV Century, De Rossi: III, p. 346.
- (72) Rome, Vatican Mus., Lamp, IV? Century, G. VI, pl. 475-2.
- (73) Rome, ?, Bronze Medal, IV-V Century, G. VI, pl. 480-12.
- (74) Rome, Bibl. Vat., Glass, IV Century, G. III, pl. 172-8.
- (75) Rome, from Vatican, Sarcophagus, IV Century, G. V, pl. 377-1.
- (76) Rome, Via Salaria, Mural Drawings, IV? Century, *B. Arch. Crist.*, 1865, p. 3.
- (77) Rome, Vigna Baseggio, Sarcophagus, IV Century, G. V, pl. 310-1.
- (78) Rome, Villa Borghese, Sarcophagus, IV Century, Gr., p. 75, No. 82.
- (79) S. Canziano, Silver Spoon, IV Century, G. VI, pl. 462-6.
- (80) St. Maximin, Church Crypt, Slab, V Century, Le Blant: G., pl. LVIII.
- (81) St. Maximin, Sarcophagus, V Century, G. V, pl. 334-3.
- (82) St. Maximin, Sarcophagus, V Century, G. V, pl. 352-2.
- (83) St. Michel du Touch (formerly at), Sarcophagus, VI Century, Le Blant: G., p. 127, pl. XLII.
- (84) Strassburg, from, Gold Glass, IV? Century, Kraus: p. 482, fig. 359.
- (85) Syracuse, from Catacombs, Sarcophagus, IV-V Century, G. V, pl. 365-1.
- (86) Toledo, S. Domingo, Sarcophagus, IV-V Century, G. V, pl. 369-4.
- (87) Toulouse, Mus., Sarcophagus, IV-V Century, G. V, pl. 312-3.
- (88) Trèves, found at, Glass, V Century, *B. Arch. Crist.*, 1873, p. 141.
- (89) ————, Lamp, V Century, Abela, *Malta Illustrata*, X, lib. I, 5.
- (90) ————, Carved Gem, ? Century, G. VI, pl. 492-7.
- (91) Arles, Mus. (Isaac not represented), Sarcophagus, V Century, G. V, pl. 312-2.

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Fragments

- (92) Ravenna, Mus. Naz., Sarcophagus, IV-V Century, Dütschke, *Rav. Studien*, p. 44, fig. 22.
- (93) Rome, Lateran Mus., Sarcophagus, IV Century, G. V, pl. 400-4.
- (94) Rome, Lateran Mus., Sarcophagus, IV Century, M., pl. XX-5.
- (95) Rome, Lateran Mus., Sarcophagus, IV Century, M., pl. VIII, 8.
- (96) Rome, Oratorio di S. Sisto, Sarcophagus, IV Century, Gr., p. 102. No. 176.

(97) Rome, Cim. di S. Lorenzo, Sarcophagus, IV Century, Gr., p. 99, No. 159.

(98) Rome, Cim. di S. Lorenzo, Sarcophagus, IV Century, Gr., p. 99, No. 161.

#### The Asiatic-Hellenistic Type

(99) Aix, Mus., Sarcophagus, IV Century (2 half), G. V, pl. 379-2.

(100) Ancona, Cath., Sarcophagus, IV Century (end), G. V, pl. 326-2.

(101) Arles, Mus., Sarcophagus, IV-V Century, G. V, pl. 366-2.

(102) Arles, formerly at, IV-V Century, Le Blant: A, p. 62, No. LX.

(103) Madrid, Ayuntamiento, Sarcophagus, IV Century (3 quarter), G. V, pl. 341-3.

(104) Marseille, Mus., Sarcophagus, V Century, Le Blant: G. p. 49, No. 64.

(105) Milan, S. Ambrogio, Sarcophagus, IV Century (Fig. 2), G. V, pl. 328-3.

(106) Paris, Louvre, Sarcophagus, IV-V Century, G. V, pl. 324-3.

(107) Rome, Cim. di Callisto, Sarcophagus (frag.), IV Century, G. V, pl. 396-8.

(108) Rome, Grotte Vaticane, Sarcophagus, IV Century, G. V, pl. 327-4.

(109) Rome, Lateran Mus., Sarcophagus, IV Century (2 half), G. V, pl. 320-1.

(110) Rome, Lateran Mus., Sarcophagus, IV Century (2 quarter), G. V, pl. 323-4.

(111) Rome, Piazza del Paradiso, 68, Sarcophagus, IV Century, Gr., p. 94, No. 146.

#### The Alexandrian-Coptic Type

(112) El Bagawat, Fresco, IV Century (Fig. 3), Bock: p. 27, pl. XIII and XIV.

(113) El Bagawat, Fresco, IV Century, Bock: p. 23.

(114) Berlin, Mus., Ivory Pyx, IV Century (Fig. 7), Vöge: pl. I, 1.

(115) Berlin, Mus., Bone fragment, IV Century, Wulff: I, no. 428.

(116) Bologna, Mus., Ivory Pyx, V Century (Fig. 6), Stuhlfauth: p. 30, fig. 3.

(117) Rome, Terme, Ivory Pyx, V-VI Century, Venturi: I, p. 534, fig. 4.

#### The Palestinian-Coptic Type

(118) Etschmiadzin, Miniature, VI Century (Fig. 8), Strzygowski: B. I., pl. IV.

(119) Rome, Mus. des Deutschen Camposanto, Lamp, V Century, *Röm. Quart.*, 1904, p. 21.

#### The Early Byzantine Type

(120) Paris, Amulet (in dealer's hands), *Byz. Z.* 1893, p. 188.

(121) Ravenna, S. Vitale, Mosaic, VI Century (Fig. 9), G. IV, pl. 261-2.

(122) Rome, Bibl. Vat. (Octateuch), Miniature, XII Century, *Byz. Archiv*, II.

(123) Rome, Bibl. Vat., Miniature of Codex of Cosmas Indicopleustes, VII-VIII Century, G. III, pl. 142-1.

ALISON MOORE SMITH

PRINCETON, N. J.

## HERACLES AND THE OLD MAN OF THE SEA

IN 1918, the University Museum in Philadelphia acquired by purchase a very interesting and important Attic black-figured scyphus, the provenance of which is unknown. Its importance lies in the fact that it is one of only three black-figured vases to portray the scene, usually interpreted as the combat between Heracles and Nereus,—an interpretation which, in my opinion, is open to question, for reasons which I hope to develop, in the course of this paper.

The scene is divided into two parts, each part taking up one side of the vase. One side A. (Fig. 1) Heracles, at the left, ad-



FIGURE 1.—SCYPHUS IN PHILADELPHIA: SIDE A.

vances to right, and seizes his adversary by the neck with his left hand. Behind him, under the handle of the vase, are his club and quiver. In his right hand is an axe. His opponent is represented as an old man, who shrinks and cowers under the hero's grasp, and seeks to escape to the right. He is bearded, and dressed in a chlamys, and has a club in his left hand, which he is

handing to a woman, who is also fleeing to the right. As is usual in the black-figured technique, her flesh is rendered in white overcolor, and she wears a long chiton and himation. To her right, another woman, similarly attired, goes off, looking back, and holding up her hands in protest. Under the handle that comes at this point is a ram. In the field is conventional foliage.

On the other side of the vase (Fig. 2) are the spectators who are watching the struggle. At the right is Athena, looking to the right. In front of her is a tree, from which springs conventional foliage. Behind her is Iolaus, carrying a bow in his left hand, and



FIGURE 2.—SCYPHUS IN PHILADELPHIA: SIDE B.

a club in his right; while at the left is Hermes, walking to the right, but looking back, and identified by his winged hat and shoes. In the field are meaningless inscriptions.

In seeking for an interpretation for this vase, we at once think of the struggle between Heracles and Nereus, which is alleged to have taken place while the hero was seeking the road to the golden apples of the Hesperides. Heracles wrestles with him, and, though the god seeks to elude him by changing his shape frequently, the hero holds on to him, and finally secures the information that he seeks. The two women would then be two of the Nereids.

My purpose in bringing this vase to the attention of scholars is to try to show that the figure is not that of Nereus at all, but is the

same figure that occurs in the majority of the Attic black-figured vases that show Heracles in combat with a marine divinity, namely, the fish-tailed "Triton," and that both are representations of "The Old Man of the Sea" (*ἄλιος γέρον*), who is the original of the myth. His identification with Nereus comes relatively late in Greek literature, and the evidence of the vases and other works of art shows it to be incorrect.

The only other vases of the black-figured technique to show this scene in the same way as the scyphus in Philadelphia, that are known to me, are an amphora in the British Museum,<sup>1</sup> and a hydria in the Bibliothèque Nationale in Paris.<sup>2</sup> Nor is this exploit much more frequent in the red-figured technique. Three examples of the struggle, portrayed in this way, are known to me, as follows:

Hydria, British Museum E162. Unpublished, but gives its name to Mr. J. D. Beazley's "Painter of the Nereus Hydria."<sup>3</sup>

Column-crater, Bologna, *Necr. Fels.* p. 74, No. 196, and fig. 45.

Vase in the form of a double disk; Athens, Collignon-Couve 1202.<sup>4</sup>

Besides these three vases, two others in the Louvre should be included. One, a cylix, No. G155, in fragmentary condition, is usually attributed to Brygos.<sup>5</sup> Heracles, in this picture, has seized the trident of the sea-god, and threatens to destroy everything in sight if he does not reveal his secret. The god, at the right, protests in vain. The second, a "Nolan" amphora, No. G210, represents Heracles, axe in hand, attacking a house, identified by Pottier<sup>6</sup> as that of Nereus, though that of Syleus is also suggested by him.<sup>7</sup>

<sup>1</sup> *Catalogue*, p. 147, No. B225. Unpublished. The following abbreviations will be used, beside the ordinary ones; A. V., Gerhard, *Auserlesene Vasenbilder*; V. A., Beazley, *Attic Red-figured Vases in American Museums*; W. V., *Wiener Vorlegeblätter*; *Necr. Fels.*, *Catalogo dei Vasi . . . delle Necropoli Felsinee*, by Pellegrini, published in 1912.

<sup>2</sup> *Catalogue* (De Ridder) pp. 166-68, No. 255. Published, A. V. 112. Gerhard (A. V., text, vol. II, p. 98, note 27) also speaks of an "archaic" cylix that was in the Canino collection at the time that he wrote, that also seems to show this scene. This may be black-figured, as he does not give its style.

<sup>3</sup> V. A., p. 61. Hoppin, *Handbook of Red-figured Vases*, Vol. II, p. 215.

<sup>4</sup> Published, Benndorf, *Gr. Sicil. Vasenb.* pl. XXXII, 4.

<sup>5</sup> Published by Klügmann, *Ann. dell' Inst.* 1878, pl. E. For a full bibliography, see Hoppin, *op. cit.* Vol. I, p. 137, No. 85.

<sup>6</sup> *Catalogue des Vases Antiques de Terre Cuite*, Vol. III, p. 1025. The vase is unpublished. Pottier sees in this vase a "souvenir de quelque drame satyrique."

<sup>7</sup> Gerhard (A. V., text, Vol. II, p. 98, note 27) speaks of a "Nolan" amphora at that time in the Canino collection, which he claims to be a Heracles and Nereus vase.



On the other hand, the combat between Heracles and the fish-tailed monster, generally called Triton, and sometimes so inscribed on the vases, is very common indeed as a design in the black-figured period. Only one red-figured vase, however, a cylix apparently of an early style, now lost,<sup>1</sup> is known, which shows Heracles and Triton; though reference should here be made to the famous stamnos in the British Museum, No. E437, signed by Pamphaeus as potter, where the combat of Heracles and Achelous is portrayed in a manner distinctly recalling the "Triton" vases.<sup>2</sup>

I had reached this point in studying this subject, in connection with the scyphus in Philadelphia, when duties of a sterner nature



FIGURE 3.—RELIEF FROM ASSOSS IN LOUVRE.

took me away from that city for about a year and a half, and archaeology became temporarily a side-issue, and of secondary importance. During my absence, the scyphus was very ably described and published by Miss Eleanor F. Rambo, who is correct in assigning it to the end of the black-figured period, at a time when the red-figured technique had already set in.<sup>3</sup> Her publication was so thorough and competent that a republication seems almost an impertinence; but nevertheless I am taking this liberty, in order to bring together, coördinate, and unify, as far as it is possible, the representations of Heracles in combat with sea divinities. I also hope to show in a later paper, that the Philadelphia scyphus can be grouped with a large number of examples, all by the same hand.

<sup>1</sup> *Ann. dell' Inst.* 1882, pl. K. Formerly in Ciai and Mazetti collections, Chiusi. The publication is worthless to determine the style of painting.

<sup>2</sup> First published, Gerhard, *A.V.* 115. Full bibliography in Hoppin, *op. cit.* Vol. II, pp. 292-93, No. 10\*. It should be remembered that Pamphaeus also signs black-figured vases, and, therefore, is much influenced by the early technique.

<sup>3</sup> *Mus. J. X*, 1919, pp. 15-19, figs. 6 and 7.

The combats of Heracles with maritime deities are among the most puzzling subjects that appear on vases, because, while there are two sorts of representations, only one myth is known to literature, which is the one in connection with the apples of the Hesperides that I have quoted above.<sup>1</sup> Nowhere is Triton mentioned in connection with Heracles in the Greek literature that has come down to us; and yet, how is it that Heracles and Triton appear in combat so often, not only on the black-figured vases, but also on a relief from Assos (Fig. 3),<sup>2</sup> and, most impor-



FIGURE 4.—HERACLES AND TRITON: OLD TEMPLE OF ATHENA: ATHENS.

tant of all, as one of the pedimental sculptures on the "Old Temple" of Athena on the Acropolis at Athens (Fig. 4)?<sup>3</sup>

At first it would seem logical and sensible to identify "Triton" as one of the forms into which Nereus, according to Apollodorus, changed himself, and to maintain that the Triton vases and sculptures show, in reality, Nereus. This must, however, be ruled out, as in several instances Triton has his name inscribed over his head, while, in two vases, a black-figured amphora in the British Museum,<sup>4</sup> and a black-figured hydria in the Louvre,<sup>5</sup> a subsidiary

<sup>1</sup> See p. 175. Told by Apollodorus, *Bibl.* II, 5, 11, where Nereus is mentioned by name.

<sup>2</sup> In the Louvre; first published in *Mon. dell' Inst.* III, pl. 34. For other publications, see Brunn-Bruckmann, *Denkmäler*, pls. 411 and 412; Reinach, *Répertoire des Reliefs*, I, p. 3; Daremberg-Saglio, *Dict. des Antiq. Gr. et Rom.* fig. 3766; and Bacon, *Investigations at Assos.*, pp. 145, 151, fig. 3, and 165.

<sup>3</sup> Acropolis Museum Sculptures, No. 36. Waldmann, *Gr. Originale*, pl. 3, and elsewhere. The most recent publication is that of Heberdey, *Altattische Porosskulptur* (Vienna, 1919), No. II, p. 13 and pl. III.

<sup>4</sup> *Catalogue*, p. 146, No. B223. Published, *ibid.* p. 21, fig. 29, also *J.H.S.* XXVI, 1906, p. 15, fig. 6, and Gardiner, *Greek Athletic Sports and Festivals* p. 445, fig. 160. P. Gardner, *Principles of Greek Art*, p. 241, fig. 80.

<sup>5</sup> No. F298. Publ., *Album des Vases Antiques du Louvre*, Vol. II, pl. 84.

figure is inscribed with the name Nereus.<sup>1</sup> This makes it possible to identify as "Nereus" subsidiary figures on at least fifteen amphorae, fourteen hydriae, one cylix, two olpae, and two lecythi of the list of "Triton" vases that accompanies this paper.<sup>2</sup> We must, therefore, regretfully conclude that "Triton" and "Nereus" are two separate personalities in the minds of some of the vase-painters of the black-figured style. This is also, as was to be expected, true of the one red-figured "Triton" vase, where "Nereus" occurs on the opposite side from that on which the hero and "Triton" are painted. I reproduce at this point a photograph of a vase in New York, where both "Triton" and "Nereus" are shown (Fig. 5).<sup>3</sup>



FIGURE 5.—HYDRIA: METROPOLITAN MUSEUM:  
NEW YORK.

But still the question remains unsolved, namely, to what myth these vases can refer. Gerhard,<sup>4</sup> with an eagerness for mythological interpretation characteristic of the period of scholarship in which he lived, is at some pains to evolve a solution, quoting a passage from Euripides<sup>5</sup> to prove his point;

<sup>1</sup> Three vases where the name of Triton is inscribed are the British Museum amphora, and hydriae in Berlin (Furtwängler 1906) and the Fitzwilliam Museum, Cambridge (No. 54).

<sup>2</sup> In the list, these vases are indicated by an asterisk placed in front of them.

<sup>3</sup> I am greatly indebted to Miss G. M. A. Richter for her kind permission to republish this vase, which had already been published in *B. Metr. Mus.* XI, 1916, p. 254, fig. 3, and *Handbook of the Classical Collection*, 1917, pp. 78, 79, fig. 47. Its accession number is 16.70.

<sup>4</sup> *A.V.*, text, Vol. II, pp. 96 f.

<sup>5</sup> *Herc. Fur.* 397 f.

but this solution, showing though it does, much scholarly knowledge of the literature, seems, nevertheless, far-fetched, and can apply almost equally well to the "Nereus" legend. Walters<sup>1</sup> recognizes the impasse, and says that the "Triton" myth is unknown to the literature we possess; Millingen<sup>2</sup> writing a hundred years ago, in publishing a small vase with the combat of Heracles and "Triton," speaks of it as the struggle between the hero and Nereus; and his example is followed by Professor Fox,<sup>3</sup> the latest writer on the subject, who republishes a lecythus in Syracuse<sup>4</sup> showing Heracles and "Triton" and speaks of the combat as that between Heracles and Nereus, "the Ancient of the Sea." The writers in Daremberg-Saglio<sup>5</sup> frankly take the bit in their teeth, and, disregarding the evidence offered by the inscriptions on the vases, declare that in the Heracles cycle, Nereus and Triton are one and the same.<sup>6</sup>

It seems to me, however, that the solution lies in ignoring for the moment the names Nereus and Triton, and coming back to the idea of one original sea divinity, ἄλιος γέρων, "the Old Man of the Sea." This is, in some measure, the idea given by the writer in Daremberg-Saglio,<sup>7</sup> who says that "before recognizing Poseidon, the maritime peoples of Greece honored under the name of Halios Geron a marine divinity, of whom Nereus, Proteus, Phorcys, Glaucus, and Triton are only particular and local forms." He shows that in the early literature Nereus, Proteus and Phorcys are referred to by the common term of ἄλιος γέρων.<sup>8</sup> He admits that Triton is never called by this name in literature, but on the other hand in the character of Triton, as finally evolved, most

<sup>1</sup> *History of Ancient Pottery*, Vol. II, p. 101.

<sup>2</sup> *Ancient Unedited Monuments*, I, pl. XI, and text.

<sup>3</sup> *Greek and Roman Mythology*, pp. 87, 88.

<sup>4</sup> Originally published by P. Orsi, in *Mon. Ant.* XVII, p. 406, and pl. XXV. Orsi, it should be noted, calls it the contest between Heracles and ἄλιος γέρων.

<sup>5</sup> *s. vv.* Hercules, Triton.

<sup>6</sup> I regret that in this connection I have been unable to consult the dissertations of Escher, *Triton und seine Bekämpfung durch Herakles*, published in 1890, or of Kourouniotis, *Herakles mit Halios Geron und Triton*, published in 1893. These dissertations have not been in any library to which I have had access. I, therefore, acknowledge at once that much material collected by these two scholars has doubtless escaped my notice, and that I may have repeated independently some of their conclusions.

<sup>7</sup> *s. v.* Triton, p. 483.

<sup>8</sup> Nereus, for example, is called Halios Geron in Homer, *Il.* I, 538, XVIII, 141, XX, 107, XXIV, 562: *Odyssey*, XXIV, 58: Hes. *Theog.* 1003, and as late as Pindar, *Pyth.* IX, 167.

of the characteristics of the original Old Man of the Sea from whom Nereus and Proteus develop are preserved.

We will now discuss two works of art where the formula ἄλιος γέρων is employed. The first, a vase (Fig. 6) will not hold us long. It is an Attic black-figured oenochoe, found at Vulci, and now in Berlin, signed by Cholchos as maker (+ΟΛΧΟΣ ΜΕΓΟΙΕΣΕΝ).<sup>1</sup> The principal scene shows the combat of Heracles and Cycnus. Cycnus (ΚΥΚΤΟΣ) has been overcome, and lies on the ground. Over his body strides Heracles (ΗΕΡΑΚΛΕΣ), about to fight Ares ([Α]ΡΕΣ), who is rushing to avenge his son. Between them is Zeus, with his thunderbolt. This figure has been repainted. Behind Heracles comes Athena (ΑΘΕΝΑΙΑ).

At each end is a chariot, heading away from the combat. That to the right is drawn by Fear (ΦΟ[Β]ΟΣ), that to the left by Iolaus (ΙΟΛ[Ε]ΟΣ). From the right Apollo ([Α]ΠΟΛΛΟΝ) comes running towards the combat,

<sup>1</sup> Furtwängler, No. 1732. Published, *A.V.*, 122, 123, *W.V.* 1889, pl. I, 2. and Buschor, *Gr. Vasenm.* ed. 1913, p. 137, fig. 89.



FIGURE 6.—OENOCHOE SIGNED BY CHOLCHOS: BERLIN.

while behind him stands Dionysus (ΔΙΟΝΥΣΟΣ). To balance Apollo on the left, Poseidon ([ΠΟΣ]ΕΙΔΟΝ), trident in hand, rushes to the support of Heracles. Behind him, corresponding to the figure of Dionysus at the right, stands a figure of a man, bearded, and draped in a himation. This figure is inscribed ΗΛΙΟΣ ΛΕΡΟΝ, ἄλιος γέρον.

It is clear in the case of this vase that the "Old Man of the Sea" is considered to be "Nereus," and can be thought of as none other than the god who is somewhat later known by that name. This is important, in view of the manner in which the vase is painted, which shows it to be relatively early in the Attic black-figured technique. It shows strong Corinthian and Chalcidian influence, particularly the latter. The frieze of animals below the principal design suggests Chalcis, and strongly resembles those found on the François vase. Furthermore, in the signature, the formula ΜΕΓΟΙΕΣΕΝ is also early, rarely appearing as a rule after Execias and Amasis, both of whom employ it, and never, except in one isolated instance, in the red-figured technique.<sup>1</sup> We are, therefore, justified in placing this vase in the middle of the sixth century B.C.

Almost contemporary with this specimen, and, if anything, somewhat antedating it, is our second work of art, a bronze plaque, found at Olympia (Fig. 7).<sup>2</sup> Here we have a representation of Heracles in combat with a fish-tailed monster, corresponding almost exactly to the "Triton" of the somewhat later Attic black-figured vases. Over the head of Heracles runs the retrograde inscription ὐ 7 Λ', which Furtwängler interprets as 'Η]ρακ[λ]ῆς. Around the lower right-hand corner runs the following inscription; ΝΟΡΥΜΟ||Λ'. This inscription, also retrograde, is read by Furtwängler as ἄλιος γέρον, and this reading is usually accepted.

The importance of this plaque is obvious. It shows at once that the original myth, at the time when the pedimental sculpture of the Old Temple of Athena on the Acropolis was set up,

<sup>1</sup> The only instance of this formula that I have been able to find in the red-figured technique is a signature of Pamphaeus (who, it must be remembered, is a "transitional" artist, signing both black-figured and red-figured vases) on a fragment of a stamnos in the British Museum, No. E457, fragment 1 (ΠΑΥΦΑΙΟΣΜΕΓ . . .). See Hoppin, *op. cit.* II, p. 294, No. 11\*.

<sup>2</sup> Curtius and Adler, *Olympia*, Vol. IV, p. 102, No. 699 and pl. XXXIX (Furtwängler). *Ausgrabungen von Olympia*, IV, pl. XXV B, and p. 19.

was of a contest between Heracles and a nameless Old Man of the Sea. Later the fish-tailed monster came to be called Triton, and Heracles is still represented in combat with him. The subsidiary figure of Nereus is introduced, identified by the inscription on the British Museum amphora; and in the later black-figured vases, and the bulk of the red-figured, "Nereus," so called, takes the place of Triton. It is well to recall, in this connection, that on none of the "Heracles and Nereus" vases,



FIGURE 7.—BRONZE PLAQUE FROM OLYMPIA.

is the name of Nereus inscribed; so that he can be thought of, not as Nereus, but as Halios Geron in another form. Indeed, it is not till the late writer Apollodorus<sup>1</sup> that the name of Nereus definitely appears in connection with this myth as the adversary of Heracles. Therefore it seems better to go back to what was undoubtedly the original story, and discard the names Nereus and Triton altogether when referring to Heracles's combat, and call it the struggle between Heracles and *ἄλιος γέρον*.

It will then be asked, "How can you explain away the inscription *Τρίτων*<sup>2</sup> that sometimes appears over the head of the

<sup>1</sup> See p. 178, note 1.

<sup>2</sup> See p. 179, note 1.

figure of the Old Man of the Sea?" This certainly apparently offers an obstacle to the adoption of the theory, but it is not as serious as it would appear. The conception of Triton is very ancient, the name being mentioned very early in Greek literature.<sup>1</sup> This would show that for a time the fish-tailed Triton and the fish-tailed Halios Geron existed side by side, and could be easily confused, as the inscribed vases would suggest, by the Attic vase-painters. Furthermore in each case, the form of the god shows him to be of very early origin, the snaky fish-tail suggesting the snake-gods worshipped in primitive Greek religion.<sup>2</sup> Thus we can either make the statement that there are two of these divinities existing side by side, or that originally Triton and Halios Geron are one and the same, the former developing out of the latter more primitive deity. Later in the evolution of Greek mythology, the honors are divided, and Nereus, Proteus, and Phorcys share with Triton the attributes of Halios Geron. To the vase-painters of the black-figured technique, however, the combat of Heracles with the Old Man of the Sea, came, little by little, to mean Triton, as the inscribed vases show. At the time of Apollodorus it had shifted to mean Nereus, and, perhaps, we can see in the statement of the mythographer that the sea-god changed his form many times, an indirect reference to the various godheads that derive their origin from the same source; that he became first Nereus, then Triton, and so on. Those black-figured vases which, like the scyphus in Philadelphia, are usually thought of as representing the combat of Heracles and Nereus, are merely manifestations of ἄλιος γέρον in another form. When Nereus and Triton appear together on the same vase, it signifies either that Triton has inherited that part of the myth of the Old Man of the Sea which describes him as fighting with Heracles, and is really the Old Man of the Sea, *par excellence*, with whom Heracles wrestles; or else, as I have suggested above, there is a confusion among the vase-painters, between the two deities, owing to their similar form.

It would, therefore, seem probable that Apollodorus has erroneously, in this instance, taken Nereus to be Halios Geron, on the theory that he has inherited so many of the attributes of that primitive god; and has lost sight of the fact that Nereus is not the sole heir to the attributes of his predecessor in marine

<sup>1</sup> First by Hesiod, *Theog.* 930 f.

<sup>2</sup> See Jane Harrison, *Prolegomena to the Study of Greek Religion*, Ch. 1.



demonology, but that they are divided, and that, in this case, Triton, as is proved by the Olympia plaque, if not himself a direct survival of Halios Geron, retains many of his characteristics, and must be regarded as the legatee. However, it is far wiser and more in keeping with the evidence afforded by the works of art, to drop such later names as Nereus or Triton, in connection with Heracles, and retain the title Halios Geron, "The Old Man of the Sea."

A list of vases portraying the combat of Heracles with the fish-tailed Old Man of the Sea is herewith given, which is as complete as I could make it. Vases preceded by an asterisk have the supplementary figure of "Nereus" represented in the picture. Previous publications of the different vases will be given in footnotes, wherever they occur. It will at once appear from this list how popular a subject this was in the Attic black-figured technique.<sup>1</sup>

AMPHORAE. ALL BLACK-FIGURED.

\* before a vase means that "Nereus" appears in the picture with "Triton;"

\*\* before a vase indicates that a figure called "Nereus" appears on Side B.

1. Munich, Jahn 161. B. Bacchic.
2. " " 391. B. Chariot scene.
3. " " 443. B. Horseman with dog, between two warriors.
4. " " 721. B. Woman and two warriors.<sup>2</sup>
5. " " 1261. B. Athena, Hermes, and Dionysus.
- \* 6. " " 1271. B. Bacchic.
- \*\* 7. " " 1292. B. Nereus, seated, with seated woman.
8. Würzburg, Urlichs 90. B. Battle between two warriors.
- \* 9. " " 109. B. Ajax and Teucros (?) between two old men.
10. " " 263. B. Heracles and the Nemean Lion.
- \*11. British Museum, B201. B. Apotheosis of Heracles.
- \*12. " " B223. B. Bacchic. (HEPAKΛEEΣ TPITON  
NEPEE[V]Σ)<sup>3</sup>
- \*13. British Museum, B224. B. Warrior arming.

<sup>1</sup> This list was compiled from references to Heracles vases collected by me in 1913, supplemented by the lists given by Gerhard (*A.V.*, text, Vol. II, pp. 95-96, footnote 12), Petersen (*Ann. dell' Inst.* 1882, pp. 75-77), and Studniczka (*Ath. Mitt.* XI, 1886, pp. 61 f.). The article by Stephani (*C. R. Acad. St. Petersbourg*, 1867, p. 22) was of no great value to me in listing these vases, as Stephani's list is repeated by Petersen.

<sup>2</sup> Published, Millingen, *Peintures Antiques de Vases Grecs*, pl. 32.

<sup>3</sup> Published, *Catalogue*, p. 21, fig. 29. *J.H.S.* XXVI, 1906, p. 15, fig. 6. E. N. Gardiner, *Greek Athletic Sports*, p. 445, fig. 160. P. Gardner, *Principles of Greek Art*, p. 241, fig. 80.

- \*14. Athens, Coll.-Couve, 750. B. Poseidon, Hermes, and draped woman.  
 15. Athens, Graef, *Akropolis-Vasen*, 773. Fragments.<sup>1</sup>  
 16. Naples, Heydemann 3419. B. Apollo, Leto (?), Hermes, and Dionysus.  
 17. Naples SA116. *On both sides of vase*.  
 18. Museum of Palermo. B. Unknown to me.<sup>2</sup>  
 19. " " " " " " " " <sup>2</sup>  
 20. Petrograd, Stephani 77. B. Bacchic.  
 \*\*21. Louvre F234. B. Nereus between two Nereids.  
 \*\*22. Marseilles 1596. B. Nereus and two Nereids.<sup>3</sup>  
 23. Zurich, Blümner 11. B. Youth on horseback.  
 \*24. Vatican. Helbig, *Führer*, 3rd ed., I, p. 299, No. 469 (49). B. *Same subject*.<sup>4</sup>  
 25. Boston, 80. 621 (Robinson 320). B. Bacchic.  
 26. Boulogne 67. B. Athena and Encelados.  
 27. Compiègne 978 (formerly Magnoncour 40). B. Bacchic. <O>TPATOS<  
 KAVO<.  
 28. Museum of Corneto. B. Bacchic.<sup>5</sup>  
 \*29. Conservatori Palace, Rome. B. Unknown to me.<sup>2</sup>  
 \*\*30. Thorwaldsen Museum, Copenhagen. B. Nereus with sceptre, and  
 Hermes.  
 31. Noel des Vergers Sale Cat., 113. B. Three Nereids.  
 32. Forman Sale Cat., 301. B. Combat scene.  
 33. Sarti Sale Cat., 274. B. Bacchic.  
 \*\*34. Seen by Gerhard "in the possession of Miss Gordon in London." B.  
 Nereus between two Nereids. (*A.V.* II, p. 95, No. k.)  
 \*35. Formerly in collection of Lucien Bonaparte. B. Heracles and the  
 Nemean Lion. (*A.V. loc. cit.*, No. o.)  
 \*36. Seen by Gerhard "in the trade in Rome." B. Battle scene. (*A.V.*  
*loc. cit.*, No. p.)  
 37. Formerly in the possession of Basseggio. B. Warriors and women.  
 (*A.V. loc. cit.*, No. r.)  
 38. Formerly in the Durand Collection; *Cabinet Durand*, No. 300. B.  
 Palaestra scenes. (*A.V. loc. cit.*, No. u.)  
 39. Seen by Gerhard "in the trade in Rome." B. Three hoplites. (*A.V.*  
*loc. cit.*, No. v.)  
 40. Castellani, *Bull. dell' Inst.* 1866, p. 181. B. Hermes between two women.  
 41. *Bull. dell' Inst.* 1857, p. 25, No. 22. B. Three nymphs.  
 42. Formerly in Barone Coll., Naples. *Bull. Nap.*, I, 118. B. Not known  
 to me.  
 43. Basseggio, *Bull. dell' Inst.*, 1851, p. 68. B. *Same subject*.<sup>6</sup>

Total of amphorae, 43.

<sup>1</sup> Published, Graef, pl. 52.

<sup>2</sup> These vases are described from notes taken by me in the museums, where I could not see the reverse sides.

<sup>3</sup> Published, Penon, *Catalogue de la coll. Campana*, pl. III, 1.

<sup>4</sup> Published, *Mus. Greg.* ed. 2, II, pl. XLIII.

<sup>5</sup> Published, *Ann. dell' Inst.*, 1882, pl. I.

<sup>6</sup> Since writing the above I have seen another amphora showing this subject,—Toronto, C 316. B. Groom with horse and maidens. This vase is in the style of Execias.

## HYDRIAE. ALL BLACK-FIGURED.

44. Louvre F38. Signed by Timagoras.<sup>1</sup> On shoulder, assembly of gods.  
ΤΙΜΑΛΟΡΑ ΕΡΘΙΕΣΕ . ΑΝΔΟΚΙΔΕΣ ΚΑΛΟΣ ΔΟΚΕΙ  
ΤΙΜΑΛΟΡΑΙ.
45. Louvre F51.<sup>2</sup> On either side, youths. On shoulder, battle scene.
46. " F52.
47. " F286.<sup>3</sup> On shoulder, chariot scene. Meaningless inscription.
- \*48. " F298.<sup>4</sup> ΝΙΚΕΣΙΓΟΣ ΚΑΛΟΣ. ΗΕΡΑΚΛΕΣ, ΝΕΡΕΥΣ,  
ΑΝΦΙΤΡΙΤΕ. On shoulder, chariot scene.
- \*49. New York 06.1021.48.<sup>5</sup> On shoulder, Achilles pursuing Troilos.
- \*50. " " 12.198.3. On shoulder, Theseus and Antiope. ΑΝΤΙΟΓΕΙΑ  
ΘΕΣΕΥΣ ΗΕΡΑΚΛΕΣ.
- \*51. " " 16.70.<sup>6</sup> On shoulder, Bacchic.
- \*52. Petrograd, Stephani 25. On shoulder, Heracles and the Nemean Lion.
- \*53. " " 142. On shoulder, battle scene. ΟΝΕΤΟΡΙΔΕΣ  
ΚΑΛΟΣ (probably by Execias).
- \*54. British Museum B311. On shoulder, animals.
- \*55. " " B312.<sup>7</sup> On shoulder, Judgment of Paris.
- \*56. Munich, Jahn 134. On shoulder, Heracles and the Nemean Lion.
57. Munich, Jahn 432. The exploit is on the shoulder; below, chariot scene.
58. Boston 99.522. Forman Sale Cat., 284, formerly in Campanari and Rogers collections. On shoulder; grooms and horses.
- \*59. Boston 01.8058. On shoulder, battle scene. Four *καλός*-names.  
ΕΥΓΑΡ . . . ΤΟΣ ΚΑΛΟΣ, ΜΝΕΣΙΛΑ ΚΑΛΕ, ΑΜ . . ΘΘΕ  
ΚΑΛΕ + ΟΙΡΟΣ ΚΑΛΟΣ. Forman Sale Cat., 283.
60. Berlin 1906.<sup>8</sup> On shoulder, Bacchic. ΗΕΡΑΚΛΕΕ (Κ modern)  
ΖΟΝΟΤΙΡΤ (Τ modern) ΚΤΕΣΙΛΕΟΣ ΚΑΛΟΣ.
61. Athens, Graef, *Akropolis-Vasen* 738.<sup>9</sup> Fragmentary.
62. Fitzwilliam Museum 54.<sup>10</sup> On shoulder, warrior attacked by chariots.  
Η[Ε]ΡΑΚΛΕΣ, ΛΟΤΙΡΤ, ΟΛΤΙΟ . . (Ποντιθή) ΑΡΟ+ΙΥ . . Χ  
(Καλλιχώρα?)
63. Conservatori Palace, Rome, No. 158.<sup>11</sup> The design is on the shoulder.
64. Art Institute, Chicago. Much restored. Modern inscription ΚΑΛΟΣ  
ΗΑΘΙΣ.

<sup>1</sup> Published, *W.V.*, 1889, pl. V, No. 3.

<sup>2</sup> Published, *Album des Vases Antiques du Louvre*, Vol. II, pl. 67.

<sup>3</sup> Published, *ibid.* pl. 82.

<sup>4</sup> Published, *ibid.* pl. 84.

<sup>5</sup> Published, *Canessa Sale Cat.*, pl. 15, No. 46, and pl. II.

<sup>6</sup> Published, *B. Metr. Mus.* XI, 1916, p. 254, fig. 3; *Handbook Classical Collection*, 1917, pp. 78, 79, and fig. 47; and Fig. 5 of this paper.

<sup>7</sup> Shoulder design published in British Museum, *Catalogue of Black-figured Vases*, p. 26, fig. 34.

<sup>8</sup> Published, Gerhard, *Etr. Camp. Vasenb.* pls. XV-XVI, 5 and 6.

<sup>9</sup> Published, Graef, pl. 47.

<sup>10</sup> Published, *Catalogue*, p. 29, and pl. XVI.

<sup>11</sup> Described from notes taken in the museum. Made no entry of main design.

- \*65. Formerly in Fontana Coll. Trieste, No. 17.<sup>1</sup> Signed by Tychios. The design is on the shoulder; below, Athena in quadriga, with Apollo and Hermes. On lip, ΤΥ+ΙΟΣ ΕΓΟΙΕΣΕ . . . √. On body, ΑΘΕΛΛΙΑ, ΑΓΟΛΟΛΟΣ, ΣΟΜΡΕΗ.
- \*66. Formerly in Durand Coll. Cabinet Durand, 302.<sup>2</sup> On shoulder, Apotheosis of Heracles.
67. Paravey Sale Catalogue 13. On shoulder, battle-scene. (Beugnot Cat., 31.)
- \*68. De Witte, *Cab. Etrusque*, 85. On shoulder, combat. (*A.V.*, *loc. cit.*, p. 95, No. b.)
69. Formerly in the collection of Lucien Bonaparte. On shoulder, Bacchic. (*A.V.*, *loc. cit.*, No. f.)
- \*70. "Campanari'sche Hydria." (*A.V.*, *loc. cit.*, No. h.) The design is on the shoulder; below, quadriga.<sup>3</sup>
71. Hydria formerly in the Pizzuti collection.<sup>4</sup>
- \*72. Canessa Sale Cat., 1903, No. 51.<sup>5</sup>

Total, twenty-nine hydriae.

LECYTHI. ALL BLACK-FIGURED.

73. Athens, Coll.-Couve 726.
74. " " " 888.
75. Museum of Syracuse; found at Gela.<sup>6</sup>
76. " " " " " Megara Hyblaea.
77. Munich, Jahn 1134.
- \*78. Vienna, Sacken und Kenner, p. 196, No. 77.
- \*79. Karlsruhe 184. ΟΓ . . . √ΟΣ (ὁ παῖς καλός;)

Total, seven lecythi.

CYLICES. BLACK-FIGURED.

80. Museum of Corneto, "Kleinmeister" type. Design in interior.<sup>7</sup>  
+ΑΙΡΕ ΚΑΙ ΓΙΕΙ ΕΥ (twice).
- \*81. Museum of Taranto, "Kleinmeister" type. Design on both sides of exterior.
82. Cook Collection, Richmond.<sup>8</sup> Design in interior.
83. Athens, Graef, *Akropolis-Vasen*, 1554.<sup>9</sup>

<sup>1</sup> Published, *W.V.* 1889, pl. VI, 1.

<sup>2</sup> Published, Gerhard, *A.V.* 111.

<sup>3</sup> It is quite likely that this vase is the same one as the vase in the Conservatori Palace. It is not the vase mentioned in *A.Z.* 1856, p. 248, as Petersen thinks. That vase is either the hydria in Cambridge, or the one in Boston, No. 99.522.

<sup>4</sup> Petersen, *Ann. dell' Inst.*, 1882, p. 77, No. N.

<sup>5</sup> Published in Sale Catalogue, pl. II, No. 4.

<sup>6</sup> Published, *Mon. Ant.* XVII, pl. XXV.

<sup>7</sup> Published, *Mon. dell' Inst.*, XI, pl. 41.

<sup>8</sup> Published, Burlington Fine Arts Club *Catalogue*, 1904, No. 14, pls.

<sup>9</sup> Published, Graef, pl. 82.

## RED-FIGURED.

\*84. Cylix, now lost, formerly in Ciai and Mazetti Collections, Chiusi.<sup>1</sup> This is the only known red-figured vase to show the contest in this manner.

Total, four black-figured cylices and one red-figured cylix.

## SCYPHI. ALL BLACK-FIGURED.

85. Athens, Coll.-Couve 816. Design repeated on side B.

86. " , Graef, *Akropolis-Vasen*, 1322.<sup>2</sup> Fragment.

87. Karlsruhe 198.

88. Museum of Taranto. Design repeated on side B.

Total, four scyphi.

## OENOCHOAE. ALL BLACK-FIGURED.

89. British Museum B493.

90. " " B494.

Total, two oenochoae.

## OLPAE. ALL BLACK-FIGURED.

\*91. Petrograd, Stephani 38.

\*92. Conservatori Palace, Rome.

Total, two olpae.

## CELEBE. BLACK-FIGURED.

93. Athens, Graef, *Akropolis-Vasen* 675. Fragmentary.<sup>3</sup>

Total, one celebe.

## LOST VASES OF UNKNOWN SHAPE. ALL BLACK-FIGURED.

94. Small vase, published by Millingen.<sup>4</sup> Shape unknown.

95. Dubois, *Notice d'une Collection*, No. 81. Petersen, *Ann. dell' Inst.*, 1882, No. F.

## DOUBTFUL VASES.

There remain a number of vases which have been assigned to this subject by various hands, and which, for various reasons must, in my opinion, be rejected. Some of these would, if accepted, be very important and helpful in the confirmation of the theory which it has been the object of this paper to prove.

First of these doubtful vases and most important is a fragmentary pinax found in a bee-hive tomb excavated by the British at

<sup>1</sup> Published, *Ann. dell' Inst.*, 1882, pl. K.

<sup>2</sup> Published, Graef, pl. 72.

<sup>3</sup> Published, *ibid.* pl. 45.

<sup>4</sup> Published, Millingen, *Ancient Unedited Monuments*, Vol. I, pl. XI.

Praesos in Crete.<sup>1</sup> Hopkinson, in publishing it, assigns it without any question to this subject, and is right in using the term ἄλιος γέρων, rather than Triton in discussing the myth. Here we have a youth grappling a large fish-tailed creature, of which only the tail and part of the back are preserved. There is nothing to prove that the upper parts of the monster were human. Therefore, I prefer the theory advanced by Professor Elderkin of Princeton University<sup>2</sup> that this vase-painting does not represent the combat of Heracles and ἄλιος γέρων, but rather suggests Theseus borne up to the surface from the depths of the sea by a large fish, representing the continuation of the story told by Bacchylides,<sup>3</sup> and illustrated by the Theseus-Amphitrite cylix by Euphronius in the Louvre.<sup>4</sup> Furthermore, as Professor Elderkin points out, the painting gives no indication of any struggle; the man grasps the back of the monster, not with any attempt to wrestle with him, but simply to hang on to him. Professor Elderkin also declares that enough of the monster is preserved to show that the upper parts could not have been human, which, if true, is sufficient to clinch the matter, without trying to seek any other interpretation. If accepted, this would be the earliest vase-painting to show the subject, as it antedates by at least half a century the black-figured vases of this list. Moreover it probably antedates the plaque from Olympia also.

There are several other works of art which have been assigned to this subject without sufficient grounds, as it seems to me, of which I shall merely mention the vases. This is a class of objects where Triton alone is shown, without Heracles. The first of these is an amphora in the Louvre, No. F397, in describing which, Pottier<sup>5</sup> says, "*L'épisode de Triton, d'où le héros principal, Hercule, a disparu par une singulière omission du peintre, qui a pourtant conservé au vaincu son attitude désespérée.*" This seems to me far-fetched. Triton appears alone on many vase-paintings, and, if we are to attribute this one to the Heracles myth, there is no reason why all of the vases where Triton appears

<sup>1</sup> Published, *B.S.A.* X, 1904-05, pp. 148-53, and pl. III; *Ath. Mitt.* 1906, p. 391, fig. 2, and elsewhere.

<sup>2</sup> In *A.J.A.* XIV, 1910, pp. 190-92.

<sup>3</sup> Bacchylides, XVI, 97f.

<sup>4</sup> Furtwängler-Reichhold, *Gr. Vasenn.* pl. V. For full bibliography, see Hoppin, *op. cit.* I, p. 398-9, No. 11.\*

<sup>5</sup> *Catalogue*, Vol. III, p. 813.

alone should not be so attributed; and therein, as it would seem to me, madness lies. For similar reasons, a fragmentary cylix from the Acropolis at Athens (Graef, *Akropolis-Vasen*, No. 1575)<sup>1</sup> is suggested as a possible Heracles-Halios Geron vase. There is, however, more reason for this, in that the cylix is in fragments, and while Triton appears alone, there is no reason to suppose that Heracles may not have figured on a missing part. Another vase, a red-figured cylix in the British Museum, No. E109<sup>2</sup> is sometimes referred to this subject, and should certainly be rejected, as there is nothing whatever to make us suppose that the vase-painter had Heracles in mind at all.

Finally there remains a class of vases that may possibly represent this subject, but which should probably also be rejected. Two of these are black-figured and one is red-figured. The first is a fragment of a large vase, in the Museum of Fine Arts in Boston, from Naucratis.<sup>3</sup> This is assigned by Mr. Robinson to Heracles and Triton, without, in my opinion, sufficient grounds. The second is a small black-figured lecythus in the Historical Museum in Berne, which I saw and took notes on in the autumn of 1914. On this vase the drawing is so bad that it is hard to know just what the designer intended to portray; but Heracles certainly figures, and it would seem that it must have been intended for the struggle with Halios Geron.

The red-figured specimen is a fragment of a cover for a vase, in the British Museum, No. E812, fragment 4.<sup>4</sup> Heracles is identified by the tail and paws of the lion's skin; his legs are bent, as if struggling or wrestling, and the writer of the catalogue suggests that "Triton" is the adversary. But this seems hardly probable, in view of the fact that no part of the fish-tailed monster appears in the fragment. In the vases that show this subject, Heracles and the Old Man of the Sea are wrestling in such a way that any fragment that showed any part of the hero would necessarily show some part of his adversary. Furthermore, so many of the exploits and labors of Heracles take the form of wrestling and struggling, that this fragment might have portrayed any of a

<sup>1</sup> Published, Graef, pl. 82.

<sup>2</sup> Published, *Él. Cér.*, III, 33. Wrongly grouped by Petersen in his list of vases (*Ann. dell' Inst.* 1882, No. L).

<sup>3</sup> *Catalogue*, Robinson, No. N 175.

<sup>4</sup> *Catalogue of Red-figured Vases*, p. 384.

great many of his deeds, such as the Cretan Bull, the Erymanthian Boar, Achelous, the Hydra, and others.

This paper, then, is the result of my study of the scyphus in Philadelphia. I have sought to show that the vases showing Heracles in combat with "Triton" and the vases with the hero attacking "Nereus" really are portraying the same exploit, the two forms of adversary to Heracles being two distinct manifestations of Halios Geron; "Nereus" being Halios Geron as he appears on the oenochoe of Cholchos, and "Triton" being Halios Geron as he is represented on the Olympia plaque. There is, therefore, no particular difficulty regarding this class of vases, when the true interpretation is reached.

STEPHEN BLEECKER LUCE.

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## ARCHAEOLOGICAL DISCUSSIONS<sup>1</sup>

### SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

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#### GENERAL AND MISCELLANEOUS

**The Geographical Method in Prehistorical Study.**—P. DEFFONTAINES urges the necessity of applying geography to prehistoric study. Differences of place, surroundings, climate, flora and fauna, and the like are quite as important as differences of date, and without careful study of geography the two are likely to be confused. (*R. Arch.*, fifth series, XIV, 1921, pp. 171-175.)

**Phoenicians, Aegeans, and Hellenes.**—The races which shared in the primitive Mediterranean culture are the subject of a recent discussion by RAYMOND WEILL (*Syria*, II, 1921, pp. 120-144). The "Phoenicians" of this period are not the Semitic people of the Syrian coast who bore this name in classical times; they are the Aegeo-Cretan people who dominated the islands and coasts of the Eastern Mediterranean, including that Syrian littoral which afterwards by a gradual limitation of geographical nomenclature, came to be known as Phoenicia.\* In Egypt the name *Kefto* underwent a precisely similar change of meaning. The Aegean civilization established on the Syrian coast was not penetrative; it did not change the originally Semitic racial and linguistic characteristics of the Canaanitish population. But the Poulousati mentioned in Egyptian documents, the Philistines of the Bible, were an Aegean people. An examination of the names of the "People of the Sea" mentioned in inscriptions of Rameses II and his successors shows that most of the nations mentioned belong to Asia Minor. The Akaiouasha seem also to have been an Asiatic people, probably Carians. It was these people whose occupation of Greece is reflected in such myths of Oriental immigration as those associated with Inachus, Danaus, and Pelops. These Asiatic Achaeans were supplanted by Hellenic invaders who took over the civilization and traditions, and even the name, it would seem, of the primitive Carian Achaeans.

**Landscape in Ancient Painting.**—R. PAGENSTECHER (*Jb. Kl. Alt.* XLVII-XLVIII, 1921, pp. 271-288) outlines the history of landscape painting in Greece and Rome. In view of the considerable appreciation of nature found

<sup>1</sup>The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor DEANE, Editor-in-charge, assisted by Professor SAMUEL E. BASSETT, Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Dr. T. A. BUENGER, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor JOHN C. ROLFE, Dr. JOHN SHAPLEY, Professor A. L. WHEELER and the Editors, especially Professor BATES.

No attempt is made to include in this number of the JOURNAL material published after December 31, 1921.

For an explanation of the abbreviations, see pp. 129-130.

in the Greek poets, even in the tragic drama, the neglect of man's natural environment in Greek painting is noteworthy. Due in part to the recognized humanistic tendency of the Greek mind, and to the anthropomorphic reaction of the Greek imagination to the forces of nature, this limitation is also inherent in the function of the monumental arts as practised in the classical period. The subjects of decoration normally chosen for pediment groups and for great mural paintings require almost exclusively the portrayal of human figures. Pre-Hellenic art is contrasted with Greek in the extent to which interest in human subjects is subordinated to that of the world in which they live: its animal, floral, and marine life. In the Geometric period the characteristic restriction of early Greek painting to human subjects is already manifest; and even the landscape elements which, under the influence of oriental models, appear so often in Ionian art, are usually rejected by Attic painters, whose concentrated humanism is in its severest form coincident with the period of the Persian wars. The invention of the red-figure technique in vase painting favored the development of this strictly monumental style, excluding landscape accessories. A similar tendency is reflected in the mural painting of Polygnotus. His adoption of the representation of irregularities of ground at different levels is not due to interest in landscape: it is the solution of a problem of composition, the covering of wide and high wall spaces with human figures. More progress in the direction of landscape painting was made in theatre backgrounds, but Polygnotus did not avail himself of this. With the Peloponnesian War the dominance of Athens in the arts passed, and in Sicily and Southern Italy there are evidences of a development of painting which gave more attention to landscape. The scene on the Ficoroni cista is a copy from some painting of this style, made perhaps at Tarentum. The extension of Greek acquaintance with the world through the conquests of Alexander, and the sight of oriental parks and villas planned for the enjoyment of natural surroundings turned the attention of the Hellenistic Greeks to landscape as a motive in art. The growth of great cities also had its reaction in a sentimental enthusiasm for nature which found its literary expression in the idyls of Theocritus. Monumental painting was in a stage of decline; the small panel pictures demanded for the decoration of private houses lent themselves to the expression of the new interest in landscape. In the development of this motive Alexandria played a leading part. This accounts for the Egyptian subjects so often found in Pompeian wall painting. The later styles of Pompeian decoration aim at an architectural breaking-up of the wall-space, allowing glimpses of landscape. The panels which originated in the oriental Greek world are enlarged in the Roman period to pictures in which the human figures are distinctly subordinate. "Contours and drawing dissolve in colors and light; the purely corporeal, plastic view is overcome; painting has entered on its own province." The Roman painter Ludius seems to have been an important figure in this development of landscape painting. According to Petronius Alexandrian art is to be credited with the invention of compendiaris, illusionistic or impressionistic devices which are exemplified in Pompeian work. Byzantine painting is marked by a complete reaction from this free, impressionistic style in favor of stiff and severe drawing and contour. Landscape vanishes, and art returns to a geometric type in harmony with its religious purpose and its architectural function.

**The Signum Salamonis.**—J. L. DE VASCONCELOS has published a detailed study of the *signum Salamonis*, the five-pointed or six-pointed star, in the superstition, folk-lore and art of Eastern and European peoples, ancient and modern. (*O Archeologo Português*, XXIII, 1918, pp. 203–316; 240 figs.)

**Tattooing in Morocco.**—J. HERBER discusses the persistence of tattooing among the Arabo-Berbers of Morocco, perpetuated by local tradition in opposition to the law of Islam. (*R. Hist. Rel.* LXXXIII, 1921, pp. 69–83.)

**The Symbolism of Lizards and Frogs.**—W. DEONNA maintains that certain Italian plastic vases showing a saurian devouring a boy are not of genre motive, but have a mystic significance. The lizard typifies the death which devours the body. Other animals have a similar rôle in various works of classical and mediæval art. Legend also associates the toad or frog with the lizard in this symbolism of death. On the other hand both lizard and frog have a celestial as well as an infernal meaning, derived from ancient Egyptian religion. The frog is a symbol of immortality; the lizard of the sun. That the two sometimes appeared together in ancient art is indirectly attested by Pliny's story of the architects Sauros and Batrachos. Probably the relief which Pliny describes as a punning signature of two artists was really of symbolic meaning. The existence of the artists was an invention parallel to the story that Phidias portrayed himself on the shield of the Athena Parthenos. (*R. Ét. Gr.* XXXII, 1919, pp. 132–148; 2 figs.)

**Sostratus of Cnidus and the Virtue of Invisible Formulae.**—W. DEONNA (*R. Arch.*, fifth series, XIV, 1921, pp. 175–178) recalls the story (Lucian, *πῶς δὲ ἱστορίαν συγγράφειν*, 62) that Sostratus, the architect of the Pharos at Alexandria, inscribed his dedication on the stone of the building, then covered it with a coating in which the king's name was inscribed. Such action may, it is here suggested, have been inspired by the belief in the magic virtue of hidden writings, etc. Such a belief has existed through the ages. It may explain the fact that prehistoric paintings in caves are in their darkest recesses. Many examples of hidden writings, etc., are given.

**The Musée Guimet.**—The first number of a new archaeological publication, the *Bulletin Archéologique du Musée Guimet*, Fasc. I (pp. 1–72; 4 pls.; Paris and Brussels, 1921, Van Oest) is devoted to the Salle Edouard Chavannes of the Musée Guimet. P. PELLIOU contributes a biographical sketch of Chavannes, S. LEVI an estimate of his contribution to Indian studies. H. D'ARDENNE characterizes and compares three leaders of archaeological research in China: Chavannes, Petrucci, and Segalen, and PAUL VITRY has a separate essay on Segalen. The results of the expedition conducted by Chavannes in North China in 1907, of Segalen's expedition in Western China in 1914, and of the expedition conducted by Segalen and others in the region of Nankin in 1917 are described by J. LARTIGUE. A list of photographic negatives made by the last two expeditions is appended. *Ibid.* Fasc. II, 1921, pp. 1–38 (4 pls.) an account by P. PELLIOU of his expedition in 1908 to Chinese Turkestan is followed by a list of the Buddhist sculptures and paintings obtained by this expedition for the Musée Guimet, written by J. HACKIN. J. HACKIN also describes the pottery fragments from Yotkan now in the Musée Guimet. These were obtained by the Mission Scientifique de Haute-Asie (1890–1895) conducted by J. L. Dutreuil de Rhins. A note by J. BACOT, explaining the lack of archaeological material in Tibet, where he travelled in 1907 and 1909, is followed by a detailed description,

written by J. HACKIN, of five Tibetan Buddhist paintings acquired by M. Bacot in his travels, and now in the Musée Guimet.

**Borneo Shields.**—NENOZO UTSURIKAWA suggests that the demon design common on shields of Borneo tribes, although it, perhaps, has historical connection with Hindu-Javanese ornament, has been modified by native imitation of simian forms. (*Am. Anthr.* XXIII, 1921, pp. 138-148; 3 figs.)

## EGYPT

**Egyptian Remains at Byblos.**—M. MONTET, after calling attention to the importance of Byblos to Egypt as the port through which the Egyptians were supplied with timber and resin, describes a few hieroglyphic inscriptions which have been found there and points out the probability that further discoveries of Egyptian objects would reward excavation on this site. (*C. R. Acad. Insc.* 1921, pp. 158-168; 7 figs.)

**A Receipt of the XXIIId Dynasty.**—G. MOLLER publishes a receipt for the payment of a loan, attested by six witnesses, which was discovered on the backs of leaves 10 and 11 of Hieratic Papyrus 3048 in the Berlin Museum. It belongs to the XXIIId Dynasty and so is the oldest known Egyptian document of its kind. It indicates that loans were made at the rate of 100 per cent. (*Sitzb. Ber. Akad.* 1921, pp. 298-304.)

**A Roman Governor at Thebes.**—J. BAILLET discusses certain inscriptions in the royal tombs at Thebes which have been attributed to the emperors Lucius Verus and Marcus Aurelius. A more complete reading of the inscription containing the name Aurelius Antoninus proves that the person named visited the tomb with his wife Isadora, and hence was a hitherto unknown and relatively unimportant Aurelius Antoninus. The inscription attributed to Lucius Verus is really that of a Roman governor named Lucius Aurelius Catulinus, who further commemorated his travels in Egypt by inscribing incorrect Greek verses on the colossus of Memnon and in one of the tombs of Tell-el-Amarna. (*C. R. Acad. Insc.* 1921, pp. 58-64.)

**Hieroglyphic Signs for East and West.**—G. MOLLER interprets two hieroglyphic signs as meaning east and west. As the first seems to refer to the "copper mountain," *i. e.* the Sinaitic peninsula, and the second to the "feather-wearers" or Libyans, it appears that the use of these signs must have originated in Lower Egypt, in the same latitude with Sinai and Libya. (*Sitzb. Ber. Akad.* 1921, pp. 168-170.)

**A Certificate of Guardianship.**—E. CUG republishes and comments on a Latin diptych which was found at Cairo and given to the University of Oxford by Professor Sayce. (See *The Bodleian Quarterly Record*, 1919, pp. 259, 262.) The document certifies that the prefect of Egypt, Q. Aemilius Saturninus, has appointed M. Julius Alexander guardian to Maevia Dionysarion, who is a Roman citizen; it is dated September 23, 198 A.D. and signed by seven citizens. In certain matters a woman could act legally only through a guardian; and if none were designated by the will of her father or other male relative, she could petition for the appointment of a guardian. This diptych does not give the whole text of the decree granting a guardian to Maevia, but gives the certified information necessary for any person entering into any contract with the persons concerned. In the archives of the prefecture of Egypt was kept a brevian-

rium containing summary records of official acts; and it was from this that such abridged certificates were copied. (*C. R. Acad. Insc.* 1920, pp. 40-56.)

**A Mediaeval Romance Traced to Egypt.**—JEAN CAPART suggests that certain features of the combat of Renart and Isengrin, in the mediaeval romance, may be traced to the Egyptian myth of the combat of Horus and Seth. (*C. R. Acad. Insc.* 1921, pp. 113-118.)

**The False Egyptian Sarcophagus at Tarragona.**—PIERRE PARIS describes in detail the now fragmentary pseudo-Egyptian sarcophagus at Tarragona. There can be no doubt that it is neither Egyptian nor Iberian, but is a modern forgery, the rather interesting figured decoration of which is intended to picture the coming of Heracles and his followers to Spain. (*R. Arch.*, fifth series, XIV, 1921, pp. 146-157; 6 figs.)

**A Bibliography of Papyri.**—A fourth part of the 'Bulletin Papyrologique' published by SEYMOUR DE RICCI has appeared, comprising the second part of a description of papyrological material published 1904-1912. (*R. Ét. Gr.* XXXIV, 1921, pp. 177-230.)

**The Centenary of Champollion.**—The centenary of the discovery of the reading of Egyptian hieroglyphics is marked by a review of the life and work of Champollion. (*The Times Literary Supplement*, London, Feb. 22, 1922, pp. 65-66.)

## BABYLONIA, ASSYRIA AND PERSIA

**The Elephant in Ancient Asia.**—C. W. BISHOP shows that the Asiatic elephant was common in Syria and Mesopotamia in the period of the XVIIIth Egyptian dynasty. Elephants and ivory are mentioned in the Babylonian and Assyrian records down to the time of Shalmaneser III. By the time of Alexander the elephant had disappeared from Western Asia and was not to be found short of India. In China the elephant was abundant in prehistoric times, but it had already disappeared by the time of the earliest contemporary historical records, about 1000 B.C. The memory of it still lingered in the traditions of the earliest dynasties that were preserved in the classical literature. The sign for "elephant" is one of the few primitive pictographs that lies at the basis of the Chinese system of writing, and this shows that the animal must have been familiar to the inventors of the earliest written characters. (*J.A.O.S.* XLI, 1921, pp. 290-306.)

**Babylonian Chronology.**—A. T. CLAY gathers up all the material that has been discovered in the course of the last fifteen years that bears upon the old Babylonian dynasties, and gives a reconstructed list of the twenty-two dynasties before the first dynasty of Babylon with the names of the successive kings and the years of their reigns that are recorded on the tablets. If we leave out of account the first two dynasties, where the lengths of the reigns are fabulously large, and allow an average of only fifteen years for each of the kings of the succeeding dynasties, we obtain 4000 B.C. as a minimum date for the first dynasty of Ur. The thirty-four kings of the first two dynasties would carry us back several centuries earlier. These kings, even Etana, Lugal-Marda, Tam-muz, and Gilgamesh, were historical early monarchs. "It is not improbable that even the goddess Ishtar may prove to have been originally some notable human figure." Back of the recorded dynasties lies a prehistoric period of the development of civilization in Babylonia that carries us back as far as 6000 B.C. (*J.A.O.S.* XLI, 1921, pp. 241-263.)

**The Early Sumerian Religion.**—J. P. PETERS maintains that the fundamental fact in the early Sumerian religion was the mystery of sex. Procreation was creation, and creation was conceived as procreation. The earliest liturgies are full of descriptions of sexual intercourse between gods and goddesses through which all things come into being, and vast numbers of phallic emblems have been discovered in all the mounds of Babylonia. The two most conspicuous features of nature in Babylonia were the annual inundations of the rivers on which the fertility of the land depended, and the raised mounds on which the villages and the mountain-house of the god stood. The former was personified as a fruitful mother, the latter as a male principle. On the proper union of these two as man and wife prosperity and security depended, and toward the consummation of this result the whole early Sumerian liturgy and ritual were directed. In essence these two divinities were the same in all places, but they assumed different names in different localities. Thus differentiated they came to be regarded as separate deities, and were adopted from one place to another, with a tendency to a specialization of functions, making them in the end separate gods. This was true especially of the male element of deity, which seemed, somehow, to lend itself more readily to polytheism than the female, which latter presented itself much more as a unity, merely called by different names. Thunder-storms, rain, and sickness were regarded as the work of evil spirits, and the great father and mother were invoked for protection against these. With the development of the city the king as the representative of the god came to be deified and partly identified with the male principle that controlled the inundations and brought fertility out of them. Astral cults were not a part of the earliest Sumerian religion, but are to be regarded as new elements brought in by the Semitic invaders. (*J.A.O.S.* XLI, 1921, pp. 131-149.) This paper is discussed by G. A. BARTON. (*Ibid.* pp. 150-151.)

**The Farnbāg Fire.**—Among the sacred fires of Zoroastrian antiquity three stand out as specially ancient and sacred: the *Farnbāg* fire, or "fire of the priests"; the *Gūshmasp* fire, or "fire of the warriors"; and the *Būrzān-Mitrō* fire, or "fire of the workers." The oldest and most famous of these is the *Farnbāg* fire, and its original location is a matter of considerable archaeological and historical interest. A. V. W. JACKSON investigates the evidence, and comes to the conclusion that the traditions in regard to the *Farnbāg* fire, or fire of Jamshīd, so far as available, seem to agree as to the fact that it was established by Jamshīd originally in Khvārazm (Khīva), but was removed from there later, in the time of Zoroaster, to another locality, probably Kāriyān in the Province of Fārs. The whole of the old oriental testimony is to this effect and is borne out by the ruins of the fire-temple still existing at Kāriyān and by modern accounts of the town and its legends. (*J.A.O.S.* XLI, 1921, pp. 81-106.)

**The Excavations of Victor Place.**—MAURICE PILLET continues the publication and elucidation of documents relating to the excavations carried on by Victor Place in Assyria. (*R. Arch.*, fifth series, VI, 1917, pp. 171-196; 2 figs.) The documents here published relate to the various attempts made to recover the sculptures which were sunk in the Chatt-el-Arab in May, 1855. Further documents are published *ibid.* VII, 1918, pp. 113 ff. and VIII, 1918, pp. 181-204. The documents contained in the last article comprise the inventories of

the antiquities brought by Place to Europe and the budgets of his excavations and publications.

**A Sassanian Inscription.**—J. DE MORGAN proposes a reading and interpretation of a hitherto undeciphered sign which occurs on Sassanid coins, beginning with the time of Hormisdas IV. The epigraphic reading is ARMN; the word is *kharman*, which unites the ideas of wrath, force, power—perhaps best rendered “puissance.” (*C. R. Acad. Insc.* 1920, pp. 231–240.)

## SYRIA AND PALESTINE

**Importance of Research in Syria.**—J. A. MONTGOMERY calls attention to the importance of archaeological research in Syria, and to the opportunities for such study which are opened by the establishment of the American School of Oriental Research in Jerusalem. (*Annual Report of the Smithsonian Institution*, 1919, pp. 433–441; 3 pls.)

**The Earliest Canaanite Inscriptions.**—CH. BRUSTON discusses the early Canaanite inscriptions from the region of Sinai. He gives their meaning and offers new readings. The name of the goddess Hathor is, he asserts, Semitic, signifying “abundance.” These are the earliest alphabetic inscriptions known, dating some 500 years before the rise of the Phoenicians. The dialect is that of the inhabitants of Goshen (*i.e.* Hebrews) before the time of Moses. It is from this primitive alphabet, transmitted through Arameans or Syrians and the Greek colonies of Asia Minor, rather than from the Phoenician alphabet, that the Greek alphabet is derived. The order of the letters in the alphabet was probably arranged so that their names, as pronounced, made a sentence. (*R. Arch.*, fifth series, XIV, 1921, pp. 49–80; two pages of alphabets and fac-similes.)

**The Meaning of the Word Ariel.**—The word *ariel* occurs a number of times in the Old Testament and in the Mesha Inscription. It seems to have four distinct meanings, hero, image, altar, and a synonym for Jerusalem. S. FEIGIN seeks to correlate these by the assumption that the word is derived from *Aralu*, the Babylonian name for Hades. *Ariel* then means the dead, an image of the dead, an altar for the cult of the dead, and the necropolis of ancient Jerusalem in which the tombs of the kings were located. This interpretation is supported by *Isa.* xxix, 2, where *Ariel* is used as a synonym for Hades. (*J. Bibl. Lit.* XXXIX, 1920, pp. 131–137.)

**The Babylonian Temple-Tower and the Altar of Burnt-Offering.**—W. F. ALBRIGHT holds that *Ariel* as a name of Jerusalem is identical with Babylonian *Aralu*, the mountain of god, the abode of the dead. The Temple resembled a Babylonian temple-tower of three stages, and the altar of burnt-offering was a miniature temple-tower of three stages. (*J. Bibl. Lit.* XXXIX, 1920, pp. 137–142.)

**The Solid Ephod of the Ancient Hebrews.**—K. BUDDE examines afresh the evidence in regard to the *ephod* mentioned in the Books of *Judges* and *Samuel*, which was made of metal, set up, carried by the priests, and used as a medium for obtaining oracles. He rejects the view of W. R. Arnold in his recent work *Ephod and Ark* that the solid *ephod* is everywhere a Jewish scribal substitute for “ark,” and maintains instead that *ephod* is a correction of *abbir*, “bullock,” a designation of the golden bull-images of Yahweh that were used by ancient Israel. (*Z. Alttest. Wiss.* XXXIX, 1921, pp. 1–42.)

**Alleged Palestinian Pyxes.**—S. RONZEVILLE shows that the little pottery objects with bits of glass in the centre, which are often found in the tombs of Palestine, are not pyxes for depositing the Eucharist with the dead, but are simple mirrors. Some of these disk-shaped objects are held by female figures of the Astarte type, which precludes the possibility of any Eucharistic connection; and traces of the lead with which these mirrors were backed have also been discovered. (*Pal. Ex. Fund*, LIII, 1921, pp. 172-174; 2 pls.)

**The Inscription of Theodotus.**—L. H. VINCENT gives an elaborate account of the "Synagogue of the Freedmen" and the inscription of Theodotus discovered by R. Weill in the excavations at Mount Zion during the winter of 1913-14. (*R. Bibl.* XXX, 1921, pp. 247-277; see *A.J.A.* XXV, 1921, p. 168.)

**The Princeton Expedition to Syria.**—With the issue of the seventh part of the section devoted to Southern Syria (Division II, Section A, Part 7, pp. 403-473; pl. 29; figs. 352-388) Professor HOWARD CROSBY BUTLER completes the publication of the results attained in the field of ancient architecture by the Princeton expeditions of 1904-1905 and 1909. The sites described, all of which are in the Ledja, are the following: Brêkeh, Djdyeh, Rîmet il-Luhf, Tell id-Dibbeh, Nedjrân, Dêr il-Asmar, Umm il-'Alak, Beshm, il-'Ahreh, Smêd, Mdjêdil, Wakm, Khurêbât, Kharsah, Lubbên, Djrên, Harrân, Msêkeh, il-Ubêr, Sûr, il-'Asim, Djedil, Dâmit il-'Alyâ, Dêr idj-Djûwâni, Djisreh, Zubaiyir, Zebîr, Sha'arah, Mismfyeh, Taff, Sahr, Hammân and Tubbeh. The inscriptions found on the same sites are published by ENNO LITTMANN and DAVID MAGEE, JR., in Division III, Section A, Part 7 (pp. 373-488). There are 130 in all.

**The Hittite Language.**—M. BLOOMFIELD (*J.A.O.S.* XLI, 1921, pp. 195-209) discusses the Hittite documents from Boghazkeui and the treatise on the Hittite language recently published by F. Hrozný with a view to the alleged Indo-European character of the Hittite language. The Indo-European aspects of "Hittite" have no basis in any known historic colonizations by Indo-Europeans of parts of Asia Minor. We should have to assume an Indo-European settlement many centuries prior to the Aryan, Celtic, Italic, and Hellenic migrations. "Hittite" seems to contain an injection of Indo-European material in a composite pidgin-Kanesian, but even this is not quite certain. "Hittite" has scarcely a noun of indisputable Indo-European etymology, except *vadar*, said to mean "water." The verbal inflections are at points bewitchingly Indo-European, at other points they are no less bewitchingly mysterious. Not a dozen verbs are securely of Indo-European etymology. The pronouns look Indo-European, but only the indefinite-interrogative is certain. The heaping of conglutinative particles combined with the conglutinative use of personal pronouns at the end of nouns is non-Indo-European. *Ibid.* pp. 210-224, J. D. PRINCE comes to the conclusion that "Hittite" displays a mixed and, at the present moment, in many instances untraceable morphology. It is highly probable that this idiom may have to be classified eventually in a group by itself, perhaps standing half way between Indo-European and non-Aryan languages such as Finno-Ugric and Turkic.

**A Series of Seleucid Tetradrachms from Tyre.**—E. T. NEWELL attributes to the mint of Tyre a series of Seleucid tetradrachms and drachms of the period 200-150 B.C. Hitherto only bronze coins of this date have been definitely assigned to Tyre. The silver series is homogeneous, and similar in style to the



later Phoenician tetradrachms of Alexander Bala, known to have been struck at Tyre. The constant use of the club as a symbol confirms the attribution. [*The First Seleucid Coinage of Tyre*, Num. Notes, No. 10; New York, 1921, American Numismatic Society; 40 pp., 8 pls.; 16 mo.; \$1.]

**New Seleucid Copper Types.**—EDGAR ROGERS describes new types on the copper coinage of the Seleucid monarchs, which will help to fill in "the sketchy classifications of past days." Prominent in his list are a Demetrius I with a full-face head of Pallas, and a new coin of Alexander Zebina with an elephant's head, recalling earlier Syrian issues. (*Num. Chron.* 1921, pp. 26-36; pl.)

## ASIA MINOR

**The Aramaeo-Lyidian Inscription of Sardis.**—A. E. COWLEY publishes a new interpretation of the bilingual inscription from Sardis, differing in many particulars from Littmann's reading. The Aramaic of the inscription is provincial and somewhat incorrect; the Lydian writer uses Aramaic "as our diplomats speak French." (*C. R. Acad. Insc.* 1921, pp. 7-14.)

**The Sun-dials of Pergamon.**—That the twin sun-dials of Pergamon had gnomons of equal length (cf. *Ath. Mitt.* XXXVI, 1911, 251 ff.) is proved by the independent and purely mathematical studies of J. Drecker. (A. REHM, *Ath. Mitt.* XL, 1915, p. 111.)

**The Temple of Athena at Priene.**—A. VON GERKAU argues (against Wilberg, *Ath. Mitt.* XXXIX, 1914, pp. 72 ff.) that the frieze was lacking in the Athena temple at Priene. The Ionic frieze, he thinks, arose in the west under the influence of the Doric order. (*Ath. Mitt.* XLIII, 1918, pp. 165-176; 3 figs.)

**A Guide to Ephesus.**—In 1915 the Austrian Archaeological Institute published in the small compass of ninety pages a guide to the ruins of Ephesus written by Dr. J. KEIL. After a description of the site the author sketches the history of the town from its foundation down to its destruction at the beginning of the fifteenth century A.D. He then describes the various buildings of which remains exist, gives illustrations of many of them, and sometimes plans and reconstructions. He also includes important Turkish remains. There is an introduction by E. Reisch. [*Führer durch Ephesos*. Von JOSEPH KEIL. Vienna, 1915, Hölder. 90 pp.; 46 figs.; 2 maps.]

**An Ephesian Decree.**—E. WEISS discusses the inscription from Ephesus published by R. HEBERDEY, *Jh. Oest. Arch. I.* 1904, cols. 4 ff. (*Ibid.* XVIII, 1915, Beiblatt, cols. 285-306.)

**Monuments of the Mother Goddess.**—J. KEIL publishes a relief found at Ephesus in 1912 representing a seated woman holding a patera in her right hand and a large drum in her left. In front of her are two seated lions, and on either side a standing male figure, one youthful and the other of middle age. The relief came from the sanctuary of the Mother Goddess identified by inscriptions. Thirteen other monuments of the same character are described. (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 66-78; 14 figs.)

**A Drachma of Smyrna.**—A drachma (in the British Museum), having a seated Homer on the reverse, is now added by J. G. MILNE to his classification of Smyrnaean silver coins in *Num. Chron.* for 1914. It is judged by him to be earlier as well as artistically finer than the usual Homereia of Smyrna. He would class it with the first issues of coins of that type, and assign as an approximate date 180 B.C. (*Num. Chron.* 1921, pp. 143-144; pl.)

## GREECE

### ARCHITECTURE

**The Doric Temple.**—The origin of the Doric temple is discussed by G. RODENWALDT. As being merely the home of the cult statue the Greek temple could not have arisen in the Geometric period, when no large statues were made, nor was it a development of the Mycenaean megaron. It came rather from the continental country house of the seventh century and earlier, was developed under Egyptian influence, and was originally of stone. The use of wooden columns in the Heraeum at Olympia was a provincialism. (*Ath. Mitt.* XLIV, 1919, pp. 175-184.)

**The Development of the Doric Capital.**—W. WILBERG discusses the development of the Doric capital. (*Jh. Oest. Arch. I.* XIX-XX, 1919, pp. 167-181; 4 figs.)

**The Columns of the Olympieum.**—In a study entitled 'The Age of the Extant Columns of the Olympieum at Athens,' A. D. FRASER comes to the conclusion that these columns, which have been attributed by Penrose and others to the period of Antiochus Epiphanes, are actually of the time of Hadrian. (1) The workmanship of the columns is not too fine for the Greek style of Hadrian's period, which was marked by a revival of Hellenism. (2) The lack of exaggerated entasis is not alien to the best art of this period. (3) The lines of the abacus, which Penrose thought characteristically Hellenistic, are almost identical with those of the Corinthian capital of the Arch of Hadrian at Athens. (4) The type of the acanthus leaf, which Penrose compared to that of the tholos at Epidaurus, is no more imitative of that model than are other Hadrianic capitals. On these four counts, the columns could as well be Hadrianic as Hellenistic. The question is settled by a detail in the design of the capitals: (5) The acanthus bloom represented in the centre of each side of the abacus is supported by a slender stalk rising between the inner volutes. This supporting stem is not found on capitals of earlier than Roman date, but is characteristic of Imperial architecture. It is found on the capital of the Ara Pacis, and on the Arch of Hadrian at Athens. (*Art Bulletin*, IV, 1921; pp. 5-18, 2 pls.)

### SCULPTURE

**A Minoan Bronze Statuette in the British Museum.**—A small and somewhat roughly cast statuette of almost pure copper, of unknown origin, which has been in the British Museum for many years, is now seen, from its likeness to the praying figure from Tyliissus in Crete, published in 1912, to be Minoan, and presumably of the M. M. III period. It represents a male votary standing in the attitude of prayer, with the right hand raised to the forehead, palm up, and the left arm dropped at the side. The exaggerated hollow of the back and the costume of boots, kilt and belt are characteristically Minoan, and a snake in the hair connects the object with the worship of the Cretan snake goddess. (F. N. PRYCE, *J.H.S.* XLI, 1921, pp. 86-90; pl.; 3 figs.)

**The Gigantomachy in the Pediment of the Old Athena Temple.**—R. HEBERDEY discusses the composition of the gigantomachy in the pediment of the old temple of Athena on the Acropolis (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 40-56; 7 figs.). H. SCHRADER dissents from some of Heberdey's conclusions (*Ibid.*

XIX-XX, 1919, pl. 154-161; 10 figs.). *HEBERDEY* defends his position (*Ibid.* Beiblatt, cols. 329-340), which is further criticised by *SCHRADER* (*Ibid.* cols. 341-346).

**BERLIN.**—*An Early Bronze Mirror Handle.*—*C. PRASCHNIKER* publishes an archaic bronze statuette which once formed the support for a mirror. It represents a nude female figure in high head-dress holding castanets in her extended right hand. The left hand and feet are missing. Above the right shoulder is a small winged figure. An amulet is attached to a cord running over the right shoulder and under the left arm. The hair hangs down the back. The figure was found at Vonitza on the Gulf of Ambracia, and is now in the Berlin museum. It dates from the second half of the sixth century B.C. (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 57-60; 3 figs.)

*An Apollo Head in Vienna.*—There is in the possession of the University of Vienna a head of Apollo, best known in another replica in Kassel. *A. SCHÖBER* compares all the copies and discusses their relative nearness to the original. The earliest copy appears to be an unpublished head in Athens. (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 79-93; pl.; 14 figs.)

*The Athena Parthenos and the Olympian Zeus of Phidias.*—*F. WINTER* argues from a study of the bases of the two statues in their relation to the temples in which they stood that the Athena Parthenos of Phidias is earlier than his Zeus at Olympia. (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 1-16; 4 figs.)

*Two Masterpieces of the Youthful Phidias.*—*W. KLEIN* argues that the Lemnian Athena, correctly recognized by *Furtwängler* in the Dresden Athena, did not stand alone but had a companion figure which represented Hephaestus. A head in the Museo Barracco, of which a copy is in Petrograd, was connected by *Furtwängler* with the Lemnia. It is in reality a copy of the head of the Amazon of Phidias, which is to be reconstructed with the right hand grasping the spear above, while the left rests lightly on the shaft. The point is turned upward. The Lemnia, like the Amazon, was an early work of Phidias, perhaps a memorial of the Persian Wars, and not dedicated by Athenian clerouchs setting out for Lemnos. The Madrid statuette of Athena may be a copy of the Promachos. (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 17-39; 16 figs.)

*The Parthenon Frieze.*—*G. FOUGÈRES* renews the discussion of the motive of the Parthenon frieze. The subject of the archaic "Erechtheum" pediment in the Acropolis Museum cannot have been a prototype of that of the Parthenon frieze, because it has not been demonstrated that this pediment showed any processional figures. Nor has it been proved that the archaic relief of a figure mounting a chariot belongs to a frieze from the pronaos of the Pisistratean hecatompedon. More probably it and the other reliefs which seem to have been associated with it are from the pedestal of an ex-voto. In motive the Parthenon frieze finds its only true analogy in votive reliefs. As these express in a graphic and popular style the devotion of an individual or a family to a divinity, so the Parthenon frieze commemorates the devotion of the city of Athens to its protecting goddess. The idea of this sublimation of a motive of popular art to a monumental purpose was original with Phidias. He placed his great votive relief in the only position suitable to its function. The pediments and metopes were traditionally reserved for the representation of myths. (*R. Ét. Gr.* XXXII, 1919, pp. 208-226.)

*Lycius.*—Lycius, son of Myron, is the subject of a detailed investigation by

Carlo Anti (*B. Com. Rom.* XLVII, 1919, pp. 55-138; 2 pls.) The Demeter of Cherchel, a herm in the Barracco Museum, the figure of a boy in the Antiquarium on the Caelian, and a boy in basalt in the Palatine Museum are ascribed to this artist. The stylistic similarity of these works to the great Eleusis relief is pointed out. The best part of the east front of the Parthenon frieze (Iris, Hera, Zeus, Athena, Hephaestus and the presentation of the peplos) is also claimed for Lycius. Lycius shows the influence of Myron only in technical matters, otherwise he is influenced more by the pre-Polycletan Peloponnesian school and by Phidias. His chief characteristic is "illustrationism." He was active before 450 and after 420 B.C.

**Two Greek Heads in the Fogg Museum.**—A new publication of the Fogg Art Museum of Harvard University is inaugurated with a brief discussion of



FIGURE 1.—HEAD OF WARRIOR: FIFTH CENTURY: CAMBRIDGE.

two marble heads recently acquired by the Museum. (1) The first, which is fragmentary, is part of a statue of a warrior, wearing a close-fitting Attic helmet of simple form (Fig. 1). The material is Pentelic marble, and the subject suggests a comparison with the Borghese Ares in the Louvre. That, however, is a copy of a more subtly modelled and sophisticated work. The head at Cambridge may be assigned to an Athenian sculptor of about the date of the Parthenon pediments. (2) The second head (Fig. 2), which shows much more variety and richness of modelling, belongs to the early years of the fourth century B.C. The shape of the skull and face suggests that it is a work of the Attic school. The somewhat swollen ears indicate that the subject is an athlete. The material is Parian marble. (*Notes, Fogg Art Museum, Harvard University, I, 1921, pp. 3-8; 6 figs.*)

**The Sculptures of the Argive Heraeum.**—F. EICHLER publishes a detailed study of the fragmentary sculptures of the Argive Heraeum. (*Jh. Oest. Arch. I. XIX-XX, 1919, pp. 14-153; 86 figs.*)

**Attic Reliefs.**—O. WALTER has succeeded in adding new pieces to several reliefs in Athens. (*Jh. Oest. Arch. I. XVIII*, 1915, Beiblatt, cols. 87–98; 4 figs.)

**Scopaic Heads.**—B. B. MANCINELLI discusses and gives detailed measurements of three Scopaic heads in Rome. (*B. Com. Rom. XLVII*, 1919, pp. 45–53; 2 pls.)

**The Niobids.**—GEORG LIPPOLD (*Röm. Mitt. XXXIV*, 1919, pp. 17–23) calls attention to the wrong restoration and combination of the fragments of the Petrograd relief of the Niobids and discusses the original grouping. GEORG RODENWALDT (*Ibid.* pp. 53–73) claims the Niobe group was carved about 340 B.C., probably in Asia Minor under the influence of the activity of Scopas and



FIGURE 2.—HEAD OF ATHLETE: FOURTH CENTURY: CAMBRIDGE.

Praxiteles and was later removed to Rome. The Florentine group is the best copy now extant. One of the Niobids was used as a model, probably to represent some other subject, by a “baroque” artist in early Hellenistic times. The Chiaromonti Niobid is this Hellenistic original.

**The Head of a Youth.**—A. SCHOBER publishes the head of a youth in Vienna purchased from a dealer in Rome. It is a good copy of an original, perhaps an ideal portrait, of the fourth century B.C. (*Jh. Oest. Arch. I. XIX–XX*, 1919, pp. 182–189; pl.; 3 figs.)

**Two Groups of Sculpture.**—W. KLEIN attempts to recover among existing marbles parts of the group of four satyrs mentioned by Pliny, *N. H. XXXVI*, 29. Two infant satyrs’ heads in Boston, a satyr’s head in Dresden and a satyr in the Vatican bearing the young Dionysus on his shoulders may be traced back to this group. Another group, the symplegma of Heliodorus, is to be found in the Pan and Daphnis in the museum at Naples. (*Jh. Oest. Arch. I. XIX–XX*, 1919, pp. 253–267; 6 figs.)

**The Original Position of the Vienna Athlete.**—R. HEBERDEY argues that the bronze athlete in Vienna stood in a small room outside the northwest corner

of the large hall, A1, in the Baths of Constantine at Ephesus; and that it stood by itself and did not form part of the decorative scheme of the building. (*Jh. Oest. Arch. I. XIX-XX, 1919, pp. 247-252; fig.*)

**A Statuette of Cybele in Vienna.**—VALENTIN MUELLER (*Röm. Mitt. XXXIV, 1919, pp. 82-106*) discusses a statuette of Cybele now in Vienna, which is a copy of a fine Pergamene statue of the second century.

**A Hellenistic Portrait.**—A. HEKLER publishes the portrait head of an aged man in the National Museum at Athens. He compares it with the portrait of the aged Homer and suggests that it represents Hipponax. It dates from the first century B.C. (*Jh. Oest. Arch. I. XVIII, 1915, pp. 61-65; 4 figs.*)

**Studies of Two Reliefs.**—J. SIEVEKING presents new interpretations of two reliefs. (1) The relief from the Athenian olive wood, now in Berlin (Conze, *Att. Grabr. IV, p. 8, No. 1743*) is an ex-voto of the early Imperial period, dedicated by a Roman family in honor of the teacher from whom they learned Greek. The curious representation in the upper part of the relief is the letter  $\Psi$ , and is a reminder of the introduction of this letter in the Ionic alphabet at Athens. The dignified seated figure at the left in the relief is a statue of Archinus, who made this reform. The Roman family is shown at the right, their teacher at the left of this figure. The great area of free space in this relief leads the author to discuss the function of accessories in Hellenistic relief. Their use is not due to the idyllic spirit or to a desire for depth or picturesque effect, but rather to the Hellenistic tendency to individualize each person and act. (2) A pair of Bacchic reliefs in Rome (Matz-Duhn, *Ant. Bildwerke in Rom. I, No. 2311*) has been regarded by Robert as a pastiche. It is more probably a unitary work, representing the planting and the fruitage of the vine in Icaria, in the presence of Dionysus, Icarus, and other figures of the legend. If Robert's objection that in the fourth century A.D., to which the relief has been held to belong, this myth would not have been known, is valid, the relief may be a creation of the Renaissance. (*Hermeneutische Reliefstudien, Sitzb. Mün. Akad. 1920; 31 pp.; 3 figs.; Svo.*)

**The Temple Servant of Nicomachus.**—J. BANKO (*Jh. Oest. Arch. I. XIX-XX, 1919, pp. 296-298; pl.; fig.*) publishes a bronze statuette of an old woman, apparently a priestess or servant, in Vienna. It was found at the ancient Noviodunum in 1893 and is .148 m. high. The hands and feet are missing. It was, perhaps, part of a group. *Ibid.* pp. 299-316 (4 figs.) E. REISCH argues that this is a copy of the statuette of the temple attendant, Lysimache, mentioned by Pausanias, I, 27, 4 (reading  $\Lambda\upsilon\tau\mu\acute{\alpha}\chi\eta$ ). The inscribed base of the original statuette still exists and shows that the old woman's name was Syeris (cf. the corrupt reading  $\epsilon\beta\eta\rho\iota\varsigma$  in Pausanias), and that Nicomachus, a sculptor of the fourth century B.C., was the artist. The portrait of Lysimache herself was by Demetrius of Colophon and is, perhaps, reproduced in the portrait head of an old woman in London.

**A Head of Zeus from Aegira.**—O. WALTER publishes the colossal marble head of Zeus found at Aegira in 1915 and now in Athens. The head is 0.87 m. high and was cut away behind, evidently for the purpose of being backed with stone or some other material. The head is identified with the head of the cult statue of Zeus by the Athenian sculptor Euclides mentioned by Pausanias (VII, 26, 4). The statue is reproduced on coins of Aegira of the time of Septimius Severus. (*Jh. Oest. Arch. I. XIX-XX, 1919, pp. 1-14; 2 pls.; 9 figs.*)

**Statues in Armor.**—A. HEKLER discusses problems connected with the history of statues of men in armor. The type, common in imperial Roman times, was derived from the Greeks. (*Jh. Oest. Arch. I.* XIX–XX, 1919, pp. 190–241; 51 figs.)

### VASSES AND PAINTING

**Geometric Vases.**—B. SCHWEITZER continues his studies in the chronology and history of Greek geometric vases, the first part of which appeared as a dissertation in 1918. He attempts to establish the dates of the founding of the Greek colonies in the west; examines the relation of the various types of graves on geometric sites, and then traces the development of the style with reference to the adjustment of decoration to the field. He concludes that the essential principle of geometric as a new variety, lies in its tendency to "plastic," rather than "picturesque," representation. As an appendix he publishes the twenty-one late Attic Dipylon vases of the Lambros collection. (*Ath. Mitt.* XLIII, 1918, pp. 1–152; 6 pls.; 32 figs.)

**Red-Figured Vases in the British Museum.**—A list of the Attic red-figured vases acquired by the British Museum since 1895 and not included in the Catalogue issued in 1896, is given by H. B. WALTERS (*J.H.S.* XLI, 1921, pp. 117–159; 7 pls.; 14 figs.). Forty-seven vases are described and many of them illustrated, and a list of seventeen others which have been published elsewhere is appended. They date from the earliest transitional period to the middle of the fourth century and are divided into five classes established by J. B. Beasley in his *Attic Red-Figured Vases in American Museums*, the last class of "ripe free" or "late fine" style, being the most numerous. One of the cylices of the early archaic period is the best of the known examples of the work of the potter Euerigides. Chachrylion's signature also occurs. Among the unusual or interesting subjects are Theseus and the dead Minotaur, and gryphons guarding a heap of gold, after Herodotus's story of the Arimaspians' country in western Siberia (IV, 13; III, 116). Many of the latest vases, some of which are of South Italian manufacture, depict marriage scenes and the home life of women, a wedding procession on a very fine pyxis being especially detailed.

**Dynamic Symmetry: A Criticism.**—E. M. BLAKE shows that from a mathematical standpoint the formulae evolved by Hambidge as normative for Greek pottery can be applied, within the limits of error in measurement, to any proportions whatsoever. The possibilities of each of the so-called root systems, either those used by Hambidge, or infinite others, are boundless, so that there is no telling by measuring an object from which root system, if any, it may have been evolved. (*Art Bulletin*, III, 1921, pp. 107–127; 20 figs.)

### INSCRIPTIONS

**Greek Epigraphy in 1919–1920.**—A summary of books and articles dealing wholly or in part with Greek inscription, most of which appeared in 1919 and 1920, is published by M. N. TOD (*J.H.S.* XLI, 1921, pp. 50–69). The periodicals cited are English, American, French, German, Italian, Greek, and Roumanian, and the regions covered, beside Greek lands on the Mediterranean and Black Seas, include Syria, Palestine, Arabia, France, Northern Italy and Switzerland. The issue of two more installments of the third edition of Dittenberger's *Sylloge*, the lively interest shown in the origin of the Greek alphabet,

and the unexpected scarcity of material from newly accessible Macedonia, are among the points noted.

**A Decree from Chaeronea.**—M. HOLLEAUX publishes with detailed commentary a Chaeronean decree discovered at Delphi, relating to the first war of Mithradates. The inscription proves that at the outbreak of the war the Odrysi were governed by Sadalas; that this Sadalas was an ally of the Romans and furnished them with troops which served under Sulla at Chaeronea and Orchomenos in 86 B. C.; and that during his siege of Athens, Sulla took care to have Boeotia occupied by his own or auxiliary troops. (*R. Ét. Gr.* XXXII, 1919, pp. 320-337.)

### COINS

**Misunderstood Titles on Greek Coins.**—R. MÜNSTERBERG discusses the following misunderstood titles on late Greek coins: ἄγνος, ἀρχή, ἀρχιερώμενος, ἀσιαρχ τῆς πατρίδος, δυνάμικός, ἐγλογιστής, ἐπιμελήσας, παραδοξονίκης, ὑπατος, φιλαλήθης, φιλοκαίσαρ and χιλιαρχος. (*Jh. Oest. Arch. I.* XVIII, 1915, *Beiblatt*, cols. 307-324; 2 figs.)

### GENERAL AND MISCELLANEOUS

**The Silver Vase from Mycenae.**—V. STAIS restores the famous silver vase from Mycenae as a rhyton of the familiar Cretan shape (Fig. 3). The scene is interpreted as an attack upon a walled city by the crew of a pirate ship.



FIGURE 3.—SILVER RHYTON  
FROM MYCENAE.

At the bottom is a net or scale pattern. The work is assigned to a local artist and is dated soon after M. M. III. On p. 112 Stais calls attention to a new drawing of the vase by E. Gillieron, Jr., in which the improbable irregularity of outline is corrected by lengthening the rhyton and straightening the line of the sides. (*Ath. Mitt.* XL, 1915, pp. 45-52, 112; 2 pls.)

**A Hittite Motive in Mycenaean Art.**—V. K. MÜLLER compares the ornamental device on the head of the "stickpin" from Mycenae (cf. *Jb. Arch. I.* XXX, 1915, pp. 289 ff.) with Hittite cylinders representing the Magna Mater. The Mycenaean artist used the Hittite features of extended arms, horizontal lines at the hips and half-circle over the head, but translated the semi-circle into a vegetable motive. (*Ath. Mitt.* XLIII, 1918, pp. 153-164; 5 figs.)

**The Phaestus Disk.**—R. A. S. MACALISTER makes some fresh observations on the curious stamped disk found at Phaestus.

The disk, being unique in Crete, is not indigenous there, but is imported from some foreign land. That land must have been remote, since no other documents of the same sort have come to light. The lack of costume in the human



figures of the disk suggests a tropical, possibly an African origin. The disk would not have been preserved in Crete unless it had some importance. This suggests that it was a treaty or diplomatic communication, and the use of stamps in producing it also suggests an office in which such stamps were kept. This seems to preclude the idea that it was a religious, literary, or musical composition. Can it have been an official communication from some African kingdom with which the Cretan traders had commercial relations? (*Pal. Ex. Fund*, LIII, 1921, pp. 141-145.)

**The Whorl from Hagios Onuphrios.**—CHAMPLIN BURRAGE begins a series of studies of Minoan inscriptions with a discussion of the whorl found at Hagios Onuphrios near Phaestus (*Scripta Minoa*, I, p. 118, figs. 52a and b). The characters on both sides which Sir Arthur Evans has taken as ideographs are to be read as phonetic letters. The shorter inscription is K(a)l=Κάλωρ (Τάλωρ); the longer is K(a)l'kin(i)(a)=Καλχυνία (Τελχυνία). Three different legendary figures called Talos are associated with Crete; and the Telchinians of Rhodes are said to have migrated from Crete. (*Harvard Studies in Classical Philology*, XXXII, 1921, pp. 177-183; 2 figs.)

**The Human Figure in Archaic Art.**—G. VON LÜCKEN reviews the development in the representation of the human form by Greek vase painters and sculptors to the end of the archaic period. The former focused his attention chiefly on the human figure in motion; the latter endeavored to express the "corporality" of his subjects. At the end of the period the two aims coalesce, and from now on each branch of art could have greater influence on the other. (*Ath. Mitt.* XLIV, 1919, pp. 47-174; 6 pls.; 17 figs.)

**Ancient Greek Weaving.**—J. SIX points out that women are depicted on Greek vases weaving upon a small upright frame held in the lap. There were upper and under threads and the pattern was produced by carrying the threads over and under according to a definite plan. The process is known in Germany as "*durchbrochene Arbeit*." (*Jh. Oest. Arch. I.* XIX-XX, 1919, pp. 162-166; 5 figs.)

**The Delphic Omphalos and Egyptian Religion.**—T. HOMOLLE compares the Delphic omphalos with an object frequently represented in Egyptian paintings and described as a "vaulted chamber" typifying the funerary region in which Osiris is buried and restored to life. It is flanked by two birds recalling the two eagles of Delphi. According to one tradition the Delphic omphalos was the tomb of Dionysus; another made it the grave of the serpent Pytho. The cult of Dionysus was associated with serpents; and the serpent at Delphi may have originally been a symbol of the god. The identification of Dionysus with Osiris is even earlier than Herodotus; and the omphalos at Delphi may be a cult symbol originally transmitted from Egypt, perhaps through Crete. (*R. Ét. Gr.* XXXII, 1919, pp. 338-358; 12 figs.)

**The Name of the Ionians.**—A. CUNY, in a study of the history of the name "Ionian" concludes that the ancient name \**Yaw* had lost its final *w* before the Greek occupation of the region later called Ionia. At this time \**Yawan* or \**Ya* was indiscriminately used as the name of the eponymous ancestor of the race. (*R. Ét. Gr.* XXXIV, 1921, pp. 155-162.)

**The Dorian Invasion.**—STANLEY CASSON has published a new examination of the literary and archaeological evidence on the Dorian Invasion. The literary tradition points to two main streams of invasion: (1) an eastern, entering

the Peloponnesus by the Isthmus; (2) a western, crossing the narrow mouth of the Corinthian Gulf to Rhion in Achaea. A study of the archaeological data may be based on the certain premise that the small objects found in the British excavations at Sparta and dated in the tenth and ninth centuries B.C. are Dorian. The discovery of similar objects—geometric horses and birds, "spectacle" spirals, etc.—at Dodona, Thermon, Olympia, and Leucas confirms the tradition of the western invasion. Similar finds in Thessaly, at Elatea, at Mount Ptous, at Athens, at Mycenae, and at Argos, indicate the route of the eastern invaders. Recent discoveries at Lake Ostrovo near Monastir, and at Kalindioia (modern Chauchitza) include objects of the same style. A sword of "antenna" type found at Kalindioia suggests that the Dorian culture is a branch of one which had a wide extent in Central and Southern Europe; and similar inferences may be drawn from discoveries made by Professor Ernest Gardner at Aivasil on Lake Langaza, south of Lake Doiran. "The origin of Dorian culture must be sought farther north than Epirus or Thessaly, or even farther north than Macedonia." It reached Macedonia through the Vardar valley. Hallstatt belongs to the same cultural group as the Dorians. The eastern stream of invasion passed through Athens, and in spite of Athenian tradition, there was probably a Dorian settlement in the Ceramicus, responsible for the special development of the geometric style which is seen in the Dipylon vases. Eastern and western invasions converged upon Sparta. The lack of artistic skill in the Dorians is due to their nomadic condition. After they were established at Sparta they developed a considerable art. A fine example of pure Dorian art is the frieze of the sixth century temple at Prinias in Crete. The recent excavations at Mycenae have proved that it was the Dorians who overthrew the Mycenaean civilization. The great walls of Mycenae were built 1400–1200 B.C. under the threat of a northern attack which ultimately proved successful. (*Ant. J.* I, 1921, pp. 199–218; 3 figs.)

**Arrow-heads from Marathon.**—E. J. FORSDYKE discusses arrow-heads from the battle-field of Marathon (*Proc. Soc. Ant.* XXXII, 1919–1920, pp. 146–157; 9 figs.). Many of the small bronze arrow-heads said to have been found on this site are of common Greek types. Of more special interest are two classes of alien origin. (1) The first comprises a series of iron arrow-heads with tangs. Sections through these heads vary from a quadrangular to a flat form, and the transition between the two is seen in points of which two opposite angles have been bevelled off. The square bolt is found in Cyprus, the flat in various Asiatic sites, and it is evident that these forms are not Greek. The intermediate forms find their nearest analogies in arrow-heads of modern date from the Far East. Hence it is clear that the iron arrow-heads from Marathon are oriental. (2) In a collection at Karlsruhe, said on uncertain authority to be from Marathon, is a large bronze arrow-head with tang and barbs. Similar heads are found in the British Museum. The evidence of Cretan coins shows that this was the form of arrow-head used by the famous Cretan bowmen.

**Rhodian Demes.**—F. HILLER VON GAERTRINGEN adds to and corrects his previous publications on the demes of Lindos, Camiros and Ialysos. (*Ath. Mitt.* XLII, 1917, pp. 171–183.)

**Stymphalus.**—F. HILLER VON GAERTRINGEN publishes with a brief description some photographs and sketches (a stone throne and an exedra carved in the rock) made by the late H. Lattermann for his study of Stymphalus. He adds

notes on *I.G. V. 2*, 351 and the victory of Philip V at Apelaurion. (*Ath. Mitt.* XL, 1915, pp. 71-90; 2 pls.; 5 figs.)

**Cyriacus in Greece.**—P. WOLTERS offers new identifications of cities in Messenia visited by Cyriacus in 1447-48; changes the assignment of several inscriptions in the *Corpus*, and proves that what Cyriacus believed to be Mycenae was really Katsingri, 6 km. northeast of Nauplia. On pp. 106-110, G. KARO describes this citadel and gives a plan and a photograph of its probably fourth-century wall. (*Ath. Mitt.* XL, 1915, pp. 91-105; 2 figs.)

## ITALY

### ARCHITECTURE

**The Villa of Horace at Tivoli.**—The evidence of Horace on the situation of his villa at Tivoli is discussed by G. H. HALLAM, who concludes that the traditional site at the Monastery of S. Antonio is probably the true one. (*Atti e Memorie della Società Tiburtina di Storia e d'Arte*, I, 1921, pp. 3-20; fig.) T. ASHBY describes the actual remains of the Augustan villa incorporated in the structure of the monastery. (*Ibid.* pp. 21-29; 2 figs.)

**The Villa of Domitian.**—G. LUGLI gives the third installment of his discussion of the Villa of Domitian in the Alban Hills. He takes up a number of scattered structures, usually pre- or post-Flavian, such as roads, a cryptoporticus, cisterns, nymphaea, wharves, a lighthouse, etc. (*B. Com. Rom.* XLVII, 1919, p. 153-205, 3 pls.)

**The Underground Basilica.**—F. CUMONT upholds his hypothesis in regard to the original purpose of the subterranean basilica near the Porta Maggiore, Rome. That the place served as a meeting place for a sect of neo-Pythagoreans is indicated not only by its general form and arrangement, but especially by the most plausible interpretation of the subjects of the stucco decorations, which contain so many references to after-life, important in Pythagorean doctrines. (*Rass. d'Arte*, VIII, 1921, pp. 37-44; 11 figs.)

**Jewish Catacombs in Rome.**—FRANZ CUMONT, reviewing the substance of a number of recent publications on Jewish cemeteries in Rome, expresses regret that many of these monuments have been destroyed, and points out the need of a collection of Jewish inscriptions. (*Syria*, II, 1921, p. 145-148.)

**The Aesthetics of the Ancient City.**—G. CALZA shows that for obtaining an understanding of the Roman attitude toward city planning Ostia offers better material than either Pompeii or Rome. For at Ostia we have all the features of an ancient city, animated by the same life as that of Rome in its period of great building renaissance. At Ostia we see how the Roman laid out his city in a clear, but not too symmetrical plan, how he had an unconscious feeling for a relationship between buildings adapted to various purposes. (*Rass. d'Arte*, VIII, 1921, pp. 261-264; 3 figs.)

### SCULPTURE

**Archaic Bronzes from Brolio.**—L. PERNIER describes a series of bronzes which were found at Brolio, between Arezzo and Cortona, on the site of an ancient lake, and which have passed into the Museo Topografico dell'Etruria and the collection of Signora Enrichetta of Ancona. The most important are four archaic statuettes, one of which represents a goddess holding two spears,

while the other three are helmeted warriors brandishing spears. The first figure, whose rigid frontality is like that of the Artemis dedicated by Nicandra at Delos, shows some decorative details imitative of Cretan ornament. The three warriors are of Cretan type, recalling those who appear on the conical steatite vase from Hagia Triada. The goddess is Dictinna; the warriors are her brothers the Curetes; and the four figures probably served as supports of a throne of Rhea. This series of bronzes, then, belongs to a deposit of objects sacred to the Great Mother, and has analogies in finds of ex-votos made at Prinia, at Phaestus, and at the sanctuary of Dictaeon Zeus at Palaikastro in Crete. Among the votive objects of the Brolio find are a horse, three stags, two hares, the figure of a warrior in full armor, in the attitude of a promachos, and two female figures which are crude in workmanship, but are curiously ornamented with incised patterns on the dress, suggesting the scale pattern which occurs often in Egyptian, Cretan, and oriental art. (*Dedalo*, II, 1922, pp. 485-498; 15 figs.)

**Recent Restorations.**—LUCIO MARIANI describes three recently restored statues in the Antiquarium (*B. Com. Rom.* XLVII, 1919, p. 139-152; 2 pls.). One, an athlete with an oil flask (Roman, going back to a fifth-century type), had been erroneously restored as a gladiator in the seventeenth century. Another is a youthful Athena of the type that has been ascribed to Timotheus. The third is the torso of a mature woman with very rich draperies, the fragments of which were found in the Cimitero Ostiense near S. Paolo. It is, perhaps, to be dated in imperial times.

**Numa in the House of the Vestals.**—The male statue found by Lanciani in 1883 among the statues of the Vestal Virgins and by him identified as a portrait of Vettius Agorius Praetextatus is claimed for Numa by Carlo Anti (*B. Com. Rom.* XLVII, 1919, pp. 211-224.). It is of the middle of the second century A.D., the work of a second rate sculptor who used an ideal Greek archaic head as model.

**A Roman Portrait Head in Budapest.**—A. HEKLER publishes the portrait head of a woman in the museum at Budapest. It is Roman, and came from the Palazzò Brancacci. It is larger than life size and, perhaps, represents some member of the Claudian house. (*Jh. Oest. Arch. I.* XIX-XX, 1919, pp. 242-246; 2 pls.; 2 figs.)

**A Relief from Lecce.**—A. HEKLER publishes part of a relief from Lecce, 0.47 m. high and 0.67 m. long, now in the museum at Budapest. There are four figures, two mounted and two afoot, engaged in combat. One pair are clearly Gauls, the others men of Southern Italy. The relief dates from the end of the third century B.C. and was part of the frieze of a large tomb. (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 94-97; pl.; fig.)

**Scene from the Lusus Iuvenalis.**—R. EGGER calls attention to a relief from Virunum in the museum at Klagenfurt and shows that it represents a scene from the *lusus iuvenalis*. (*Jh. Oest. Arch. I.* XVIII, 1915, pp. 115-129.)

**The Cult of the Lares.**—V. SKRABAR discusses various reliefs found at Poetovio (Pettau) which have to do with the cult of the Lares. (*Jh. Oest. Arch. I.* XIX-XX, 1919, Beiblatt, cols. 279-294; 8 figs.)

**The Nutrices Augustae.**—K. WIGAND describes the monuments and fragments known as the "Nutrices Augustae" found in the vicinity of Pettau. They date from the second and third centuries A.D. The reliefs fall into two

groups: 1, in which the Nutrix is nursing a child while another woman holds out a child to her; and 2, a cult scene in which offerings are brought to the Nutrix. The worship of the Nutrices was a local cult. They had a temple at Pettau. (*Jh. Oest. Arch. I. XVIII*, 1915, Beiblatt, cols. 189-218; 22 figs.)

The "Bed of Polyclitus."—C. HUELSEN shows that there is in the Palazzo Mattei a modern copy in marble of the relief known as the "Bed of Polyclitus." It represents a male figure in bed, a nude female figure sitting on the bed, and a small female figure crouching on the floor. The original was once in the possession of Ghiberti, but has been lost since about 1630. Another modern copy in marble was formerly in the Palazzo Corsetti. Two bronze copies, both lost, are also known. The relief had considerable fame in Renaissance times. (*Jh. Oest. Arch. I. XVIII*, 1915, pp. 130-137; fig.)

A Pseudo-Egyptian Relief.—JEAN COLIN publishes a relief in Florence representing a procession in honor of Isis ('une procession isiaque'). The relief is carved on a block of hard granite, which once formed the base of a column. The Roman sculptor evidently tried to imitate the Egyptian style. The relief, which was already in Florence before 1825, evidently came from the temple of Isis and Serapis in the Campus Martius at Rome. Two similar vases are in the courtyard of the Museo Capitolino. Part of the base in Florence has been cut away, so that it is no longer round. The six persons represented are all priests or worshippers of Isis, as were, no doubt, the two represented on the missing part of the base. (*Mél. Arch. Hist. XXXVIII*, 1920, pp. 279-283; 3 pls.)

## PAINTING

Pompeian Wall Paintings of the Third Style.—W. KLEIN continues his study of Pompeian wall paintings with a discussion of the characteristics of two artists who worked at the beginning of the Third Style. The painting of Daedalus-Icarus published in colors in Baumeister's *Denkmäler*, pl. 22 and the Pegasus painting are by the same artist, as is a third painting in the same room, now almost destroyed, which represented Actaeon and Diana. A second artist painted another scene representing Daedalus and Icarus, as well as a Perseus and Andromeda and a Heracles and Hesione. Other paintings show the influence of these masters. (*Jh. Oest. Arch. I. XIX-XX*, 1919, pp. 268-295; 12 figs.; cf. *Ibid.* XV, 1912, pp. 143 ff.)

Roman Wall Painting in the Second Century A.D.—H. KRIEGER (*Röm. Mitt.* XXXIV, 1919, pp. 24-52; 3 pls.) posits a fifth style of Roman wall painting harking back to the second in its simpler naturalistic use of architectural motives but improving on it by the better handling of perspective. This is followed by a sixth style in which the architecture becomes more complicated again and which adopts and combines motives from all styles.

## INSCRIPTIONS

An Imperial Rescript.—O. CUNTZ publishes an imperial rescript of Septimius Severus and Caracalla dated October 14 of the year 205. It has to do with the *centonarii* of Solva. It was found at Solva, near Leipzig, in Steiermark in 1915 and is now in the museum at Graz. (*Jh. Oest. Arch. I. XVIII*, 1915, pp. 98-114; fig.)

**An Honorary Decree.**—R. EGGER discusses and restores a fragmentary Latin inscription found at Salona in 1911. It was a decree in honor of a certain C. Julius [Ale]xianus who held various important offices. It dates from about 217 A.D. (*Jh. Oest. Arch. I. XIX-XX*, 1919, Beiblatt, cols. 293-322.)

**D. Simonius Julianus.**—D. Simonius Julianus, who was *praef. urb.* A.D. 239, probably kept his office for five or six years. According to J. COLIN the lacuna in the inscription on the measure in Florence in which his name occurs probably contained the name of Philippus II. (*B. Com. Rom. XLVII*, 1919, pp. 3-10.)

**Valentinism and Gaia.**—In an article on Valentinus and Valentinism (*R. Arch.*, fifth series, XIV, 1921, pp. 131-145), SALOMON REINACH explains the last line of the epitaph of the Roman Valentinian woman Γαῖα, τὴ θανάμᾶξις νέκνος γένος; ἢ πεφόβησαι; (*Aigrain, manuel d'épigraphie chrétienne*, No. 81) as a reference to a figure of Gaia rising from the earth with a gesture of surprise (cf. Reinach, *Rép. Rel.* III, 130, 187), a gesture which is itself a survival of the gesture of supplication such as is seen in representations of the battle of the gods and giants.

## COINS

**Mints of Vespasian.**—H. MATTINGLY continues with an exhaustive article on the mints of Vespasian his study of the coinage of the civil wars of 68-69 A.D. (see *Num. Chron.* for 1914). The article is too long for brief summary, but is of the utmost importance for students of Roman coinage. (*Num. Chron.* 1921, pp. 187-225; 2 pls.)

**Third-Century Mints and Marks.**—Mints and marks of the third century are at last thoroughly and systematically assembled and treated by PERCY H. WEBB. (*Num. Chron.* 1921, pp. 226-293.)

**Apollo Vejovis.**—G. PIERFITTE discusses a type on the obverse of a denarius of the gens Cassia (Babelon, *Monnaies de la République romaine*, Cassia, 7). The head which Babelon interprets as that of Bonus Eventus is more probably that of Apollo Vejovis. (*B. Soc. Arch. Midi*, 44, 1915, pp. 57-61; pl.)

## GENERAL AND MISCELLANEOUS

**The Early Commerce of Latium.**—Latin commerce from the Iron Age to the sixth century B.C. is the subject of a recent dissertation by LOUISE E. W. ADAMS. From literary tradition and archaeological evidence it is inferred that foreign traders, of whom the first were Phoenicians, visited the west coast of Italy in the early Iron Age, and that at this period trade in salt, iron, and bronze was carried on between different parts of Italy. Probably metals were transmitted to the Latins through Rome from Etruria. In general Latium was a backward district in comparison with the Etruscan region to the north and the Hellenized region to the south. In the seventh century the Etruscans controlled a trade route to the south, guarded by the fortress of Praeneste. Some Phoenician and Greek manufactures were imported into Latium. In the sixth century, which was marked by Greek predominance in the culture of Etruria, the Etruscans took possession of Rome and tried to convert it into a commercial centre. After the expulsion of the Etruscans the Romans were too much embarrassed by wars to take full advantage of their economic opportunities. The terms of

their early treaty with Carthage (Polybius, III, 22, 4), which seems to have been made in 509 B.C., show the indifference of the Latins to commerce, but also indicate that the Carthaginians foresaw, and sought to forestall the possible growth of Rome as a commercial power. [*A Study in the Commerce of Latium from the Early Iron Age through the Sixth Century B.C.*, Smith College Classical Studies, No. 2; Northampton, Mass., 1921, Smith College; 84 pp.; 8vo. \$0.75.]

**Etruscan Ships.**—FRIEDERICH BEHN (*Röm. Mitt.* XXXIV, 1919, pp. 1–16) adduces evidence to prove that the Etruscan ships were closely related to the Phoenician and Minoan and radically different from the Greek.

**The Pomerium of Rome.**—Numismatic evidence for the enlarging of the pomerium is adduced by LODOVICO LAFFRANCHI (*B. Com. Rom.* XLVII, 1919, pp. 16–44; pl.) for the following: Augustus, 27 and 7 B.C.; Trajan, 107 A.D.; Commodus, 189–190 A.D. The type of coin commemorating events of this sort is very similar to that celebrating the founding of a colony, *viz.* a pontifex plowing with a bull and a cow. The *ius proferendo pomerii* was conferred on the emperor at his accession. The rite was intimately connected with the closing of the temple of Janus and the taking of the census. It did not necessarily refer to a particular conquest, but to all the annexations since the last enlarging of the pomerium. For Augustus, Trajan and Commodus monuments were erected in honor of the event.

**The Costume of the Oscan Woman.**—MARGARETE LÁNG discusses the costume of the Oscan woman in the light of tomb frescoes and vase paintings. (*Jh. Oest. Arch. I.* XVIII, 1913, Beiblatt, cols. 233–252; 4 figs.)

**Attis on the Sainte Chapelle Cameo.**—E. TÄUBLER (*Röm. Mitt.* XXXIV, 1919, pp. 74–81) interprets the crouching figure adjacent to Livia-Cybele on the Sainte Chapelle cameo as Attis. He probably symbolizes grief over the fate of Germanicus. The cameo may have been cut under Claudius, who introduced Attis into the official Roman cult.

**Caesius Bassus.**—M. MAYER (*Röm. Mitt.* XXXIV, 1919, pp. 107–114) recognizes Caesius Bassus in the relief on a silver plate found in Russia, which was published by Pharmakowsky (*Arch. Anz.* 1908, p. 155 ff.).

**Notes on Two Roman Names.**—E. GROAG (*Jh. Oest. Arch. I.* XVIII, 1915, Beiblatt, cols. 265–280) traces the family connections of Q. Pompeius Sosius Priscus, consul 149, and of Bassaeus Astur. *Ibid.* XIX–XX, 1919, cols. 323–328, he discusses the family of Ducenius Geminus.

**The Uniform of the Roman Soldier.**—P. VON BIEŃKOWSKI discusses the uniform and armor of the Roman soldier in late imperial times. (*Jh. Oest. Arch. I.* XIX–XX, 1919, Beiblatt, cols. 261–280; 9 figs.)

**The Trade in Lead in Roman Times.**—MAURICE BESNIER completes his treatise on the trade in lead in Roman times. He describes and discusses ingots found in Northern Africa and in Italy. Those found in the sea off Mahdia, since the ship in which they were came from Athens, may perhaps be of Attic origin, though they resemble Spanish ingots. The same doubt affects one or two ingots found in Italy. As the Roman Empire decayed, Italy ceased to import lead from the British mines, but merely used over again the metal which had been imported in earlier times. (*R. Arch.*, fifth series, XIV, 1921, pp. 98–130; 7 figs.; recapitulatory chart; epigraphic index. Cf. *Ibid.* XII, 1920, pp. 211–244; *A.J.A.* XXV, 1921, p. 415.)

## SPAIN

**A Stone Palette.**—GEORGE BONSOR publishes and discusses a stone palette with a bronze case, found in a tomb at La Cañada Honda, in the province of Seville, Spain. Other similar palettes have been found. They must have formed part of the toilette apparatus of Roman ladies. The case of this specimen is adorned with a relief representing a nude woman seated between two Erotes. (*R. Arch.*, fifth series, VIII, 1918, pp. 166-169; fig.)

## FRANCE

**Some Archaeological Aspects of Mediterranean Languedoc.**—ANDRÉ JOUBIN has published a description and discussion of some archaeological aspects of southern or, as he prefers to call it, Mediterranean Languedoc. He describes the region, its climate, vegetation, and geological character. In ancient times a sea route passed through the lagoons of the coast, now deserted by vessels and, in part, filled with silt. Other trade routes were by land. The caves of the lower cañon of the Gardon—especially that of La Baume—are described. Here are remains of palaeolithic and neolithic occupation. Especially towards the end of the neolithic period, objects from the eastern Mediterranean were imported. In the hypogaea of the mountain of Cordes and of Castellet, not far from Arles, resemblances to Mycenaean tombs and to monuments of the Balearic Islands, as well as imported objects, point to foreign settlement in the Bronze Age, if not earlier. At Montlaurès, about five kilometers north of Narbonne, are traces of ancient dwellings and remains of pottery. Much of this last is of local manufacture, but much is imported ware from Greece and Italy. The earliest imported ware is Attic black-figured pottery of the sixth century B. C., including a fine Attic-Corinthian amphora. Fragments of Attic red-figured ware are more numerous, though the end of the sixth and the beginning of the fifth centuries are not represented. Similar conditions occur at Empurias (Emporion). At Montlaurès was evidently a small Greek settlement surrounded by natives. Such early Greek settlements and intercourse with Greek traders may explain the ease with which Roman civilization was afterwards accepted. Maguelone, Villeneuve-lès-Maguelone, the stations of the pilgrimage route to Sant' Iago de Compostela, Saint-Guilhem-le-Désert, Saint-Martin-de-Londres, and Aigues Mortes, are discussed. Maguelone, a protected island, dominated the neighboring region in the early Christian times. Devastated by Charles Martel in 737, it was not again important until the eleventh century. Little remains there now except the dismantled cathedral and the bishop's palace. The cathedral was built at different times, in the eleventh century, the first half of the twelfth century, and the second half of the twelfth century, and shows the characteristics of those dates. The sculptured lintel of the principal door, dated 1178, is related to the sculpture of St. Trophime at Arles. Villeneuve belongs chiefly to the twelfth century. The chief remaining feature is the much disfigured church of Saint Étienne. Of the four chief routes to Sant' Iago de Compostela, one followed the ancient Via Domitiana from Arles to Narbonne. Saint-Guilhem-le-Désert is some 37 kilometers from this route, to the northward. The Guilhem who sanctified this place was a count of Toulouse in Charlemagne's time. The legend of his life and deeds was elaborated in the twelfth century. The monas-



tery and the bridge by which it was (and is) approached were built in the eleventh century. The church and ramparts of Saint-Martin-de-Londres belong to the end of the eleventh century or to the twelfth. Aigues Mortes was an important port for three hundred years from the middle of the thirteenth century. Its fortifications are described. They belong to the thirteenth century, at least for the most part, and are almost entirely preserved. (*R. Arch.*, fifth series, XII, 1920, pp. 269-309; XIII, 1921, pp. 37-78.)

**The So-Called Ancient Tomb of Neuvy-Pailloux.**—ADRIEN BLANCHET discusses the remains of a structure at Neuvy-Pailloux, between Thizay and Ville-saison. The structure was discovered in 1844 and was regarded as a tomb of a time earlier than the Roman conquest. The objects found in it are clearly Gallo-Roman. The building itself was not a tomb, but, in view of the number of amphorae found in it, a wine-shop or, more probably, a pavilion in which wine was stored and, perhaps, sometimes sold. A tripod with movable legs, found in the building, may have been a contrivance to hold up the mouth of an amphora, so that its contents could be poured out merely by raising the lower end of the vessel. (*R. Arch.*, fifth series, XIV, 1921, pp. 81-97; 2 figs.)

**A Gallic Terra-cotta.**—A terra-cotta statuette of a warrior in the Musée Saint-Raymond at Toulouse is published by C. LECRIVAIN. The peculiar tunic, as well as the form of the armor, shows that the subject is a Gallic soldier. (*B. Soc. Arch. Midi*, 44, 1915, pp. 61-63; 2 figs.)

**Fortifications of Toulouse.**—J. CHALANDE, continuing his studies of the ancient fortifications of Toulouse, describes the remains of Roman and mediaeval date between the Porte Saint-Michel and the Porte Montgaillard. (*B. Soc. Arch. Midi*, 43, 1914, pp. 217-230; plan.)

**Vercingetorix.**—G. PIERFITTE reviews the evidence on numismatic portraits of Vercingetorix. (*B. Soc. Arch. Midi*, 44, 1915, pp. 47-56; pl.)

**Roman Toulouse.**—M. DE SANTI sketches the history and topography of Toulouse in Roman times (*B. Soc. Arch. Midi*, 42, 1913, pp. 65-69.). J. CHALANDE describes the Roman and mediaeval fortifications of the Quartier Saint-Michel of the city (*Ibid.* pp. 76-84; fig.).

## SWITZERLAND

**Pre-Christian Cults of Geneva.**—W. DEONNA, in a thoroughly documented and indexed monograph which has the proportions of a book rather than of an article, discusses the local cults of Geneva from the Palaeolithic Age to the Christian era. The study is based in great part on objects in the Musée d'Art et d'Histoire at Geneva. It includes a description of the early objects of personal adornment found in this region, and of the evidence for cults of stones, of lakes and streams, of trees, of animals, of the key, the saw-toothed representation of the solar disc, and of aniconic symbols; of anthropomorphic types, and certain pre-Roman divinities of Geneva; and of the several Roman gods who were worshipped there. A final chapter is devoted to the survival of certain Pagan influences and beliefs in the Christian period. (*B. Inst. Gen.* XLII, 1917, pp. 209-526; 104 figs.)

**Rhoeto-Romanic Villages.**—B. REBER describes the remains of two ancient villages discovered by Abbé Jolivet on the summit of Reculet in the Jura. The extant walls are of limestone blocks, not squared, but carefully fitted without

mortar. Structures are generally rectangular in plan, but each village contained a circular building, the use of which has not been ascertained. The villages are to be attributed to the Rhoeto-Romanic population which occupied this region before the invasions of the Alemanni in the third and fourth centuries A.D. (*B. Gen.* XLI, 1914, pp. 83-96; 3 figs.)

## AUSTRIA

**The Costume of the Pannonian Woman.**—MARGARETE LÁNG discusses the costume of the Pannonian woman as shown on the monuments. (*Jh. Oest. Arch. I.* XIX-XX, 1919, Beiblatt, cols. 207-260; 21 figs.)

## SWEDEN

**Firestones of the Iron Age.**—HANNA RYDH describes and classifies firestones of the Iron Age. Her investigations have shown that primitive unshaped stones remained in use long after the invention of an artificially shaped form. The oldest finds of such primitive stones have been made in East Prussia, where they were associated with objects of the late La Tène period. Stones found in Sweden can be dated in the first and second centuries A.D., and a fine oval stone was discovered at Evehö in Norway with a coin of Theodosius II. It appears that the period in which such stones were in use extends from the first century A.D. to the fifth. Many have been found in Skåne. (*Fornvännen*, XII, 1917, pp. 172-190; 20 figs., map.)

**The Star-form in Germanic Ornament.**—The star motive in the ornamentation of Germanic metal work of the third and fourth centuries, especially as illustrated by examples from Sweden, is discussed by Nils Åberg. (*Antikvarisk Tidskrift för Sverige*, XXI, 3, pp. 1-51; 70 figs.)

**Weights of the Viking Period.**—F. DE BRUN (*Fornvännen*, XII, 1917, pp. 56-66), opposing the theory of T. J. Arne that the system of weights in Sweden during the Viking period was based on the Sassanid drachm (4.25 grammes), maintains that four systems of weights were in use (8.7, 8.4, 8.15, 7.85 grammes).

**Metal Ornaments from Gotland.**—Metal objects discovered in graves of 550-800 A.D. in Gotland are the subject of a descriptive article by BIRGER NERMAN. They include fibulae of various forms, and other articles of personal ornament. (*Antikvarisk Tidskrift för Sverige*, XXII, 4, pp. 1-102; 30 pls.; 16 figs.)

## GREAT BRITAIN AND IRELAND

**Flint Daggers in England.**—R. A. SMITH discusses the chronology of flint daggers discovered in England (*Proc. Soc. Ant.* XXXII, 1919-1920, pp. 6-21; 11 figs.). They are usually found in round barrows, and the English specimens may, therefore, be attributed to the post-neolithic period. Often they are associated with pottery beakers. Both pottery and daggers may have been imported into England by an invading people at the beginning of the Bronze Age.

**Bronze Bracelets from Cornwall.**—Two bronze bracelets belonging to the Royal Institution of Cornwall, and presumably found in that region, are described by R. A. SMITH (*Proc. Soc. Ant.* XXXII, 1919-1920, pp. 97-100; fig.) They are moulded and cast; but ornament was also applied with a graving tool, producing rows of triangular indentations. No exact analogy is known but the

bracelets have some resemblance to one found in Jutland and assigned by Montelius to the eleventh century B.C.

**Irish Gold Crescents.**—R. A. SMITH discusses the significance of the gold crescents of early workmanship found in Ireland. They are probably to be associated with a cult of the moon, perhaps introduced into Ireland from Spain. (*Ant. J. I.*, 1921, pp. 131-139; 5 figs.)

## NORTHERN AFRICA

**VOLUBILIS.**—A Rider.—L. CHATELAIN publishes a bronze figure of a youth, found recently in the excavations at Volubilis. It was in several pieces but has been put together to form a complete whole. Certain details of the work make the hypothesis of its being a Greek original seem doubtful, but its Greek inspiration is perfectly evident, and the style is typical of the influence of Polyclitus or his school. The figure is unique in that it represents a type unknown today in any other example. (*Gaz. B. A. III*, 1921, pp. 1-6; pl.; 5 figs.)

## EARLY CHRISTIAN, BYZANTINE AND MEDIAEVAL ART GENERAL AND MISCELLANEOUS

**Early Christian Metal Work.**—A catalogue recently published by the Römisch-Germanisches Central-Museum at Mainz constitutes a handbook of metal work in the Early Christian period, since the objects it describes are the most important known metal objects of this date, represented by reproductions in the Mainz collection. A brief historical introduction is followed by descriptions of objects, classified as treasures, caskets and reliquaries, kettles, chalices, censers, lamps, candelabra, plates, pitchers, crosses, book-covers, ampullae, spoons, amulets, sarcophagi, doors and cupboards. [W. F. VOLBACH, *Metallarbeiten des christlichen Kultes in der Spätantike und im frühen Mittelalter*. Mainz, 1921, Wilckens; 95 pp.; 8 pls.; 6 figs.; 8vo.; 5.50 M.]

**Late Antique and Early Mediaeval Ivories.**—A catalogue of the principal examples of ivory work of the late antique and early mediaeval periods, represented by reproductions in the Römisch-Germanisches Central-Museum at Mainz, has been published by that museum. The descriptions of objects are accompanied by bibliographical references, and are arranged primarily under chronological headings, and secondarily under headings representing the several classes of works described. There is also a general bibliography of the subject. [W. F. VOLBACH, *Elfenbeinarbeiten der Spätantike und des frühen Mittelalters*. Kataloge des röm.-german. Central-Museums, No. 7. Mainz, 1916, L. Wilckens; 114 pp., 12 pls., 2 figs; 8vo.; 6 M.]

**The Cult of Poor Souls.**—P. M. HALM discusses a cult important in late mediaeval times, which was based in large measure upon narrations given by the thirteenth century Caesarius von Heisterbach, though these derive in some cases from still earlier sources. The point of the stories reveals the miraculous benefits derived by absent or deceased persons from the prayers and offerings of the living. A whole cycle of illustrations—reliefs, paintings, and drawings—may be traced to this cult. Some are almost literal transcriptions of the stories told by the religious writers, others are more symbolical and complicated. (*Münch. Jb.* XII, 1921, pp. 1-24; 15 figs.)

**The Sun and the Moon in Crucifixions.**—LOUIS HAUTECOEUR discusses the reasons for the presence of the sun and the moon in representations of the crucifixion, where they appear as early as the sixth century, at first in Syria. They had been associated with pagan deities—Isis, Serapis, Baal, Saturn, Mithra, Jupiter of Heliopolis and other solar and chthonic deities. This presence in crucifixions is in part due to syncretism, in part, no doubt, to artistic tradition and popular habit. (*R. Arch.*, fifth series, XIV, 1921, pp. 13–32.)

**Romanesque Capitals in Nazareth.**—P. EGIDI discusses the set of five almost perfectly preserved capitals found in 1908 on the grounds of the convent of the Annunciation at Nazareth. The writer conjectures that the capitals were intended to be used on a minor portal of the church which had only been commenced when the attack upon the holy city in 1187 drove the Christians out of Nazareth. While the style of the work shows many points of similarity with the sculpture of Autun and Vézelay, it cannot be placed in that school. It was done by French artists, apparently under various oriental influences. (*Dedalo*, I, 1921, pp. 761–776; 15 figs.)

**A Christian Mosaic from Palestine.**—O. M. DALTON discusses a detail of a mosaic pavement of the sixth century discovered at Umm Jerar near Gaza in 1917. It is a representation of a bird with a radiate nimbus, seated upon a nest in an object of curious shape. The bird is the phoenix, which is not seldom represented in early Christian art; while the object on which the nest rests is a Persian fire altar. The mosaic shows other evidence of Persian influence. (*Proc. Soc. Ant.* XXXII, 1919–1920, pp. 47–55; 2 figs.)

**A Sculptured Stone from Mesopotamia.**—O. M. DALTON discusses a marble slab discovered at Miafarkin (Tigranocerta) in Northern Mesopotamia. It has reliefs on both sides, and it may have been part of an iconostasis, or may have filled the lower part of a light in a church window. The style of the reliefs dates them in the period from the ninth to the thirteenth century. Of special interest is the representation of a double-headed eagle on one side of the stone. This symbol of power seems to have been introduced into European heraldry in imitation of the Seljuk Turks. But it occurs in the Orient in Hittite art. On the other side of the slab a fountain is twice represented; from it rises a stem crowned by a pine cone. The pine cone, a symbol of fertility in the cult of Mithra, passed into Christian symbolism in association with the Water of Life. (*Proc. Soc. Ant.* XXXII, 1919–1920, pp. 55–63; 3 figs.)

**A Byzantine Church near Megalopolis.**—The church of the Holy Apostles at Leondari near Megalopolis is described by A. C. ORLANDOS (*R. Ét. Gr.* XXXIV, 1921, pp. 163–176; 6 figs.). It is imitative of the Brontochion at Mistra, but some details indicate that it is of somewhat later date; and the pentagonal apse assigns it to the fourteenth century, which is the date of the earliest documentary evidence regarding it.

## ITALY

**Oderisi da Gubbio.**—P. D'ANCONA takes as his point of departure for the study of Oderisi of Gubbio the passage in which Dante gives us a clue to the kind of work that artist did. Though heretofore we have known no certain work by Oderisi, what Dante says in comparing him with Francesco Bolognese leads the author to believe it possible to attribute to Oderisi a definite group of

thirteenth century Bolognese miniatures showing strong French influence. (*Dedalo*, II, 1921, pp. 89-100; 7 figs.)

**The Altar of Sant' Ambrogio.**—N. TARCHIANI (*Dedalo*, II, 1921, pp. 5-35; 5 pls.; 10 figs.) gives the result of his study of the much disputed altar of gold in Sant' Ambrogio at Milan. While superintending the removal of the altar during the war, the author was able to examine it under unusually favorable conditions. Besides a criticism of documentary material and a study of the technique and iconography of the work, he writes a full description of it and publishes complete and adequate photographic reproductions. The conclusion is that the original parts of the altar belong to the early decades of the ninth century; its Carolingian character is indicated by the technique and iconography and by the types of figures, which bear close similarity to those of such well-known Carolingian works as the Utrecht Psalter.

**Byzantine Mosaics of Sicily.**—B. PACE shows how Sicilian art of the twelfth century, conforming in general iconography and style to Byzantine canons, yet departs from the latter in one significant point. It is characterized by an original display of realism. This may be clearly seen by comparing the mosaic of the Entrance into Jerusalem in the Palatine chapel, Palermo, with the mosaic representation of the same subject in the church of Daphni. (*Rass. d'Arte*, VIII, 1921, pp. 181-184; 3 fig.)

**The Art of Carnia.**—G. FIOCCO writes on an exposition of art in remote Tolmezzo in the heart of the Friulian Alps. The work is peculiarly interesting because the isolation of the region has guarded the purity of its style through the centuries. The art is always pervaded by the quiet, peaceful spirit of the mountaineer, whose greatest joy through the long winter days was the employment of his knife in wood carving. Naturally, the houses have many ornamental carvings, but to the art historian the most interesting work is the carved altar pieces, headed by the fine productions of that well-known fifteenth century sculptor, Domenico da Tolmezzo. (*Dedalo*, I, 1921, pp. 669-689; 21 figs.)

**Two Romanesque Statues.**—E. NICODEMI publishes the statues of Adam and Eve which adorn the portal of the twelfth century cathedral of Lodi and have previously had but slight literary notice. Prototypes are the figures on the ciborium of Sant' Ambrogio in Milan, the two caryatides of Sant' Antonio in Piacenza, and, for the Adam, Byzantine crucifixions. But the figures possess an expressive force which characterizes all the sculpture from Wiligelmo to the Antelami, and they are not lacking in originality, particularly the Eve, that almost seems to be moving in the severe liturgical dance. (*Dedalo*, I, 1921, pp. 738-742; 3 figs.)

**Primitives in the Vatican.**—O. SIRÈN writes a supplement to his article in *L'Arte* of 1906 on the early paintings in the Vatican. A more recent and more thorough study of the collection leads the author to a revision of some of his previous attributions, and he also fills some former omissions. Further, this later study is, in parts, a correction of the catalogue of the collection compiled by Dr. P. d'Achiardi. (*L'Arte*, XXIX, 1921, pp. 24-28, 97-102; 16 figs.)

**Barbaric Art of Nocera Umbra.**—M. SALMI discusses the wealth of jewelry and other objects found in the barbarian necropolis of Nocera Umbra. (*Rass. d'Arte*, VIII, 1921, pp. 152-157; 6 figs.)

**Lippo Memmi.**—L. OZZOLA discusses Lippo Memmi in his collaboration with his father Memmo and with Simone Martini. Along with the work of Lippo

in the *Maestà* of the Palazzo Pubblico, San Gimignano, the hand of the father is to be recognized in the more primitive, Gothic figures of the right side. As to the work with Simone, the paramount example is the Uffizi Annunciation, signed by the two artists. Contrary to usual criticism, the two figures at the left, the Announcing Angel and S. Ansano, are given to Simone; the two at the right, the Virgin and S. Giuletta, because of their heavier treatment are, in execution at least, though not in design, given to Lippo. (*Rass. d'Arte*, VIII, 1921, pp. 117-121; 4 figs.)

**Two Paintings by Taddeo Gaddi.**—R. OFFNER publishes two paintings, a Madonna in the church of S. Lorenzo alle Rose near Florence, and a St. John the Evangelist in the Gentner collection, Worcester, Mass., which he attributes, on the basis of relationship to authentic paintings, to Taddeo Gaddi. The Madonna is to be dated about 1355, the St. John about 1340-50. (*L'Arte*, XXIV, 1921, pp. 116-123; 7 figs.)

**Giotto's Last Judgment.**—The Last Judgment of the Arena Chapel in Padua is the subject of a discussion by A. FORATTI (*Boll. Arte*, I, 1921, pp. 49-66; 15 figs.) in which it is shown how little is taken by Giotto from predecessors and how much of the composition is his own invention. It is the freest product of fourteenth century art.

**Dante the Painter.**—Taking as his point of departure Dante's description in *La Vita Nuova* of his own attempt at painting, H. COCHIN (*Gaz. B.-A.* IV, 1921, pp. 65-80; pl.; 5 figs.) discusses the high value which Dante put upon painters, his theory of painting, which comes out in the Divine Comedy, and the pictorial character of his poetry. Dante eulogizes naturalistic qualities in painting, and all through his poetry he betrays the spirit of a painter in his simple, vivid descriptions of scenes.

**A Note to Purgatorio X, 55-63.**—J. SHAPLEY uses Dante's description of one of the reliefs in Purgatory as the point of departure for a discussion of the relationship of illustration, particularly the illustration of Dante, to literature. The effects of the two arts upon the various senses constitute the main problem involved, though the problem of unity is also important in the translation of the literary into the pictorial. (*Art Bulletin*, IV, 1921, pp. 19-26; 5 figs.)

**The Tomb of Pietro Alighieri.**—L. COLETTI gives something of the history of Pietro Alighieri, elder son of Dante, a notable lawyer not unworthy his parentage, and discusses the sepulchral monument set up for him at Treviso, where he died. The monument, by the Venetian sculptor, Ziliberto fu Mauro Santo, has been dismembered and some parts have been lost; but its character can be surmised from the remaining parts and from the monument of the bishop Salomone Castellano, which Pietro's tomb simulated in large part, though the style of its sculpture is more realistic, less refined, and less Pisan than that of the bishop's. The parts of Pietro's tomb that remain are his own statue, the figures of two virtues that supported the baldacchino, and the coats of arms. They are in the chapter library at Treviso. (*Rass. d'Arte*, VIII, 1921, pp. 315-324; 6 figs.)

**Wooden Sculpture.**—C. GRADARA writes on the development of wooden sculpture in the Abruzzi. This region was active in the art from the thirteenth century on. Much of the work consists in furniture decoration, but from the fourteenth century through the seventeenth large figure compositions are

abundant. A group of Madonnas from various churches is here published. (*Rass. d' Arte*, VIII, 1921, pp. 270-274; 6 figs.)

**Florentine Textiles.**—G. SANGIORGI describes the changes in the style of figured textiles when, after the death of Manfredi, the industry was transferred from Sicily to Florence and neighboring towns. The oriental character of the designs was lost and the compositions used in Florentine painting were copied for more than two centuries. In many instances the paintings which inspired directly or indirectly certain textile designs may be recognized. (*Dedalo*, II, 1921, pp. 153-169; pl.; 17 figs.)

**Feminine Costume of the Trecento.**—From passages in contemporary literature and from paintings of the time, C. LA FERLA (*L'Arte*, XXIV, 1921, pp. 55-70; 21 figs.) studies costumes worn by women in the fourteenth century. Their elaborate design, their harmonious coloring, and their wealth of jeweled ornament, particularly as seen in Sieneese examples, were no doubt due in no small degree to oriental influence.

**A Picture of St. Ursula.**—O. SIRÈN attributes to the North Italian painter, Guariento, a painting of St. Ursula with her maidens (property of Mr. F. Steimayer, Lucerne), which is unusually attractive in color and design. (*Burl. Mag.* XXXIX, 1921, pp. 169-170; pl.)

**Umbrian Primitives.**—M. SALMI studies early Umbrian paintings as represented in collections at Perugia. (*L'Arte*, XXIV, 1921, pp. 155-171; 20 figs.)

**Textile Designs in Italian Paintings.**—I. ERRERA places side by side with paintings dating from the fourteenth to the end of the sixteenth century examples of extant textiles in which the same designs occur that are found in the draperies of figures in the paintings. Such a study throws light both upon the sources of influence in the paintings and upon the dates of the textiles, often showing that certain textile designs originated much earlier than has hitherto been supposed. (*Gaz. B.-A.* IV, 1921, pp. 143-158; 21 figs.)

**A Reliquary Casket in Capodistria.**—A. GNIRS describes a reliquary casket, 30 cm. long, 16 cm. wide and 11.5 cm. high, in Capodistria. It is of oak covered with carved plates of bone which were once gilded. On each of the long sides and on top are three panels, each containing a figure. A border of rosettes, or "stars," surrounds the whole and separates the panels. On one end two men appear fighting; and on the other are four heads in circles, all enclosed by the same border. The casket dates from the twelfth century. (*Jh. Oest. Arch.* I. XVIII, 1915, pp. 138-144; pl.; 4 figs.)

## SPAIN AND PORTUGAL

**Valencian Silversmith Work.**—E. TORMO publishes two Valencian processional crosses, one in Játiva, the other in Onteniente. The latter is documentarily dated 1392-93 as the work of a Valencian silversmith, Pedro Capellades. The one in Játiva is so close to this in general style that it undoubtedly belongs to the same period, and it seems likely that its author was Pedro Bernés. Both crosses are richly decorated with relief and enameled paintings and are of great importance in portraying the character of Valencian silversmith work in the latter part of the fourteenth century. (*B. Soc. Esp.* XXVIII, 1921, pp. 193-204; 2 pls.)

**Spanish Defensive Houses and Towers.**—The character of the building activity of the fifteenth century in the region of La Montaña is described by L. T.

BÁLBAS (*Arquitectura*, No. 30, 1920, pp. 279-283; pl.; fig.). The most characteristic feature was the tower, built for defense, and the most complete extant example is in Espinosa de los Monteros (Burgos).

**The Royal Monastery of Sigena.**—R. DEL ARCO traces the long and complicated history of the great monastery of Sigena and describes its architecture and the monuments preserved in it. The monastery was founded in the late twelfth century and its construction covers a period from the twelfth century to the sixteenth century. It has been a veritable museum of sculpture and painting and still retains not a few examples of importance. (*B. Soc. Esp.* XXIX, 1921, pp. 26-63; 3 pls.; 3 figs.)



FIGURE 4.—BUST OF SAINT PETER:  
PROVIDENCE.

**The Ruins of Ayllón.**—P. ARTIGAS describes the ruins of the thirteenth century Romanesque church of Ayllón with its later additions. The church has a single nave, with rectangular choir, cylindrical apse, and square tower. Contrasting with its severe simplicity are the sumptuous sixteenth century chapels and tombs which it shelters. (*B. Soc. Esp.* XXVIII, 1921, pp. 205-215; 2 pls.)

**The Monastery of Ermelo.**—F. ALVES PEREIRA describes the Romanesque structure of the Monastery of Ermelo, which is situated thirteen kilometers from Arcos de Valdevez in Portugal. (*O Archeologo Português*, XXIII, 1918, pp. 138-158; 22 figs.)

#### FRANCE

**Romanesque Sculpture.**—R. VAN MARLE publishes a number of twelfth century French sculptures in American collections, gives a brief study of the schools to which they belong, and makes comparisons between those schools. A statue of the king of Judah in the Metropolitan Museum is assigned to the school of Berry. The bust of St. Peter (Fig. 4) recently acquired by the Rhode Island School of Design belongs to the school of Burgundy, bearing especially close similarities to certain statues of the Sainte Croix church at La Charité-sur-Loire. A crowned and bearded head in the Fogg Art Museum, which has been attributed to the school of Poitou, must have been done by artists from the atelier which produced the ornamentation of the church of St. Pierre at Moissac. Two crowned figures, reliefs of the



Entry into Jerusalem and the Message to the Shepherds in Mrs. Gardner's collection originally made up part of the decoration of Notre Dame de la Coudre at Parthenay in Poitou. Finally, a wooden figure of Christ (from a Descent from the Cross) in the same collection may be attributed, by comparison with a similar figure in the Louvre, to the school of Auvergne. (*Art in America*, X, 1921, pp. 3-16; 10 figs.)

**Frescoes at Albi.**—The Abbé AURIOL describes some of the frescoes of the church of Saint-Cecile at Albi. (1) On the vault of the nave the Transfiguration is represented. This subject, never entirely neglected in the Middle Ages, was chosen with special frequency by artists of the fifteenth century, since it was in this period that the Feast of the Transfiguration was established by Pope Calixtus III, in commemoration of the defeat of Mahomet II at Belgrade. (2) In the chapel of Sainte Croix the appearance of Christ to the sleeping Constantine is depicted. The cross itself, which is lacking in this picture, is to be found in the ornamentation of the vault above, surrounded by angels and cherubs; and it is shown not in a simple form, but in imitation of the richly jewelled reliquary cross, containing a fragment of the True Cross, which was preserved in this church. (*B. Soc. Arch. Midi*, 43, 1914, pp. 179-185; pl.)

**A Romanesque Church.**—F. PASQUIER calls attention to the interest of the church of Saint-Pierre at Lavernose, a structure of the school of Poitou. Although considerably altered and disguised by restorations, the building deserves a place among historic monuments. (*B. Soc. Arch. Midi*, 43, 1914, pp. 202-205.)

**A Relief of the Trinity.**—A. COUZI describes a relief representing the Trinity in a niche at the entrance of the church of Villefranche-le-Lauruguais (Haute-Garonne). The emotion depicted on the face of God the Father shows that the date is the fifteenth century. This is not a conventional Gothic face, but recalls a local type. The relief was probably a votive offering. (*B. Soc. Arch. Midi*, 43, 1914, pp. 330-332; pl.)

**A Pietà at Toulouse.**—A. COUZI describes a Gothic Pietà of wood in the Nazareth oratory at Toulouse. (*B. Soc. Arch. Midi*, 44, 1915, pp. 156-159; pl.)

**Horses in Romanesque Sculpture.**—Horses and their harness as represented on the Romanesque capitals of the twelfth century in the Museum of Toulouse are discussed by J. DE LAHONDÈS. He shows that certain details are appropriate only to the period to which the capitals are attributed. (*B. Soc. Arch. Midi*, 43, 1914, pp. 303-306.)

**The Church of Sain-Bel.**—J. TRICOU publishes three drawings by A. Cateiland, illustrating the small Romanesque church of Sain-Bel in the Rhone district. The church is threatened with destruction because of plans for a large modern church on the site. (*Bulletin Historique du Diocèse de Lyon*, 1922, pp. 30-33; 3 figs.)

**A Sculptured Lintel.**—A. COUZI describes the primitive reliefs on the lintel of the door of the church of Sainte-Marie, at Bagiry (Haute-Garonne). In the centre is a coat-of-arms, with the date 1498. At the right is represented the Crucifixion, with the Virgin and St. John. At the left is the figure of St. Peter, in chasuble and conical tiara, carrying an enormous key. (*B. Soc. Arch. Midi*, 42, 1913, pp. 146-147; fig.)

**Romanesque Capitals at Toulouse.**—A series of eight Romanesque capitals in one of the portals of Saint-Sernin at Toulouse has hitherto been interpreted

as representing (1) the Feast of Dives (2-8) the Seven Deadly Sins. The Abbé AURIOL maintains that all the capitals of this series illustrate episodes of the story of Lazarus and Dives. (*B. Soc. Arch. Midi*, 44, 1915, pp. 63-71; pl.)

**Processional Cross.**—W. L. HILDBURGH has published a description of an English bronze processional cross of the late fifteenth or early sixteenth century, a pair of mediaeval enamelled basins (gemellions), a candlestick with folding legs, shown by the arms enamelled on the supports to be of about 1310, two fragments of mediaeval Limoges enamel, a small copper image of the Virgin, possibly made at Limoges in the thirteenth century, and two bronze rood figures, one of which was probably made in or near Auvergne, about 1100, while the other is possibly German. (*Proc. Soc. Ant.* XXXII, 1919-1920, pp. 129-140; 3 figs.)

### BELGIUM AND HOLLAND

**Early Goldsmith Work.**—In the first of his series of articles on the early thirteenth century goldsmiths of Oignies, near Namur, H. P. MITCHELL (*Burl. Mag.* XXXIX, 1921, pp. 157-169; 3 pls.) attributes to Hugo, on the basis of stylistic similarity to signed work, the upper part of a reliquary in the Victoria and Albert Museum. The foot of the reliquary is believed to be the work of the late thirteenth century Mosan school.

**The Altarpiece of the Lamb by the Van Eycks and Talismanic Engraved Stones.**—F. DE MÉLY explains some of the inscriptions on the altarpiece of the Lamb as magic words or abbreviations such as are found on engraved stones used as talismans. ADONAI=Lord; AGLA is made up of the initials of the Hebrew words *Atar Gibor Laïlam Adonai*, and is found on many mediaeval objects. It served to ward off disease, fire, and enemies, and also to bring love. HONI, also written "huni" is Hebrew, signifying "Thanks (to God);" like AGLA it is of benefit to women in child birth. MEIAPARO, on the border of the bodice of the Cumaean sibyl in the altarpiece, is a mis-spelled transliteration of 'Πίνα παρ' ὀφθαλμῶν, *Iliad*, V, 291, a passage which was used as a talisman of victory. The mediaeval artists used many languages and also cryptic alphabets. Examples of these are given and their magic use is illustrated. The inscription on the altarpiece, which records the names of the painters and the dedicator, reads according to Napoleon de Pauw (*Bulletin de la Commission royale d'histoire de Belgique*, V, 1921).

*Pictor Hubertus e Eyck, major quo nemo repertus  
Incepit pondus, quod Johannes in arte secundus  
Suscepit fratri, Judoci Vijd prece freti  
Versu sexta Maï vos collocat acta tueri.*

(*R. Arch.*, fifth series, XIV, 1921, pp. 33-48; 8 figs.)

**Identification of some Figures in the Ghent Altarpiece.**—P. Post presents evidence to prove that the recognition of Jan and Hubert van Eyck among the Just Judges of the Ghent altarpiece is groundless, and that, instead, the four first figures represent Philip the Good, John the Fearless, Philip the Bold, and Ludwig von Male, the four successive counts under whose rule Jodokus Vydt, the donor of the altarpiece, lived (*Jb. Preuss. Kunsts.* XLII, 1921, pp. 67-81; 7 figs.). Such an interpretation helps in the solution of some of the difficult problems connected with the altarpiece. For example, it destroys the evidence

for the usual belief that there was a great discrepancy in the ages of Hubert and Jan van Eyck; and, more important than this, it leads to the conclusion that Hubert was the author of the panel of the Just Judges, since his death in 1426 explains the omission of the chain of the Golden Fleece from the neck of Philip the Good. Jan, who began his work on the altarpiece in 1430, would have shown the chain, for the duke acquired it early in that year. This proof, that Hubert was the author of this wing, is a confirmation of the author's earlier conclusion based on the Turin Book of Hours (see *Jb. Preuss. Kunsts*: 1919, pp. 208 f.).

### GERMANY

**The St. George Choir of Bamberg Cathedral.**—R. KÖMSTEDT studies the choir of St. George in the east end of the cathedral of Bamberg, showing how it was developed in the early years of the thirteenth century from two different ground plans. (*Münch. Jb.* XII, 1921, pp. 25–37; 9 figs.)

**A Garment of Emperor Heinrich II.**—R. BERLINER makes a detailed study of the remains of a garment now in the Bavarian National Museum, which have been, and justly, as the author concludes, looked upon as coming from a garment originally belonging to Emperor Heinrich II. This garment early came into the possession of the Bamberg cathedral, among the treasures of which it is listed in the invoice of 1127. At various times through the centuries, until the eighteenth, it underwent partial restorations; but some of the original work is still to be seen. Sassanian influence is observable in the embroidery; its style is like that of Byzantine stuffs of Persian style in the Mazedonian period. (*Münch. Jb.* XII, 1921, pp. 45–60; 13 figs.)

**An Augsburg Family of Painters.**—K. FEUCHTMAYR, taking as his point of departure an altar wing in the Louvre representing the Adoration of the Magi, develops the history of the artistic activity of a late Gothic family of Augsburg named Apt. Ulrich Apt the Elder is shown to have been the master who in 1510 painted the Louvre Adoration, and to him may be assigned earlier and later works. He was best as a portrait painter, mirroring what he saw about him. He made but little advance upon the past; he summed up, rather, its peculiarities in his own creations. Paintings which may be attributed to his sons and other members of his studio have the same fundamental characteristics as do those of the elder Apt. (*Münch. Jb.* XI, 1921, pp. 30–61; 18 figs.)

**Mediaeval Art in Colmar.**—C. CHAMPION writes on the superb art collection of the Underlinden Museum (the thirteenth century convent) in Colmar. It comprises, among other things, much of the best work of mediaeval Rhenish art from Isenmann to Schongauer and Grünewald. (*Gaz. B.-A.* IV, 1921, pp. 1–22; pl.; 15 figs.)

### POLAND

**A Romanesque Bronze Door.**—Through an analysis of the style and iconographical details of the bronze door of the cathedral of Gnesen in Posen (one of the most venerable monuments of ancient Poland), C. FURMANKIEWICZ (*Gaz. B.-A.* III, 1921, pp. 361–370; pl.; 7 figs.) dates the work and ventures a hypothesis as to its authorship. The scenes represent the life of St. Adalbert, and it is particularly in the details of costumes and liturgical accessories, French Romanesque in their origin, that the key is given to the date, which

must be the first half of the twelfth century. The knowledge displayed concerning ecclesiastical forms and costumes, as well as the general character of the work, conforms with what would be expected from the artist Leopardus, known only documentarily.

### SWEDEN

**The So-Called Birka Coins.**—L. KJELLBERG discusses the so-called Birka coins of which the greater number have been found on the island of Björkö (Birka). They belong to the ninth and tenth centuries, and are made in imitation of the Dorstadt denarii of Charlemagne and of Louis the Pious. They are entirely lacking in Christian symbols, and are the work of native designers. (*Fornvännen*, XII, 1917, pp. 41-46.)

**Coins of Knut Eriksson.**—G. GALSTER attributes to the period of Knut Eriksson (ca. 1200 A.D.) and his successor a series of coins from Sodermanland which H. Hildebrand assigned to the Swedish king Waldemar, 1250-1275. (*Fornvännen*, XII, 1917, pp. 96-101; 4 figs.)

### GREAT BRITAIN AND IRELAND

**The Breadalbane Brooch.**—Sir C. H. READ and R. A. SMITH describe (*Proc. Soc. Ant.* XXXII, 1919-1920, pp. 63-66; pl.) a beautiful silver brooch from the Breadalbane collection, recently acquired by the British Museum. Its ornament of filigree interlaces, birds' heads, and inset colored glass is characteristic of Irish and Scotie work of the eighth century.

**An Ivory Panel.**—O. M. DALTON describes a triangular panel of ivory found at St. Cross and now in the Winchester Museum. On it are represented two angels, back to back. The workmanship has remarkable delicacy and vitality, and is to be attributed to an English craftsman of about 1000 A.D. (*Proc. Soc. Ant.* XXXII, 1919-1920, pp. 45-57; fig.)

**English Alabaster Tables.**—A series of English alabaster tables and images is described by W. L. HILDBURGH (*Proc. Soc. Ant.* XXXII, 1919-1920, pp. 117-129; 6 figs.). One, only a fragment, is a part of a representation of the Assumption. A second, also a fragment, shows three figures, one of whom is St. Edward the Confessor. On a third panel the Betrayal of Christ is portrayed. An alabaster image, obtained in France, represents St. Barbara. Ten fragments of tables come from the church of St. Andrew at Wotton, and show scenes in the Life of the Virgin. In addition to these examples in England, a number of English alabaster carvings now in Spain are described.

**Alabaster Carvings.**—W. L. HILDBURGH describes (*Ant. J.* I, 1921, pp. 222-231; 2 pls.; 4 figs.) a number of English alabaster carvings, including (1) a group of four reliefs of unknown provenance, representing the Carrying of the Cross, the Deposition, the Entombment, and the Resurrection; (2) a table representing the Ascension, remarkable in the fact that the figure of Christ is represented in full length; (3) a panel showing the consecration of an archbishop, probably Becket or William of York; (4) a table showing St. James and St. John; (5) images of St. Christopher.

## RENAISSANCE ART

## ITALY

**Leonardo and Boltraffio.**—Contending that Leonardo himself, and not Boltraffio, is the author of *La Belle Ferronnière* in the Louvre, C. HOLMES (*Burl. Mag.* XXXIX, 1921, pp. 107-108; 2 pls.) reproduces the portrait of a youth in the collection of Sir Philip Sassoon, in which he sees the characteristics of Boltraffio as contrasted with those of his master. Boltraffio appears as a more sensitive colorist, but as a less perfect designer and craftsman.

**A Drawing by Leonardo for the Leda.**—A drawing of a female head in the museum of the Castello Sforzesco, Milan, is suggested by A. VENTURI (*L'Arte*, XXIX, 1921, p. 42; pl.) to be not the work of Antonio Bazzi but of Leonardo himself. The turn of the head and the suave and delicate treatment throughout the work places it in the master's late period, close to the *St. Anne* of the Louvre. And it seems not a far fetched hypothesis to see in the drawing a study for the standing *Leda*, the *Leda* freely copied by Raphael in the Windsor drawing and by many followers of Leonardo in painting.

**The Crucifixion in S. Maria delle Grazie.**—The collaboration of Leonardo with Donato Montorfano in the Crucifixion in the refectory of S. Maria delle Grazie is discussed by L. BELTRAMI (*Rass. d'Arte*, VIII, 1921, pp. 217-232; 11 figs.). The conclusion is that Montorfano in 1494-95 completed the whole composition, including the outlines of the four figures in the ducal family. The coloring of these figures was left for Leonardo. Between 1497 and 1499 Leonardo painted these figures in oil. His technique was somewhat different from that used in his *Last Supper* because for the ducal family Montorfano had already put on the ground treatment for fresco. Leonardo did not slavishly conform to the outlines made by his predecessor. How much freedom he allowed himself is indicated by his introduction of a Moorish servant behind Ludovico.

**Drawings by Giambellino and Raphael.**—A. VENTURI publishes two drawings in the Pinacoteche Civiche at Brescia (*L'Arte*, XXIX, 1921, pp. 7-9; 2 figs.). One, representing the Entombment, is an excellent example of the work of Giambellino. The other, formerly attributed to Perugino, is one of the most complete of extant drawings by Raphael. The only thing lacking to make it a complete picture is the color. The same author writes on three drawings by Raphael in the Teyler Museum in Haarlem (*Ibid.* pp. 19-23; 4 figs.). One is a putto similar to the one used by Raphael in the chamber of Pope Julius and in the fresco of Sant' Agostino at Rome. The second is a study of an equestrian group for the Attila. The third is a sketch for the Marriage of Alexander and Roxana painted by Sodoma in the Farnesina. Still other drawings by Raphael are published by A. VENTURI (*Ibid.* pp. 49-54; 7 figs.). They belong to the Oppenheimer collection in London and to the Windsor Library, and include a study for a musician, two hands, a design for a platter, and studies for the *Disputa*, the *Attila*, and the *Loggia*.

**Paintings by Correggio.**—R. LONGHI publishes a *St. Jerome* in the Academy of S. Fernando, Madrid, and a *Holy Family* in the Museum of Orléans, which he attributes to the early period of Correggio, to about 1515 (*L'Arte*, XXIX, 1921, pp. 1-6; 2 figs.). A. VENTURI publishes a painting in the Hofmuseum at Vienna, which there bears the name of Lelio Orsi da Novellara (*Ibid.* p. 33; fig.).

It represents the *Mansuetudine* in the half length figure of a woman who presses a lamb to her breast. In spite of its damaged condition, its qualities are sufficiently Correggiasque to suggest the hand of the master himself.

**Fifteenth Century Leather Work.**—P. CAMPETTI publishes a beautiful fifteenth century tooled leather casket in the cathedral at Lucca (*Dedalo*, II, 1921, pp. 240–250; 9 figs.). It is decorated with colored compositions in relief representing scenes from the life of Christ (Fig. 5). F. MALAGUZZI-VALERI publishes a fifteenth century leather case, probably of Lombard workmanship, in the Museum of Industrial Art at Bologna (*Ibid.* pp. 305–308; 2 figs.). It



FIGURE 5.—LEATHER CHEST: LUCCA.

is a case for containing the stone for testing the gold of jewelry. The love scene depicted on the outside is in the style of Pisanello.

**Sixteenth Century Roman Ceramics.**—U. GNOLI writes on the sixteenth century humanist, Giovanni Goritz of Luxemburg, and of Domenico Gnoli's search for the manuscripts and other treasures hidden by Goritz during the sack of Rome in the garden of his home at the foot of the Campidoglio. Besides many fragments, only two pieces of ceramics were found, a plate and a candlestick. These are now owned by the author of the article. (*Dedalo*, II, 1921, pp. 199–202; 2 figs.)

**Sixteenth Century Mirror Frames.**—L. DAMI publishes a number of Italian mirror frames, mostly Florentine, which he dates from the beginning to past the middle of the sixteenth century. They were all destined to be hung on the wall, as opposed to hand mirrors, and the emphasis is always upon the frame rather than upon the mirror. A few have circular glasses, but in nearly all cases the glass is rectangular and there is usually a sliding door to cover it, apparently because its glitter would interfere with the effect of the carved and colored frame. Architectural features are generally used in the adornment, and the frame takes on the semblance of a door, a tabernacle, or a window. (*Dedalo*, I, 1921, pp. 625–642; pl.; 12 figs.)

A "*Mariegola*."—R. BRATTI writes on the "*Mariegola*" (*Mater Regula*) of the Calafati in the Arsenal at Venice. It is an example of the richly bound and illuminated volumes in which the art corporations of Venice recorded their rules

and laws. It was finished in the second half of the sixteenth century and compares in the magnificence of its cast silver binding and its rich miniatures by Giorgio Colonna with such a monument as the Grimani breviary. (*Dedalo*, II, 1921, pp. 169-180; 7 figs.)

**Petrarch's Tomb.**—A. CALLEGARI outlines the vicissitudes of the tomb of Petrarch in Arquà, with special reference to the bronze bust of the poet which adorns the sarcophagus. This bust, made and put in place in 1547 at the order of Paolo Valdezocco, is of much greater interest upon close examination than one can realize from the usual point of view. Of a little more than life size, it presents a serious, contemplative interpretation of the subject. In itself, it does not add anything new to the iconography of the poet. But it is significant that among all the portraits of Petrarch in Padua the sculptor has chosen as his prototype the fresco in the Sala dei Giganti, indicating that in the mid-sixteenth century this fresco enjoyed the greatest fame in Padua as a true likeness of Petrarch. (*Dedalo*, I, 1921, pp. 723-728; pl.; 2 figs.)

**Fifteenth Century Wooden Sculpture.**—L. SERRA publishes three unusually fine wooden statues, which show how high a plane this art reached in the more remote regions of Italy. The examples under discussion were produced in the Marches. A very simply designed but animated Virgin and Announcing Angel lately acquired by the National Gallery of Urbino are less well preserved but probably not less fine in their way than the dignified hieratic Madonna della Misericordia of the Accademia Georgica at Treia. (*Dedalo*, I, 1921, pp. 693-697; pl.; 4 figs.)

**Tintoretto's Drawings.**—D. FREIHERR VON HADELN describes the masterly quality of Tintoretto's drawings, choosing for illustration only a few out of the great number of extant examples. It is noticeable that practically all represent single figures. This observation leads to an investigation into Tintoretto's manner of giving visual form to his compositions before painting them. Instead of making drawings of them, he made wax models. His method of procedure seems to have been as follows: On an elaborate scaffolding, placed at the desired height with reference to the eye, the artist arranged his composition with wax figures. Before this composition in three dimensions he stretched a net. His large canvas was marked off into squares corresponding to the squares of this net, and sections were marked off on drawing sheets. Then studies were drawn of the single figures, and these were transferred to the canvases before the final painting was begun. (*Jb. Preuss. Kunsts.* XLII, 1921, pp. 82-103, 169-189; 29 figs.)

**A Portrait of Piero de' Medici.**—T. DE MARINIS discusses the full-page portrait of a youth in the 1488 edition of Homer in the Biblioteca Nazionale, Naples. There are several reasons for concluding that this is a portrait of Piero de' Medici. First, the portrait agrees with the age of Piero at this time and is sufficiently like other known representations of him, notably, the portrait in Ghirlandaio's fresco in the Sassetti chapel in Santa Trinità. Second, the copy of the Homer in which this portrait appears is dedicated to Piero. Third, a portrait in an illuminated border of the book represents the same person and is distinctly referred to in the dedication as Piero. A critical study of the painting of the full-page portrait indicates Ghirlandaio himself as its author. (*Dedalo*, II, 1921, pp. 38-46; pl.; 2 figs.)

**Ghiberti's Glazed Terra-cotta.**—W. VON BODE shows that in certain terra-

cotta reliefs which may be attributed to Ghiberti the artist has made attempts at glazing. The reliefs representing the story of Adam and Eve on a chest in the Victoria and Albert Museum and on a fragment of its companion piece in the Museo dell' Opera del Duomo, Florence, are treated with a tin glaze; a relief of the Madonna and Child in the Volpi collection, Florence, has a lead glaze. The experiments were not very successful, but they bore fruit in inspiring the younger artist, Luca della Robbia, to continue the attempts and to perfect the technique. (*Jb. Preuss. Kunsts.* XLII, 1921, pp. 51-54; pl.; 3 figs.)

**Michele da Verona.**—T. BORENIUS offers a brief study of Michele da Verona, whose Crucifixion in the Brera, dated 1501, forms the best touchstone for other attributions. Venetian influence upon the artist is seen in his allegorical scene, owned by Lady Horner, here reproduced for the first time. Of special iconographical interest is a drawing of the Trial of Moses in Mr. A. P. Oppé's collection. (*Burl. Mag.* XXXIX, 1921, pp. 3-4; pl.; 2 figs.)

**Francia's Portrait.**—E. E. C. JAMES publishes a portrait of a man from the Campana collection in Rome and now in the museum at Angers, which she believes to be a self-portrait of Francesco Francia, the one he sent to his friend Raffaello in 1508. A portrait in the Boschi collection evidently portrays the same man some years earlier. (*Burl. Mag.* XXXIX, 1921, p. 89; 2 figs.)

**Drawings by Pisanello.**—Two drawings of stags, studies for the Sant' Eustachio painting, are published by A. VENTURI (*L'Arte*, XXIV, 1921, pp. 90-96; figs.). They are from the Bonnat collection in Paris. Other interesting drawings from this collection are a study for the reverse of the medal of Alfonso of Aragon, studies of leaves and flowers, and a representation of the Santo of Padua as it was in the artist's day. Finally, an unusually fine and naturalistic drawing of a dromedary is published from the Windsor Library.

**Paintings by Piero della Francesca.**—Two panels representing St. Clara and St. Dominic in the Liechtenstein Gallery, Vienna, are attributed by A. VENTURI (*L'Arte*, XXIV, 1921, pp. 152-154; 2 figs.) to Piero della Francesca. Apparently they originally formed parts of a polyptych. They belong to about the same time as the Madonna with Angels of Sinigallia.

**The Mask of Dante.**—The so-called mask of Dante, which exists in so many duplicates, is the basis of a study by C. RICCI (*Rass. d'Arte*, VIII, 1921, pp. 289-294; 6 figs.). Apparently the one from which all the others are cast or modelled is that in the Dante Museum at Ravenna; for it is the one that came into the possession of John of Bologna and later was in Tacca's studio, where there were many sculptors to copy it. But that even it is not actually a mask taken from the face of the poet is shown by a careful study of it. The soft lines of the face, the full treatment of the lips, the open eyes, the indication of the cap, etc., to say nothing of the beauty of modelling, indicate that it is the work of a sculptor or cast from the work of a sculptor. Ricci believes, from comparing the work with the head of Guidarello Guidarelli, that its sculptor was Tullio Lombardi.

**The Cleopatra of the Louvre.**—C. MARCEL-REYMOND calls attention to the fact that the Cleopatra in the Louvre attributed to Gianpetrino is another instance of the great influence Leonardo's Leda had upon the art of the sixteenth century and investigates the attribution of the Cleopatra. That it has been assigned to Gianpetrino seems to have resulted from the general tendency to attribute to that painter all nudes, especially the numerous half-length



figures of nudes that are related closely or distantly to the Milanese school that followed Leonardo. In reality, the character of this painting gives it to the school of Sodoma, if not to that master himself. (*Gaz. B.-A.* IV, 1921, pp. 211-224; 9 figs.)

**The Visconti Venosta Collection.**—C. GAMBÀ describes the Visconti Venosta collection (*Dedalo*, I, 1921, pp. 506-534; pl.; 26 figs.). This is of particular interest because Visconti Venosta found time in spite of his active diplomatic career for intimacy with Morelli and Cavanaghi, whose combined efforts made



FIGURE 6.—TABERNACLE BY BERNARDO DADDI: ROME.

the Milan of their day the centre of art collecting in Italy. The Visconti Venosta collection was long ago removed to Rome. Although its treasures are known singly the effect of its total riches presented by Gamba is surprising. Among significant things may be mentioned examples of Italian and northern minor arts (furnishings and utensils), sculpture, and a thoroughly representative collection of Italian painting beginning with the time of the Giottesques (Figs. 6-7).

**The Villa d'Este at Tivoli.**—The history of the Villa d'Este at Tivoli is the subject of a recent article by VINCENZO PACIFICI. (*Atti e Memorie della Società Tiburtina di Storia e d'Arte*, I, 1921, pp. 58-83; 4 pls.)

## SPAIN

**A Painting by Navarrete.**—B. G. MUR publishes a painting of St. John on Mount Patmos (in the collection of the author) which he shows to be the painting for which King Philip II gave a commission in 1571 to Juan Fernandez Navarrete (called El Mudo). The painting is full of Venetian qualities and helps to characterize its author as "the Spanish Titian." (*B. Soc. Esp.* XXVIII, 1920, pp. 216-225; pl.)

**A Spanish Collection.**—J. PEÑUELAS describes some paintings in the collection of D. Félix Labat. Among the treasures are a fourteenth century Italian Madonna, showing Byzantine influence (possibly to be attributed to Lorenzo Veneziano), a Madonna by Botticelli, a Holy Family by Raphael or a follower, two paintings by El Greco, two by Zurbaran, and several examples of northern schools, attributed to Van der Goes, Mabuse, etc. (*B. Soc. Esp.* XXIX, 1921, pp. 72-77; 2 pls.)



FIGURE 7.—MADONNA BY PINTURICCHIO: ROME.

**Spanish Renaissance Houses.**—The Marquis of LOZOYA describes a number of Renaissance houses of Segovia (*B. Soc. Esp.* XXIX, 1921, pp. 85-95; 2 pls.). While church architecture clung to the Gothic style far into the Renaissance period, the new style was early

adopted for domestic building. Engineers and sculptors came from Ávila and Valladolid, but their style was necessarily modified by the new conditions which they had to meet, particularly by the character of the material offered by the region. The fact that they had to use granite for much of their work imposed a general simplicity and soberness upon the decoration. The same author discusses the houses of the reign of Henry IV and Isabella, in the late fifteenth and early sixteenth centuries (*Ibid.* pp. 1-12; 2 pls.).

## BELGIUM AND HOLLAND

**Pictures from the School of Rembrandt.**—R. R. TATLOCK publishes a painting of Tobias Curing his Father's Blindness (owned by Mr. A. H. Buttery), which he attributes to an unknown artist of the school of Rembrandt in the middle of the seventeenth century. A second picture, Jacob and his Blood-stained Coat (National Gallery, Helsingfors), is clearly the work of another disciple of Rembrandt, Govaert Flinck, by whom it is signed. (*Burl. Mag.* XXXIX, 1921, pp. 195-196; 2 pls.)

**Painters of Mechlin.**—M. J. FRIEDLÄNDER finds in a number of engravings a clue to the kind of work painters were doing in Mechlin in the early sixteenth century under the regency of Margaretha. Among the Mechlin painters of this period listed by van Mander, it is possible to identify Nicolas (given *Hans*

by van Mander), Hogenberg and Frans Crabbe as the authors of extant engravings, notably the series of The Entry of Charles V into Bologna by Hogenberg. Hogenberg, who came from the south, was more independent than Crabbe; the latter was apparently not a little influenced by him as well as by others. (*Jb. Preuss. Kunsts.* XLII, 1921, pp. 161-168; 5 figs.)

**A Self-Portrait by Rembrandt.**—R. FRY describes the qualities in a portrait little known to the public, which is a late work by Rembrandt and one of his finest creations. (*Burl. Mag.* XXXVIII, 1921, pp. 262-263; pl.)

**The Barend Family.**—J. HEWITT traces some of the main facts in regard to several generations of the Dutch painters, the Barend family. One member, Barent Dircksz, is identified as the painter of several pictures in Chichester cathedral, formerly thought to have been done by an Italian named Theodoricus Barnardi. The work is to be dated in about 1519. (*Burl. Mag.* XXXVIII, 1921, pp. 263-264; fig.)

**A Painting by Vermeer.**—R. R. TATLOCK publishes the little painting of the Girl with the Flute, recognized a few years ago as a work of Vermeer of Delft. (*Burl. Mag.* XXXIX, 1921, pp. 28-33; fig.)

**The "Hours" of James IV.**—P. DURRIEU gives a résumé of the characteristics of the school of miniature painters which, from the region in which it was active, he terms "*ganto-brugeoise*," and he publishes a Book of Hours done by this school, which is identified by coats of arms and other insignia as that of James IV, king of Scotland, and his wife, Margaret of England. The manuscript is of special importance not only because of the excellent quality of the best of its miniatures, but because, being datable, between 1503 and 1513, it serves to date a group of similar manuscripts hitherto undatable. (*Gaz. B.-A.* III, 1921, pp. 197-212; 2 pls.)

**Drawings by Lambert Lombard.**—In calling attention to the importance of authentic drawings for any analysis of the art of Lambert Lombard, M. KUNTZIGER (*Gaz. B.-A.*, IV, 1921, pp. 185-192; 6 figs.) publishes a number of the drawings and discusses their style.

## AMERICAN ARCHAEOLOGY

### GENERAL AND MISCELLANEOUS

**Two Types of Cliff-dwellings.**—J. W. FEWKES distinguishes between two types of prehistoric cliff-dwellings in the Southwest: (1) that which includes a circular and vaulted room called the kiva, used for ceremonial purposes, found in Colorado and northern Arizona; (2) that which shows no trace of the kiva, in southern Arizona and southern New Mexico. (*Annual Report of the Smithsonian Institution*, 1919, pp. 421-426; 6 pls.)

**Iroquois Archaeology.**—A. B. SKINNER has published an additional study of the characteristic Iroquoian remains in New York State. The monograph contains three papers: Archaeological Problems of the Northern Iroquois, Notes on Cayuga Archaeology, and Archaeological Researches in Jefferson County, N. Y. The author reiterates the conclusion that there are two culture levels in the region, an older, more uniform Algonkian level, and a later somewhat varied Iroquoian one. He thinks that Cayuga pottery is a development subsequent to the arrival of the Iroquois in their historic habitat (p. 87). Their ceramic art does not resemble that of the Cherokee and other southern Iroquoian

peoples. He summarizes the two cultures by contrast: "The material culture of the early Iroquois of New York was, roughly speaking, a culture of bone and of clay. . . . The Algonkian culture was one which developed the working of stone." [*Notes on Iroquois Archaeology*, New York, 1921, Museum of the American Indian. 216 pp.; 37 pls.; 52 figs.]

**The Lenapé.**—M. R. HARRINGTON is the author of one of a much needed series of studies on the life of the Delaware or Lenapé Indians formerly inhabiting New Jersey and Pennsylvania. These people removed from the east and are now to be found distributed in various parts of the west to the number of about 1900 in Oklahoma, Ontario and Kansas. Harrington treats the Lenapé pantheon, minor deities, beliefs of the soul, visions and guardian spirits and the great annual ceremony, and minor ceremonies. The ethnologist is struck with a conviction of the derivation of Lenapé institutions from both the Iroquois and the southern culture areas. The use of masks, stone sculptures, purification rites, and dances are instances. The whole account of this little-known group is not so full but that we could wish for more. [*Religion and Ceremonies of the Lenapé*. New York, 1921, Museum of the American Indian. 249 pp.; 9 pls.; 19 figs.]

**The Sun Dance.**—LESLIE SPIER has published two papers which furnish an ethnological survey and equation of the dominant feature of the religious life of the plains Indians. The Sun Dance is a ceremonial complex, its minor traits borrowed back and forth in the region under a systematic selection, the product of a long series of historical events. [*Notes on the Kiowa Sun Dance*, Anthropological Papers of the American Museum of Natural History, XVI, 1921, part VI; 13 pp.; fig. *The Sun Dance of the Plains Indians, its Development and Diffusion*, *ibid.* part VII; 67 pp.; map.]

**The Stone of the Sun.**—A work by E. J. PALACIAS on the Stone of the Sun in the Archaeological Museum in Mexico has been translated by F. STARR. It comprises a description of the stone, and an interpretation of its symbols, which express the prehistoric Mexican division of time, from minutes to centuries of 104 and cycles of 416 years. The author draws some inferences regarding the chronology and history of the Indian races of Mexico. [*The Stone of the Sun and the First Chapter of the History of Mexico*. Chicago, 1921, University of Chicago Press. 78 pp.; 3 pls.; fig; 4to.; \$0.75.]

**A Mexican Stone Drum.**—H. BEYER discusses an ancient Mexican representation of a drum in stone, now in the Museo Nacional in Mexico. (*Mémoires de la Société Scientifique "Antonio Alzate,"* XXXIX, 1921, pp. 335-342; 8 figs.)

**A Mexican Vase.**—H. BEYER describes an ancient Mexican vase which has the curious form of an upturned head, the open mouth being the orifice of the vase. (*Mémoires de la Société Scientifique "Antonio Alzate,"* XXXIX, 1921, pp. 195-201; 5 figs.)

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## A NEW TYPE OF ARCHAIC ATTIC GRAVE STELE

AMONG the recent accessions of the Metropolitan Museum of Art, in New York, is a marble base or acroterion with an incised lotus design, evidently intended to serve as a support for sculpture, and certainly of Attic origin (Fig. 1).<sup>1</sup> The only known analogy for this form is the well-known stele from Lambrika, the ancient Lamptrae, drawn by Fourmont in 1730, rediscovered in 1886, and now in the National Museum at Athens (Fig. 2).<sup>2</sup> Though the two pieces differ in size and in decoration, and so were not set up as pendants, yet they are obviously of the same style, perhaps even by the same carver, and so are best considered together.

The material employed in both examples is bluish Hymettian marble, as Lepsius remarked in the case of the stele from Lamptrae.<sup>3</sup> This would indicate that both were of local manufacture, dating from a period before the opening of the best quarries of white Pentelic marble (*i.e.* before 500 B.C.), and that they were not regarded as of sufficient importance to justify the use of imported Parian marble.

<sup>1</sup> *B. Metr. Mus.* 1920, p. 108; *Fifty-first Annual Report*, 1920, p. 14. Shown at the Fiftieth Anniversary Exhibition, in May, 1920. For permission to publish the marble I am indebted to Dr. Edward Robinson and to Miss G. M. A. Richter. I wish to thank Miss Richter also for the photographs of the stele.

<sup>2</sup> Concerning the stele of Lamptrae see: Fourmont *Mss.*, Paris, *Bibl. Nat.*, *Suppl. gr.* 854, ff. 36, 334, and 569, fo. 93; Milchhöfer, *Ath. Mitt.* 1887, p. 102; Winter, *ibid.* pp. 105-118, pl. II; Borrmann, *Jb. Arch. I.* 1888, p. 271; Wolters, *Arch. Eph.* 1888, pp. 189-191; Kavvadias, *Γλυπτὰ τοῦ ἑθνικοῦ Μουσείου*, No. 41; Stais, *Guide illustré du Musée national d'Athènes*, No. 41; Conze, *Att. Grabreliefs*, I, pp. 9-10, pl. XI; Collignon, *Statues funéraires*, pp. 34-37, 63; Gardner, *Sculptured Tombs of Hellas*, pp. 125-126; Gardner, *Principles of Greek Art*, pp. 144-145; Perrot and Chipiez, *Histoire de l'Art*, VIII, pp. 83, 85, 658; Collignon, *Sculpture grecque*, I, pp. 382-383; Lechat, *Sculpture attique avant Phidias*, p. 295 n. 1; Wiegand, *Poros-Architektur*, pp. 69-70; Helbig, 'Les *ἱστῆρες* athéniens,' *Mem. Acad. Inscr.* XXXVII, 1904, pp. 52-53; Helbig, *Jh. Oest. Arch. I.* 1905, p. 197; Brunn-Bruckmann, *Denkmäler*, pl. 66; Reinach, *Répertoire de Reliefs*, II, 418, 2.

<sup>3</sup> *Ath. Mitt.* 1887, p. 106 n. 2.

The leading characteristic of the two stelae is their unusual form. Each consists of a simple abacus, oblong in plan, below which is a spreading curve resembling the throat moulding of the regular Egyptian cornice. In the stele from Lamptrae, but not in that in New York, we find at the bottom an additional member, the mutilated remains of a projecting collar or moulding.



FIGURE 1.—STELE IN NEW YORK: FACE.

In dimensions the stele in New York is slightly smaller than that from Lamptrae. The former is 0.636 m. high, the latter 0.735 m.; the measurements at the bottom are 0.363 x 0.122 m. in the former and 0.42 x 0.17 m. in the latter, while on the abacus they are 0.638 x 0.204 m. and 0.678 x 0.255 m. respectively.<sup>1</sup> The height of the abacus, the entire vertical member above the flaring curve, is 0.119 m. in New York and 0.129 m. in Athens.

Analysis of these dimensions indicates that both stelae were designed with reference to a foot rule, and that this bore no relation to the ordinary Attic foot of about 0.327 m. then already in

<sup>1</sup> These general measurements of the stele from Lamptrae are taken from Conze's publication; for details noted hereafter I have referred to a cast in the Metropolitan Museum.

use; it was, on the contrary, the Ionic foot of about 0.294 m. Thus the total height of the stele from Lamptrae was made exactly  $2\frac{1}{2}$  Ionic feet of 0.294 m.; then, using the side of his rule that was divided into twelfths of feet, the artisan set off  $\frac{1}{6}$  foot for the moulding at the bottom, making the portion above the moulding, that is, the throat and abacus,  $2\frac{1}{3}$  feet high; the



FIGURE 2.—STELE IN ATHENS: FACE.

width he made exactly the same,  $2\frac{1}{3}$  feet, giving a square in elevation. For the stele in New York (where the bottom moulding is absent) he made the height  $\frac{1}{6}$  foot less, or  $2\frac{1}{6}$  foot; again the width is exactly the same. At this point the direct application of the foot rule ceased. For now, using the other side of his rule, divided into sixteenths of feet, he cut each side of each square into sixteen parts (Fig. 3); the height of the abacus is three parts and that of the throat thirteen parts in both cases. While the width of the abacus is uniformly sixteen parts, the depth is six parts in Athens and five parts in New York; and the width at the bottom of the throat is ten parts in Athens, nine

parts in New York, while the depth at the same level is in both cases less than that of the abacus by two parts. As compared with the actual dimensions, these theoretical dimensions are as follows:

	STELE IN ATHENS		STELE IN NEW YORK	
	Actual	Ionic Feet	Actual	Ionic Feet
Height, total . . . . .	0.735 m.	$2\frac{1}{2} = 0.735$ m.	0.636 m.	$2\frac{1}{8} = 0.637$ m.
Height, without bottom moulding . . . . .	0.685 m.	$2\frac{1}{8} = 0.686$ m.	0.636 m.	$2\frac{1}{8} = 0.637$ m.
Width of abacus . . . . .	0.678 m.	$2\frac{1}{8} = 0.686$ m.	0.638 m.	$2\frac{1}{8} = 0.637$ m.
	Actual	In 16ths of Square	Actual	In 16ths of Square
Height of abacus . . . . .	0.129 m.	$\frac{2}{16} = 0.1285$ m.	0.119 m.	$\frac{1}{8} = 0.1195$ m.
Depth of abacus . . . . .	0.255 m.	$\frac{4}{16} = 0.257$ m.	0.204 m.	$\frac{1}{8} = 0.199$ m.
Width of throat . . . . .	0.42 m.	$\frac{1}{8} = 0.4285$ m.	0.363 m.	$\frac{9}{16} = 0.3585$ m.
Depth of throat . . . . .	0.17 m.	$\frac{4}{16} = 0.1715$ m.	0.122 m.	$\frac{3}{8} = 0.1195$ m.

The unit, the sixteenth of the side of the square, is 0.0429 m. in the stele in Athens; the maximum error is a fifth of this unit, which occurs in two instances, while the four other measurements are within 0.002 m. of the estimated scheme, extreme accuracy for careless work of this kind. Similarly in the New York stele, where the unit is 0.0398 m., the maximum error is an eighth of the unit, occurring in two instances, while the four other measurements are again within 0.002 m. of the planned amount; in a monument wherein the uniform spacing of the rosettes on the abacus shows an error of 0.014 m., this is surely accurate enough to satisfy our expectations.

The implication of such dimensions, namely, that the designer

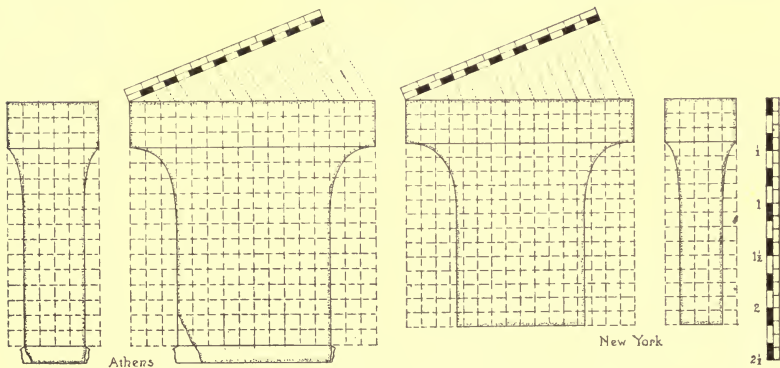


FIGURE 3.—PROPORTIONS OF THE TWO STELAE.



was of Ionic origin, would seem to be confirmed by the forms of the decorative patterns.

The back of the New York stele, like its counterpart in Athens, is without decoration of any kind, and is only roughly tooled; it is moulded, however, exactly like the front (Fig. 4).

In decoration the two blocks are strikingly similar. Each is



FIGURE 4.—STELE IN NEW YORK: BACK.

carved in "relief," if we may so term it, on one broad face and on both ends. The technique is most peculiar; it consists merely of drawing by means of incised lines, and then of beveling or chamfering the surface on one side of the line, preferably the background, so that the area enclosed within the line stands forth in silhouette, with squarely cut edges. Apart from the bevel, 0.004-0.005 m. wide, the background is flush with the applied decoration.<sup>1</sup> The depth of the beveled surface is generally about 0.002 m.; at one point, behind the manes of the horses on the stele from Lamptrae, it attains 0.004 m. On the abacus, the

<sup>1</sup> The general appearance is very similar to that of unfinished reliefs in Egyptian mastaba tombs of the Old Kingdom. In these, however, the background would ultimately have been cut back to the depth of the beveled edges, whereas in the two Attic stelae the background was obviously intended to remain in its present state.

ornament in both cases consists of a row of rosettes enclosed within a frame. So far the two stones are alike in general appearance. But on the upper portion of the flaring throat moulding in the stele from Lamprae we have a Doric leaf pattern, with the leaves upright; and below



FIGURE 5.—STELE IN  
NEW YORK: LEFT  
SIDE.

the leaf pattern is a rectangular panel containing a horseman, while on the right edge appears an old man leaning on a staff in a mournful attitude, on the left edge two women tearing their hair. The stele in New York, on the other hand, has the portion below the abacus entirely filled by a conventionalized lotus and volute pattern, repeated in more compact form on the ends (Fig. 5).

The abacus in New York is bordered above and below by two bands, the inner one of which shows a slightly convex profile and was painted red;<sup>1</sup> these are carried across the two ends but not round the back. In the Lamprae example, where we have similar bands, we find an additional refinement in, that they are returned vertically at each edge of the abacus, forming rectangular panels. In both cases the wide central area is filled with rosettes. In New York there are four rosettes on the front and none on the ends; the rosettes are inscribed in circles 0.072 m. in diameter, and are eight-petaled, with interior model-

ing. In the Lamprae capital we have five ornaments on the front and one on each end; two of those on the front, and those on the ends, are eight-petaled rosettes but without interior modeling; the three others on the front are square lotus patterns, alternating with the rosettes. It is in the ornament of the Hekatompedon, and of the surrounding smaller temples on the Acropolis, dating from the first half of the sixth century, that these forms find their closest analogies.<sup>2</sup>

<sup>1</sup> The bands are 0.012 m. wide at the upper edge, but only 0.011 m. wide at the lower edge of the abacus. Across the front the lowest band is reduced in width to 0.008 m. by an incised line (only 0.003 m. above the bottom of the abacus) which does not appear at the ends.

<sup>2</sup> Cf. Wiegand, *Poros-Architektur*, pl. VI, 4-6; pl. IX, 2a-b, 3.

The great lotus ornament, rising from a pair of upward springing volutes, filling the entire lower part of the New York stele, is perfectly adapted to the field; and the choice of this type of ornament may even have been suggested to the designer by the use of the throat moulding. The three great calyx leaves, ribbed to imitate the natural form, were painted in alternating colors, blue, red, and blue, from centre to edge. In the two triangular areas left between the calyx leaves appears the central mass of petals, conventionalized to form three lobes in each area; in each group of three, the central lobe was blue, the others (probably) white; blue bands bind together the bottoms of the lobes, and the apex of the triangle below each group is likewise blue. Narrow red edges outline and separate all these members, calyx leaves, petal lobes, and connecting bands. The volutes below, probably left in the natural bluish white of the marble, are also outlined in red; the eyes are blue, with red enframing circles; and the connecting band between the volutes is divided into concentric rectangles of blue and white. The seven small areas of background not occupied by this ornament show traces of blue.<sup>1</sup> The abbreviated patterns on the two ends show traces of the same polychrome treatment.<sup>2</sup> The bottom of the field is bounded by two bands like those enframing the abacus, the upper one convex in profile and painted red; this upper band is not returned across the left end.

The lotus pattern of the throat moulding, like the rosettes of the abacus, resembles closely, both in technique and design, the ornament on the soffit of the raking cornice of the Hekatompedon,<sup>3</sup> and that on the sima or gutter-moulding of the same temple,<sup>4</sup> dating from about 566 B.C. Such semi-naturalistic lotus flowers, both those of the Hekatompedon and that in New York, find their closest analogies in vase paintings of the various Ionic fabrics,

<sup>1</sup> The picked or hammered surface which appears in many of the blue areas is apparently due, not to the original sculptor, but to some idle Greek who thus amused himself while the colors were still fresh.

<sup>2</sup> These numerous remains of color yield welcome confirmation to the belief of Kavvadias that he could distinguish traces of red on the background of the left edge relief in the stele from Lamptrae; Conze reported that Brückner was unable to find such color. Even without such traces, however, it would be obvious that reliefs of this technique must have been supplemented by color.

<sup>3</sup> Wiegand, *Poros-Architektur*, pp. 23-25, pls. I-II; Heberdey, *Allattischer Poroskulptur*, pp. 127-128.

<sup>4</sup> Wiegand, *op. cit.* pl. IX.

wherein the lotus can be traced up from Egypt through Cyprus, Rhodes, and the Ionic coast, and thence across the Aegean to the two chief centres of archaic vase painting, Corinth and Athens, where they appear early in the sixth century, at the time of the building of the Hekatompedon. From the use of Ionic rather than Attic units of measure, and pure Ionic ornament, it is reasonable to conjecture that we have in these stelae the work of an Ionic artist who had migrated to Attica, perhaps one of many craftsmen called from abroad at the time of the construction of the Hekatompedon, just as Peisistratus afterwards called in numerous Ionic sculptors from Samos, Chios, Paros, and Naxos. Thus Winter was probably correct in assigning the stele from

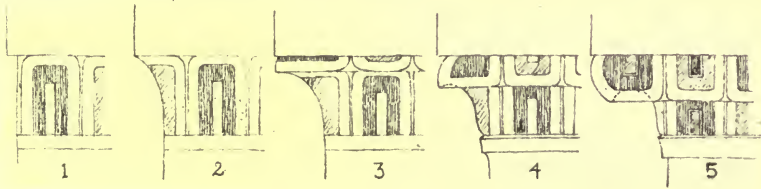


FIGURE 6.—DEVELOPMENT OF THE DORIC CYMA.

Lamptrae to the middle of the sixth century; I should be inclined, on account of the resemblance to the Hekatompedon, to place both about a decade earlier, about 560 B.C.

The New York stele has nothing corresponding to the Doric or upright leaves occupying the upper part of the throat moulding in the Lamptrae example; yet on account of its chronological importance we must refer to this pattern. The Doric leaf ornament was in later times associated with a special profile, the Doric cyma or hawksbeak, just as its counterpart, the Ionic egg-and-dart, was later associated purely with the ovolo moulding. Originally, however, the two types of ornament were very similar, and differed chiefly in the direction of the leaves, either upright (Doric) or pendant (Ionic). Thus the development of the Doric cyma seems to have passed through the following stages (Fig. 6), which can be identified by means of their characteristic ornament: (1) the vertical plane, as in the metopes of the old Hekatompedon; (2) the simple throat moulding, as in many archaic Attic votive bases; (3) the first representation of the top of the leaf, as in the stele from Lamptrae; (4) the double curvature of the lower mem-

ber, as in later archaic votive bases;<sup>1</sup> and (5) the fully developed profile. The stele of Lamptrae, with its rudimentary beak, represents the middle stage, and again, therefore, would indicate the middle of the sixth century as a suitable date.

Having discussed the form and the probable authorship and date of the two stelae, we now come to the question to which my attention was first drawn when the example in New York was placed on public view, namely, the restoration of the monuments to which they belonged.

The chief purpose of the spreading abacus, in both cases, was to form a wider base for the support of some crowning object.



FIGURE 7.—STELE IN NEW YORK: TOP.

In order to fasten this object, now missing, a rectangular cavity was cut in the top of each stone. That on the stele from Lamptrae is about 0.16 m. wide, 0.465 m. long, and 0.035 m. deep, and somewhat irregular in shape—so irregular, in fact, that the object supported could not have been a stele or a palmette acroterion; Winter suggested, with great probability, that it was a sphinx. The cutting on the stele in New York (Fig. 7), on the other hand, is perfectly regular in form, about 0.07 m. wide, 0.30 m. long, and 0.075 m. deep; in it still remains, imbedded in lead, a portion of the missing marble object; in this case it might have been a stele, but I am inclined to believe that it was again a sphinx,<sup>2</sup> as on a colossal stele in the Metropolitan Museum where the cavity is equally regular.

This brings us to the question of the purpose of the stones. That from Lamptrae is obviously a sepulchral stele; the attitudes of the accessory figures on the right and left edges are conclusive

<sup>1</sup> There are several variants of this scheme, as, for instance, in the pedestal of Antenor's Acropolis maiden.

<sup>2</sup> The cutting terminates 0.18 m. from the right end, 0.155 m. from the left end, indicating an unsymmetrical emplacement of the object.

on this point. The marble in New York might have been a votive support; there is nothing in the decoration, at least, to suggest a sepulchral character (unless the lotus ornament and the sphinx can be so interpreted); but I shall assume, for lack of further evidence, that it was a grave stele, like its twin from Lamprae.

On what sort of a base should such a stele be placed? Winter restored the stele from Lamprae as resting on a crepidoma of three steps, each about 0.12 m. high, making the total height 1.00 m. (Fig. 8). This restoration has been widely accepted,<sup>1</sup> and if it could be verified the marble in the Metropolitan Museum should undoubtedly be restored in the same manner. But against this restoration there are serious objections.

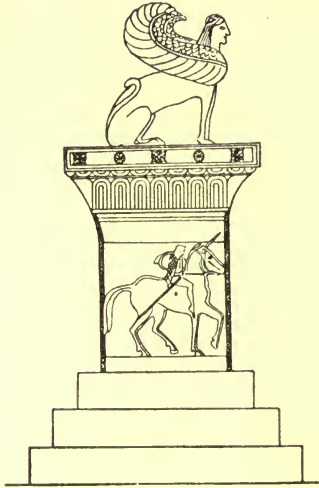


FIGURE 8.—STELE IN ATHENS:  
WINTER'S RESTORATION.

In the first place, the steps restored by Winter are, in themselves, too trivial in scale, and they leave the top of the stele too far below the level of the eye. The top is, in both examples, very roughly tooled, and was hardly intended to be exposed to view; we must, therefore, raise it above the level of the eye, to a greater height, that is to say, than 1.60 m. If steps seemed desirable, a more satisfactory solution would be to use high risers and narrow treads like the steps supporting the sepulchral statue by Phaidimos, from Vourva in Attica.<sup>2</sup>

The next question is, therefore, are steps of any form suitable for such a monument? To answer this, we must consider the method of fastening or holding the blocks in place. In small votive and grave monuments of this scale the mode of fastening was always the tenon and mortise, employed, however, in different ways. Thus when an upright member was set upon a base of

<sup>1</sup> Winter, *Ath. Mitt.* 1887, p. 105 fig. 1; Percy Gardner, *Sculptured Tombs of Hellas*, p. 125, fig. 46; Perrot and Chipiez, *Histoire de l'Art*, VIII, p. 85, fig. 51; Reinach, *Répertoire de Reliefs*, II, 418, 2.

<sup>2</sup> Δελτίον Ἀρχαιολογικόν, 1890, pl. Γ', 4; Perrot and Chipiez, *op. cit.* p. 82, fig. 50; Collignon, *Statues funéraires*, p. 35, fig. 14.

sufficient width, as a stele or column upon a plinth, or a statue upon a pedestal cap, then the base could safely be hollowed out to receive the entire foot of the upright member, which in itself became the tenon (Fig. 9, 1). When the wider member was not of sufficient projection to take the entire thickness of the upright, as in the case of a moulded base (2a)<sup>1</sup> or capital (2b), then it was

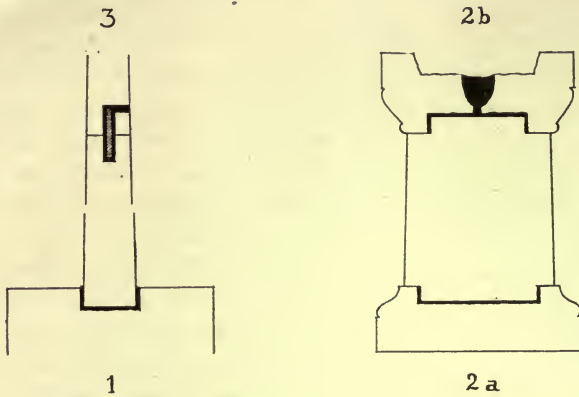


FIGURE 9.—MORTISE AND TENON IN ARCHAIC PEDESTALS.

necessary to reduce the size of the inserted portion, forming a true tenon. And when the members were both so small that a marble tenon could not be cut on either of them, a thin metal tenon was used, that is to say, a dowel fitting into cavities cut in both the upper and the lower piece (Fig. 9, 3).

The tenon, be it the entire foot, a true tenon, or merely a dowel, always fitted loosely into the mortise, leaving space for a bed of molten lead which was poured in to serve at once as bonding material and as cushion. When the entire foot of a column, stele, or statue was to be set in a socket, a thin bed of lead was apparently poured in first, the upright member set upon this, and then the surrounding crack of 0.005 m. filled up with lead flush with the top of the base;<sup>2</sup> in such cases a portion of the lead always remained visible (Fig. 9, 1). But when the chamber to be

<sup>1</sup> Moulded bases are rare in work of this kind; the example shown is from a Caryatid pedestal of the Siphnian Treasury at Delphi.

<sup>2</sup> In statue plinths a hole was sometimes bored vertically between the feet, and lead was poured through this as well as into the crack round the edge of the plinth.

filled with lead was not exposed, as in the case of a true tenon, the process became more complicated. If the tenon was cut on the bottom of the upper member (as was rarely the case), then a simple pour channel cut on the top of the lower member sufficed (2a). But when the tenon was cut on the top of the lower member, the pour channel had to be placed at a higher level in order to enable it to reach the top of the mortise; and in many cases it was found most economical to bore a vertical pour channel down from the top of the stone, especially if, as in capitals of votive pedestals, the capital were already partly hollowed to receive the foot of a statue or other object (2b). In such cases the mouth of the vertical pour channel was widened, in the shape of a cup or funnel, to facilitate the pouring. Finally, members such as were connected by metal dowels being usually too thin and high to permit boring from the top, we have another method of pouring the lead, through a round hole bored horizontally from the back of the stone at the level of the top of the dowel (Fig. 9, 3). These three types of connection will undoubtedly cover the majority of cases, though a few exceptional examples might, perhaps, be found if we were to inventory large collections such as exist in the Acropolis Museum and Epigraphical Museum, at Athens.<sup>1</sup>

If the Lamprae type of stele were set upon a broad plinth or step, as Winter supposed, the junction must have been of type 1. It was a hard and fast rule that the bottom of a stele should be set down into the plinth for a depth of 0.05–0.10 m.; there are no exceptions.<sup>2</sup> Now the Lamprae stele has, to be sure, a broken projecting surface 0.05 m. high along the lower portion of the face, which might possibly be interpreted as the remains of a roughened band which was set down into a plinth, though such a projecting band would be without parallel in other examples. But the New York stele is decorated to within 0.016 m. of the

<sup>1</sup> The lost stele of Theron (Conze, *op. cit.* pl. XIV, 1) had a separate crowning palmette, so thin that we should have expected to find a metal dowel; instead of this a marble tenon seems to have been used, though the drawings of Stackelberg, Kinnaird, and Vulliamy show discrepancies. In the capital shown by Borrmann (*Jb. Arch. I.*, 1888, p. 275 fig. 15) we have a separate dowel, perhaps of marble, of type 3, but the pour channel is at the level of the joint and so at only half of the height of the dowel; the dowel must, therefore, have been led into the capital while the latter was upside down, before being set in place. In effect, therefore, these two exceptions are of type 2a.

<sup>2</sup> This was noted also by Conze, *op. cit.* p. 12.



bottom, and even the lowest band is required to complete the pattern; this stele, therefore, could not have been set down into a socket, but must have rested on the very top of the stone next below. This observation is confirmed by another fact. In the bottom of the New York stele is a great dowel hole, 0.22 m. long, 0.04 m. wide, and 0.115 m. high, into which the lead was poured through a round hole 0.021 m. in diameter bored horizontally from the back of the stone, at the level of the top of the dowel (Fig. 4). According to Conze's description,<sup>1</sup> a dowel hole exists also in the bottom of the Lamptrae base, though we have no particulars as to the pour channel. Such a dowel eliminates the possibility of restoring a socket of type 1; and such a dowel, furthermore, was never employed when it was a question of fastening a stele to a plinth or step. In other words, the Lamptrae stele and its New York counterpart are examples of the third type of fastening, and the faces of each must have been practically flush with the faces of the stone on which it was set.

What was the form of the missing lower stone in each case? The dimensions of the bottoms of the existing blocks are, as we noted, 0.42 x 0.17 m. in the stele from Lamptrae, 0.363 x 0.122 m. in the stele in New York. Both are characteristic dimensions of archaic Attic stelae, among which the extreme examples are about 0.62 x 0.15 m.<sup>2</sup> and 0.265 x 0.08 m.<sup>3</sup> With such dimensions, it is difficult to restore the lower stone in each case otherwise than as a tall tapering stele, to which the existing blocks become merely the capitals. This form would also explain the tapering of the capital below the outward flare; in the Lamptrae example the width of the face is reduced from 0.42 m. to 0.40 m. (at the top of the panel) before it flares out to 0.678 m.; in the New York capital the reduction is less marked, from 0.363 m. to 0.359 m. (Fig. 10).<sup>4</sup>

This restoration seems to be confirmed also by the form of the decoration. On the Lamptrae capital the accessory figures at left and right are obviously the mourners at the funeral; and what was easier than to interpret the youthful rider as the deceased himself? Such was the interpretation that long passed muster.

<sup>1</sup> Conze, *op. cit.* p. 9.

<sup>2</sup> Noack, *Ath. Mitt.* 1907, p. 555, fig. 34.

<sup>3</sup> Stele of Antiphanes; Conze, *op. cit.* pl. XIII.

<sup>4</sup> The restoration of the plinth and shaft here shown was carried out under the direction of Miss Richter. A similar restoration of the stele in the Museum at Athens would be desirable.



FIGURE 10.—STELE IN NEW YORK: RESTORATION.

But when we observe that the rider bears two shields, one the round shield of the hoplite and the other the crescent-shaped shield of the light-armed peltast, and that, furthermore, behind his mount is a second, and riderless, horse, the question becomes more complicated. Obviously somebody is absent. Helbig, therefore, surmised that the rider does not represent the deceased, but rather his squire or attendant, as frequently shown in the lower portions of Attic stelae;<sup>1</sup> this was accepted by Collignon, and seems to be the only logical explanation. Far less satisfactory is the conclusion of Helbig and Collignon, that the missing image of the deceased must be placed above the horseman, in the form of a statue. The form of the cutting on the stele from Lamprae is too narrow for such a purpose, and its irregularity can be explained only on Winter's supposition that it contained an animal. But with a high shaft below the capital, we are at perfect liberty to assume that the image of the deceased was carved in relief on its face, in a pose like that on the ordinary stele. The same is true of the stele capital in New York. Here the decoration of the face is different, a conventional floral pattern; but it is to

<sup>1</sup> Helbig, 'Les *ἑπιτάφιοι* athéniens,' *Mem. Acad. Inscr.* XXXVII, 1904, pp. 52-53; cf. *Jh. Oest. Arch.* I. 1905, p. 197; Collignon, *Statues funéraires*, p. 63.

be noted that its form is that of a floral acroterion, resembling the palmette type with volutes such as frequently crowned archaic grave stelae. The application of this acroterion decoration to the face of the capital implies that below it was a shaft of the usual stele form.

The Lamprotrae type of capital is unprecedented among Attic grave stelae, though we find many analogies in another group of small monuments, the pedestals of votive offerings. It is, in fact, next to the mere abacus, the simplest form of capital that could be devised to provide a shelf on which to set an offering. Among the examples found on the Acropolis, the flaring throat moulding and the simple abacus occur on the stele of Onatas (in which the capital is cut in the same stone with the shaft) and in three separate capitals; in the last of these we find the same upright Doric leaf pattern that appears on the stele capital from Lamprotrae.<sup>1</sup> In these separate votive capitals the fastening to the shaft is of type 2b, because the shafts are of heavier proportions than the thin slabs from which were fashioned the grave stelae.

In thus adding a new type to the few known forms of archaic Attic grave stelae, it is necessary to consider its general relation to the series. Apparently there are five types (Fig. 11), two (A and B) being widely represented while the three others are known either in single examples (C and E) or in the work of a single man (D).<sup>2</sup>

(A) The type without acroterion, the simplest, was first made known by Noack during his investigation of the Themistoclean walls of Athens; there he found one example of which the top is perfectly horizontal, and roughly tooled, with no preparation for a crowning member.<sup>3</sup> A second example is in the Boston Museum of Fine Arts.<sup>4</sup> Noack indeed conjectured that many of the well-known incomplete stelae, as those of Aristion and Lyseas, were of this type, but the conjecture cannot be verified.

(B) The type with palmette acroterion, long supposed to be the conventional type of archaic Attic grave stele.<sup>5</sup> The authen-

<sup>1</sup> Borrmann, *Jb. Arch. I.* 1888, p. 271, figs. 2 and 3; p. 272, figs. 5 and 6.

<sup>2</sup> In Fig. 11, types A to C are generic forms rather than reproductions of specific examples; type E is sketched from the *Handbook* of the Metropolitan Museum (cited below); while in type D the proportions are represented as slightly lower than in the actual restoration (Fig. 10), for the sake of agreement with type E.

<sup>3</sup> Noack, *Ath. Mitt.* 1907, p. 541; cf. *A.J.A.* 1911, p. 297, fig. 4.

<sup>4</sup> Caskey, *A.J.A.* 1911, p. 294, fig. 1.

<sup>5</sup> Brueckner, *Ornament und Form der attischen Grabstelen*, p. 60; Furtwängler, *Samml. Sabouroff*, I, text to pl. II.

tic examples of this type, however, are not very numerous; we have the stele of Antiphanes in Athens<sup>1</sup> and that of Antigenes in the Metropolitan Museum,<sup>2</sup> both painted but without relief sculpture. The upper part of a stele in Athens, of this type,<sup>3</sup>

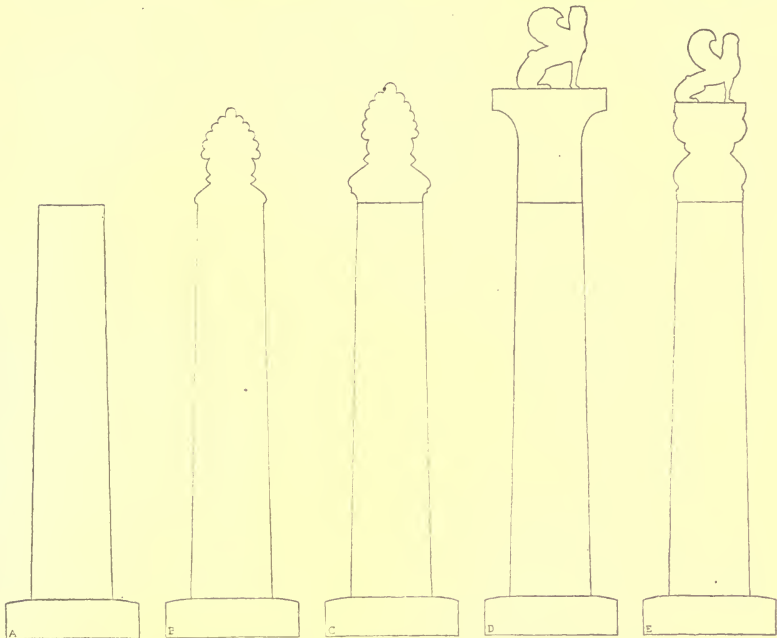


FIGURE 11.—FIVE TYPES OF ARCHAIC ATTIC GRAVE STELAE.

has incised ornament, the technique being similar to that of the Lamptrae capital. In these three examples the acroterion is cut in the same slab with the shaft. In the lost stele of Theron the acroterion was separate, fastened to the shaft by a tenon.<sup>4</sup>

(C) A type represented by a single fragment in the National Museum at Athens;<sup>5</sup> a special capital with a flaring throat moulding is inserted between the shaft and the palmette acroterion. The throat moulding is decorated with an upright Doric leaf pattern. The acroterion was fastened to the shaft by a metal dowel, leaded through a hole from the back.

<sup>1</sup> Conze, *op. cit.* pl. XIII.

<sup>2</sup> *B. Metr. Mus.* 1916, p. 125, fig. 1.

<sup>3</sup> Conze, *op. cit.* pl. XIV, 4.

<sup>4</sup> Conze, *op. cit.* pl. XIV, 1; the drawing by Kinnaird seems more reasonable (*Antiquities of Athens, Suppl.*, p. 13).

<sup>5</sup> Conze, *op. cit.* pl. XIV, 6.

(D) The type with an animal acroterion, a lion or preferably a sphinx. Several of the Attic sphinxes, as that from Spata (0.45 m. high), seem to be of the proper dimensions for such a purpose. In this type, a larger plinth being desired at the top of the shaft to give sufficient area for the support of the animal, a separate capital was always provided in order to avoid waste of material in the shaft. The simplest form of capital is that in New York, merely the flaring throat moulding and abacus; on account of the long association of the floral acroterion with the stele (type B), an acroterion pattern was incised on the face of the capital, so that in spirit we have two superposed acroteria, one painted on the capital and one carved in the round above the capital. Next in order comes the capital from Lamptrae, in which advantage was taken of the separate block to add a special necking moulding, now broken off,<sup>1</sup> below the curve (Fig. 3). In both examples the animal was let into a socket in the top of the capital, the fastening being of type 1; and the fastening of the capitals to the shafts was of type 3, each having a great metal dowel leaded through a round hole from the back of the capital. Such a dowel hole appears on the top of the shaft of one of the stelae found by Noack;<sup>2</sup> it is uncertain, however, whether this should be assigned to group D, or to group B with a separately cut acroterion.

(E) A composite type represented only by a colossal stele in the Metropolitan Museum,<sup>3</sup> with two actual acroteria superposed. At the bottom of the capital block is a projecting necking moulding, such as must have occurred in the stele from Lamptrae; above this we have, instead of the flaring capital, a true floral acroterion, though with lines designed for the better support of the flat abacus which is set abruptly upon its top; on the abacus sat the animal acroterion. The capital block is fastened to the shaft in the same manner as in the two examples of group D.<sup>4</sup>

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<sup>1</sup> This is my interpretation of the rough projecting surface 0.05 m. high at the bottom of the capital.

<sup>2</sup> Noack, *Ath. Mitt.* 1907, p. 555, fig. 34.

<sup>3</sup> *Metropolitan Museum: Handbook of the Classical Collection*, p. 203, fig. 121.

<sup>4</sup> On the great composite stele the bored hole is 0.039 m. in diameter, and is centred about 0.14 m. above the joint to the shaft.

A GIFT OF THEMISTOCLES: THE "LUDOVISI  
THRONE" AND THE BOSTON RELIEF<sup>1</sup>

[PLATES II-V]

ALTHOUGH able archaeologists have studied the "Ludovisi Throne" and the relief of like form and like material which is in the Museum of Fine Arts, Boston, I think it will be generally conceded that they have not yet produced a convincing interpretation of these interesting marbles.

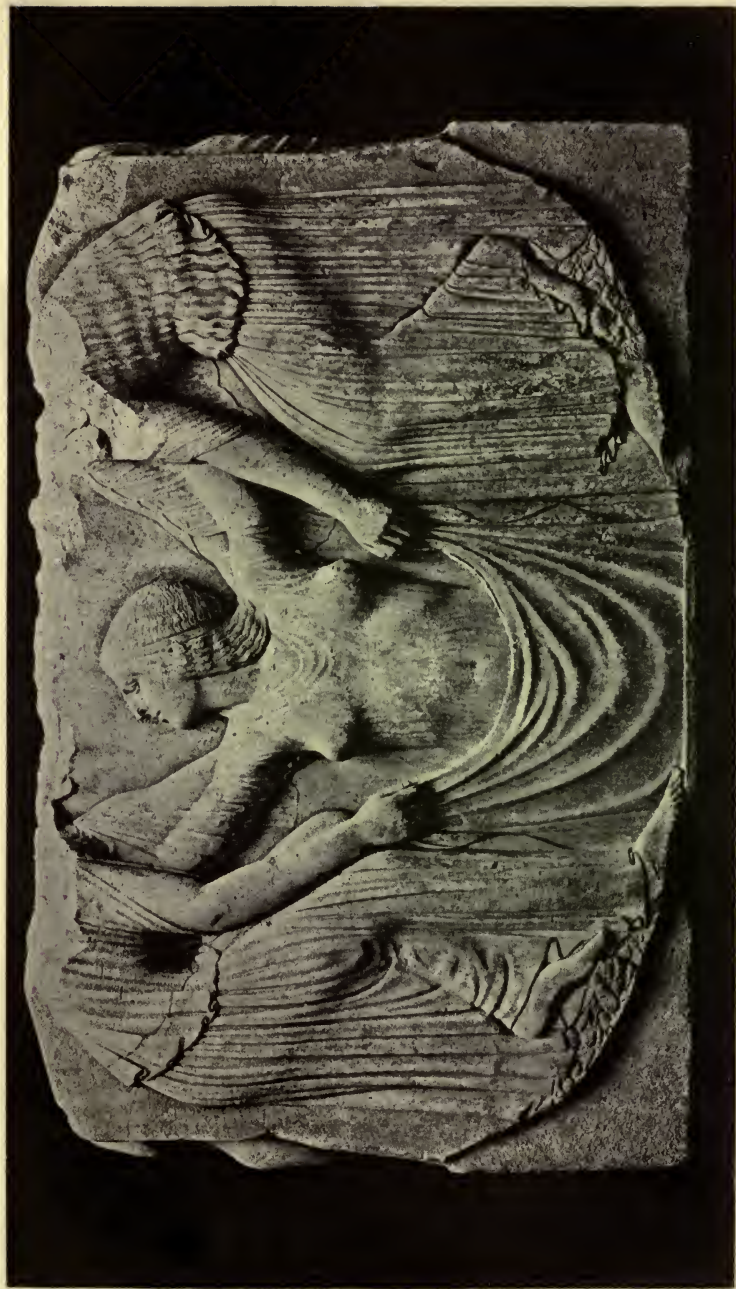
In 1910, Mr. Marshall wrote in the *Burlington Magazine*: "The large three-sided relief added to the Museum of Fine Arts in Boston is the most important antiquity which has left Italy in the last hundred years. Its beauty and solemnity will impress all who see it and to students whether of Greek art or of Greek religion, it will prove of extraordinary importance."<sup>2</sup>

In the following year Professor Studniczka published the two reliefs in full as parts of one monument, and such they are in all human probability,<sup>3</sup> although the beautiful scroll frame of the Boston marble is absent from the relief in Rome and, on the other hand, superiority of workmanship has been claimed for the "Ludovisi Throne." Even if the same hand did not execute the

<sup>1</sup> A synopsis of this article was read at the annual meeting of the Archaeological Institute of America at Ann Arbor, Michigan, December 29, 1921. See *A.J.A.* XXVI, 1922, pp. 81 f.

<sup>2</sup> Marshall, *Burlington Magazine* XVII, July, 1910, pp. 247 ff., cf. p. 232.

<sup>3</sup> Petersen, *Vom alten Rom*.<sup>4</sup> p. 142. Studniczka, *Jb. Arch. I.* XXVI, 1911, pp. 50-192, gives a complete bibliography of earlier articles. The most noteworthy contributions since 1911 are those by Caskey, *A.J.A.* XXII, 1918, pp. 101-145; Richter, *J.H.S.* XL, 1920, pp. 113-123; Casson, *J.H.S.* XL, 1920, pp. 137-142. To three books my debt is immeasurably great: Jane E. Harrison's *Prolegomena to the Study of Greek Religion*; Sir James Frazer's *Translation with Commentary of Pausanias's Description of Greece*; Salomon Reinach's *Répertoire des vases peints*. Members of the Staff of the Boston Museum of Fine Arts have been most helpful. My thanks are especially due to the Director, Dr. Fairbanks, for practical encouragement, to the Assistant Director (my husband), Charles H. Hawes, for suggestions and criticism which have prevented some serious errors, and to the Curator of the Classical Department, Dr. Caskey, for generously placing his special knowledge of the subject at my disposal.



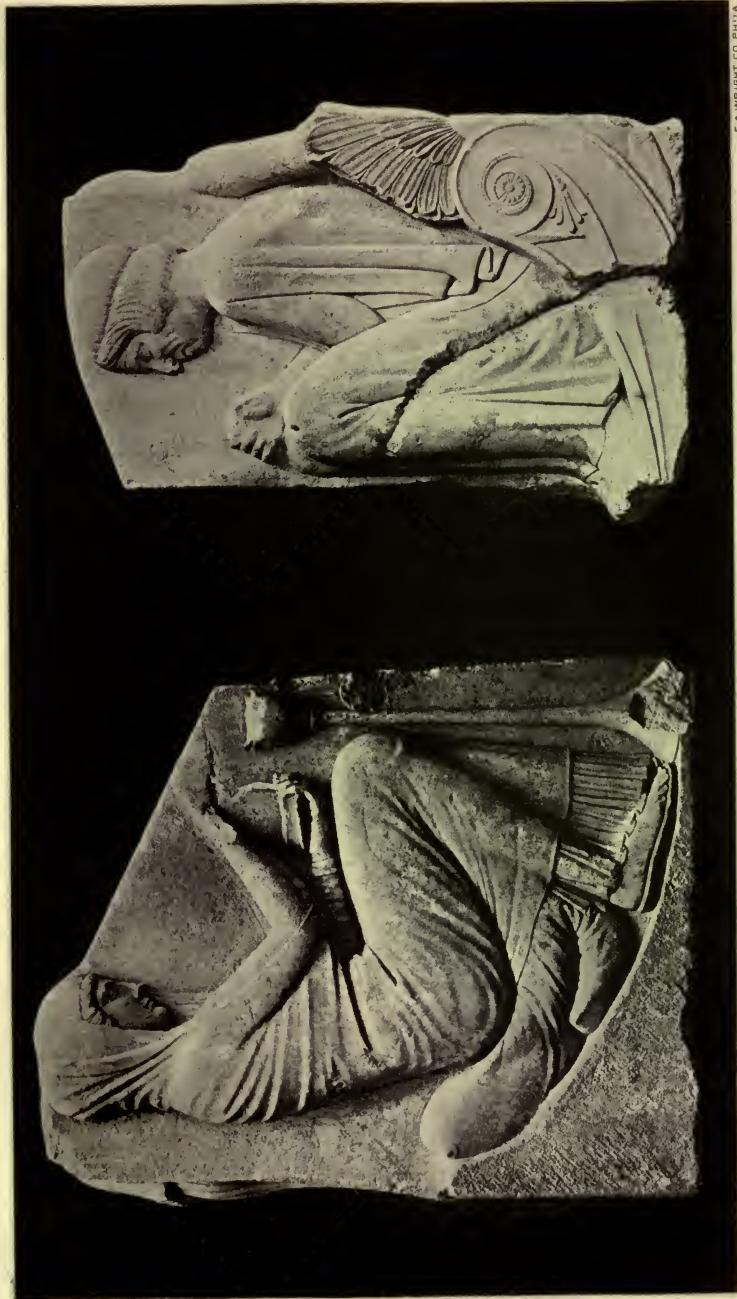
E. A. WRIGHT CO. PHILA.

A

A GIFT OF THEMISTOCLES: A. EARTH AND THE ISMENIAN NYMPHS: ROME.







E. A. WRIGHT CO. PHILA.

B

C

A GIFT OF THEMISTOCLES: B, PRIESTESS: ROME; C, MINISTRANT: BOSTON.





D



E

E. A. WRIGHT CO. PHILA.

A GIFT OF THEMISTOCLES: D. YOUNG LYCOMED: BOSTON; E. FLUTE-PLAYER: ROME.





278<sup>D</sup>

E. A. WRIGHT CO. PHILA.

F

A GIFT OF THEMISTOCLES: F. DEMETER, EROS AND PERSEPHONE: BOSTON.



two ends of the monument, one brain must have conceived the design. The relief in Rome shows signs of having been denuded of a frame similar to that of the Boston marble. Such a frame would have fitted over the plane surfaces at the corners of the "Ludovisi Throne" and would have made it equal in width on the outside, as it actually is on the inside, to the relief in Boston—a point which must be remembered in examining PLATES II-V of this paper.

In presenting a new answer to the riddle of these marbles, my justification lies in the fact that I have followed a method of inquiry hitherto untried and have arrived at results which seem to fit together like the correctly placed parts of a picture puzzle. I have accepted in some cases as proved true, in other cases as proved possible beyond need of further demonstration, certain views held by eminent archaeologists; seeking to combine them in a pattern appropriate to early fifth century, Attic-Ionic art, I have found what appears to me verification in a score of unexpected contacts. Further testing of these contacts is needed and can be obtained I hope through publication of this article in the JOURNAL.

On two points there is almost unanimous agreement among those who have studied the reliefs most carefully: first, that they belong to the Transitional Period of Greek art (480-450 B.C.); second, that they are products of the Attic-Ionic school.<sup>1</sup> There is no question here of a late Greek or Roman copy, although the marbles were found in Rome; in every line and surface the first-hand, Greek character of the work is displayed.

"Original, early fifth-century, Attic-Ionic"—to how few extant monuments can this description be applied! We have here neither isolated figures, nor fragments of a frieze, but the sculptured ends and adjoining side pieces of a monument which probably had no other equally important parts, so that we are free to judge the artist's scheme of composition and to learn from it. In less than fifty years after the making of these reliefs, the Parthenon marbles were carved under the supervision of Phidias. Can we find in our reliefs any forecast of their glory? Is it audacious to think (1) that these reliefs are too beautiful to have been altogether without fame, (2) that the surest way to interpret may be to identify them?

<sup>1</sup> *E.g.* Studniczka, *op. cit.* pp. 190 ff.; Caskey, *op. cit. passim* and pp. 120, 145.

An excavator often begins with the smallest clue. On the Boston relief the smallest objects are the pomegranate and the fish. They occur at the corners of the end (PLATE V, F), which has the winged figure in the centre. The fish at the left lower corner is so badly injured that it might not be recognized if it were not repeated on the adjoining side (PLATE III, C). We know that the pomegranate and fish were food forbidden to initiates in the famous Mysteries of the Great Goddesses Demeter and Persephone at Eleusis,<sup>1</sup> as well as to those taking part in the Athenian Mysteries of the Haloa,<sup>2</sup> which were celebrated in honor of Demeter and Dionysus.

From these minor objects one looks to the womanly figures above them. Are they mortal? It is hardly normal that they should be mortal, for they are on the end of a fifth century oblong monument that probably follows the same canons of composition as are observed on temples of that period and evidently they are not attendants on the central supermortal figure or in action dominated by him. If they are immortal, can it be doubted who they were in early fifth century Attica? Two goddesses, seated, facing each other, almost replicas one of the other—beside them the forbidden food of Eleusis—I think every peasant in old Attica would have named them at once, Demeter and the Maid.

To distinguish between the goddesses is difficult; as Miss Harrison has wisely said, "Not infrequently when they appear together it is impossible to say which is which."<sup>3</sup> But if, laying aside our own prepossessions, we follow the indications of early Greek iconography, I think we must decide that the goddess on the right with the pomegranate beside her is Persephone. Again and again in early Greek art when the goddesses confront each other, seated or standing, with either a male figure, a group of persons, or an inanimate object between them, if they *can* be distinguished, the one on the right is found to be Persephone, the one on the left Demeter.

A celebrated example of this arrangement and one that may have influenced the sculptor of our monument is the Harpy relief of sixth century date from Xanthos in Lycia. This shows Demeter enthroned at the left and Persephone at the right of a proces-

<sup>1</sup> Porphy. *de Abst.* IV, 16, cited by Harrison, *op. cit.* pp. 149, 150.

<sup>2</sup> Luc. *Dial. Meretr.* VII, 4, quoted in full by Harrison, *op. cit.* p. 148, note 1.

<sup>3</sup> Harrison, *op. cit.* p. 273.



sion of mortals; Persephone holds the flower of the pomegranate in her right hand, the fruit in her left hand; the mortals are making their way towards Persephone, in other words are passing to the underworld. Other well-known examples are the famous Eleusinian relief, of about 460 B.C., an early red-figured scyphus from Eleusis,<sup>1</sup> and the beautiful Hieron cotyle in the British Museum;<sup>2</sup> on all three we see Demeter at the left and Persephone at the right of the Attic hero, Triptolemus. Many vases have Demeter at the left and Persephone at the right of a male god or hero;<sup>3</sup> one vase shows Demeter at the left and Persephone at the right of a column.<sup>4</sup>

On two of the early Attic-Ionic vases decorated with eyes, there is a marked contrast in the costume of the goddesses, Persephone being wrapped in her mantle as on the Boston relief, Demeter wearing hers in freer fashion; one of these vases follows the normal order,<sup>5</sup> the other the reverse order.<sup>6</sup> But the reverse order remains rare.<sup>7</sup> Romaios interprets also in the reverse sense a very interesting polychrome sherd from Eleusis (Fig. 1)<sup>8</sup> of Ionic style (*ca.* 530 B.C.), but he



FIGURE 1.—DEMETER, PLUTO AND PERSEPHONE:  
SHERD FROM ELEUSIS.

<sup>1</sup> Harrison, *op. cit.* p. 273, fig. 66.

<sup>2</sup> Harrison, *op. cit.* p. 556, fig. 158.

<sup>3</sup> Reinach, *op. cit.* II, pp. 33, 34, 45, 184, 324 (4).

<sup>4</sup> Reinach, *op. cit.* II, p. 321 (5).

<sup>5</sup> A black-figured hydria; Reinach, *op. cit.* II, p. 61 (7).

<sup>6</sup> A black-figured cylix; Böhlau, *Ath. Mitt.* 1900, p. 63, fig. 25 (see Fig. 2).

<sup>7</sup> For reverse arrangement see Reinach, *op. cit.* II, pp. 187 (5), 199 (2), which is probably a forgery, and 324 (3).

<sup>8</sup> *Ath. Mitt.* 1906, p. 186, pl. XVII.

admits that the object in the hand of the goddess at the right, which he calls a rose, is exactly like one called by Gerhard elsewhere a pomegranate flower; and we are left to infer that if one decides in favor of the pomegranate, the right-hand goddess must be Persephone. The presence of the snake on the right side of the composition favors this choice. Pluto (or Hades-Dionysus) appears to be arguing his case with Demeter, showing her, as in the "flash-back" of a modern cinema, that he has a right to retain her daughter, because she has tasted the pomegranate. Even on much later vases, painted when iconography had become slack, the arrangement here cited as normal is much more frequent than the contrary one. Our artist has not misplaced his pomegranate.

The right-hand figure on the Boston end is strikingly like certain figures on Attic grave reliefs; the comparison has been made by others and I am much impressed by it. One can not always decide which figure on a Greek grave stele represents the dead, but the better the artist, the easier the choice; for no matter how the figure is posed, the first-rate sculptor manages to give to it a spiritual remoteness, an appearance of being withdrawn from the emotions of our mortal life, that is very remarkable. The only exception seems to be in the case of the mother whose yearning for her child remains unstilled by death. This same remoteness I find in the right-hand goddess of the Boston relief.<sup>1</sup> She has no regard whatever for the two other personages in the composition. Her mantle is drawn about her as if she were ready for departure, a detail we have already noted on two early Attic-Ionic black-figured vases. Of these the Berlin cylix—which I have cited as an example of reverse arrangement—deserves special attention (Fig. 2). At a later point in our study we shall be interested in the horn held by Hades-Dionysus; at present we note that the animated gesture of the right hand goddess on the cylix and the drooping attitude of the left-hand goddess have much in common with the goddesses on the Boston relief, reversing their positions.

The goddess on the left in Boston is not aloof, remote, passive. She looks across to the other goddess and, perhaps, to the figure between them, with hand raised in a gesture that is meant to express and command attention; it may mean surprise, remon-

<sup>1</sup> Our relief may afford a clue for the identification of the so-called "Penelope." Cf. *Ath. Mitt.* 1911, p. 122, fig. 47.

strance, farewell, or joy, triumph, greeting.<sup>1</sup> One archaeologist has detected sadness in the expression of this left-hand goddess;<sup>2</sup> usually she is held to be joyful. We know, however, that the archaic Greek sculptor had but one facial expression at his command to express all sorts of animation. The artist who carved the Boston relief was far more expert; nevertheless, he may have been influenced by conservative traditions when fashioning immortals from which he was free when carving human figures. I think we shall do well not to stress the smile that appears in



FIGURE 2.—PERSEPHONE, HADES-DIONYSUS AND DEMETER: KYLIX IN BERLIN.

greater or less degree on three of the four faces on the ends of this monument.

Miss Harrison has reminded us that, under the influence of the Mysteries, the Mother and the Daughter, who had been one goddess originally, became differentiated. ". . . the Mother is more and more of the upper air, the Daughter of the underworld. . . . The Daughter, at first but the young form of the Mother, . . . withdraws herself more and more to the kingdom of the spirit, the things below and beyond."<sup>3</sup> To explain her meaning more fully, she quotes aptly from Swinburne's *Garden of Persephone*:

"She waits for each and other,  
She waits for all men born,  
*Forgets the earth her mother,*  
*The life of fruits and corn,*

<sup>1</sup> That the gesture of the goddess I have called Demeter need not be one of joy or triumph is proved by the same gesture used by Eurystheus to express alarm (Reinach, *op. cit.* I, p. 153, 3). This fact was pointed out to me by Dr. Caskey, who assures me the outspread hand is used by vase-painters with widely different meanings. On the Boston relief it appears to mean surprise, protest, argument, as on the sherd from Eleusis (see Fig. 1).

<sup>2</sup> F. J. Mather, *Nation*, 1909, p. 495, "the seated figure at the left raises her hand in sorrow. . . ."

<sup>3</sup> Harrison, *op. cit.* pp. 275, 276.

And spring and seed and swallow  
 Take wing for her and follow  
 Where summer song rings hollow  
 And flowers are put to scorn."

This verse embodies the very thought that eludes but charms us in the Boston relief, underlying the extraordinary beauty of Demeter and the Maid.

But who is the figure between the goddesses, weighing the lots of men? All have agreed that he is Eros—not, however, a playful boy or a mischievous spirit like Cupid, but Love the Master of Life. In technical language he is the Ker of Life weighing the *keres* or *eidola* of men. This is the old conception, before the *ker* had been specialized down to death, while it still meant "more a man's luck than his fate."<sup>1</sup> Each little man is tugging at the weight, trying to turn Love's balance in his favor. *The goddesses are not watching the weights.* It is a question whether either of them sees Eros, although it may be that Demeter sees and protests. If so, the protest is not against his weighing of human lots—a proper function appropriately represented—but against the fact which every Greek peasant knew well, that through Love Hades stole Persephone from her Mother and through Love he made her eat the pomegranate that kept her with him in the underworld six months of every year; that made her, in fact half-mortal.

This figure represents not Eros, youngest of the gods, son of Aphrodite, but Eros the cosmic spirit, who, according to Olen the Lycian, author of the oldest Greek hymns, was a son of Ilithyia.<sup>2</sup> As son of Ilithyia and, therefore, a member of the oldest, pre-Olympic circle of divinities, Eros was especially worshipped in Boeotia. "Of all the gods," says Pausanias, "the Thespians honor Eros the most and have always done so; they have a very ancient image of him, consisting of an unwrought stone."<sup>3</sup> He is

<sup>1</sup> Harrison, *op. cit.* p. 185. Miss Harrison calls this older Eros "Lord of Life and Death," quotes Plato (*Symp.* 189) and Euripides of Phlya (*Hipp.* 535) in his behalf and ascribes to him the Graeco-Roman title Proteurythmos (*op. cit.* pp. 657-659). On a late vase Hades is represented as carrying off Persephone in his chariot, Persephone takes a touching leave of her Mother, Love hovers above the horses, as if guiding them to the underworld, Reinach, *op. cit.* II, p. 309; a similar scene occurs in Reinach, *op. cit.* I, p. 156.

<sup>2</sup> Paus. IX, 27, 2.

<sup>3</sup> Paus. IX, 27, 1.

seldom named in the legends and myths of Greece, but he is the power behind every throne, human or divine, as well as the spirit that in early Greek thought animated nature. Homer does not mention him; Hesiod ranks him supreme not merely as the god of sensual love, but as a power which forms the world by inner union of the separate elements. Elsewhere I have given reasons for thinking that Hesiod represents an older stratum of Greek thought than Homer.<sup>1</sup> In the fourth century both Praxiteles and Lysippus made statues of Eros for the Thespians. The Boston relief shows us an earlier Eros, most important as establishing the early fifth century Attic-Ionic type. Strength and grace are wonderfully combined in his youthful figure; the wings will sustain him; they are perfectly proportioned and form a most beautiful background for the shoulders, made powerful by their use.

Eros, Demeter and the Maid—this is an unusual combination; were they ever worshipped together? Miss Harrison, following Pausanias, tells us there was such joint worship at one place—and so far as I know at one place only in the Greek world.<sup>2</sup> The place was Phlya, a deme of Attica which belonged originally to the ancient tribe, Cecropis; Sir James Frazer identifies it with the modern village Chalandri, one of the largest and most thriving villages in the Athenian plain, about five miles northeast of Athens itself. "The district is well watered and fertile."

There is nothing here to contradict our basic assumptions. The place is a fitting home for Attic art that shows strong Ionic influence. The next question is as to time. Have we any record of a monument erected at Phlya in the Transitional Period, that is, in the years between the Persian Wars and the Age of Pericles? Plutarch has a word on the subject. In the first paragraph of his Life of Themistocles we read: "However it is certain that he (Themistocles) had a connection with the house of the Lycomids (τοῦ Λυκομιδῶν γένους μετείχε), for Simonides records that he rebuilt the shrine of initiation (τελεστήριον) at Phlya belonging to that family, and beautified it with pictures and other ornaments, after it had been burnt by the Persians." This rebuilding is of para-

<sup>1</sup> *Gournia*, pp. 11, 12; *Crete the Forerunner of Greece*, p. 149.

<sup>2</sup> Harrison, *op. cit.* p. 645: "At Phlya . . . we have the worship of the great Earth-goddess who was Mother and Maid in one, and, conjointly, we have the worship of the Orphic spirit of love and life, Eros."

mount importance to us, for it must have happened soon after 480 B.C., at just about the time our reliefs were made.<sup>1</sup>

Suppose, then, we assume as a working hypothesis that the reliefs are from this telesterion of the Lycomids at Phlya which was rebuilt by Themistocles in the decade following the second Persian War; are we helped in interpreting them? It will be necessary to review our information on Phlya to answer the question. The process may be dull, but it yields results.

In the thirty-first chapter of his first book, Pausanias discusses the small townships of Attica. I use Sir James Frazer's translation:

"The small townships of Attica, taking them in order of situation, offer the following notable features. . . .<sup>2</sup> At Phlya there are altars of Dionysus-given Apollo and Light-bringing Artemis, and Flowery Dionysus, and the Ismenian Nymphs, and Earth, whom they name the Great Goddess. Another temple contains altars of Demeter, the Sender-up of Gifts and of Zeus, god of Acquisition, and of Athena Tithrone, and of the First-born Maid, and of the goddesses named Venerable."

Here is a quaint assemblage of divinities; Apollo, Athena, Dionysus all bear epithets unknown for them elsewhere. At Phlya Pausanias does not name Zeus in his majesty, but as a

<sup>1</sup> It may have been through his mother that Themistocles attached himself to the Lycomid clan and their well-known Orphic cult. His father was "an Athenian of no distinction." His mother was a foreigner, and this fact created the barrier which separated him from youths who were of unmixed Athenian parentage; but she is reputed to have been from Thrace or Caria, and either origin would suggest old Aegean connections of race and religion that might give her some claim to the friendship of the Lycomids. According to a tradition accepted by Pausanias, the Lyceum at Athens took its name from Lycus, son of Pandion, the name-hero of the Lycomids. It was certainly frequented by men of the bluest blood in the city. It stood next to the Cynosarges, the gymnasium for the base-born, where Themistocles was obliged to exercise. We are told that he contrived to efface the humiliating distinction by persuading some well-born youths to take their exercise with him there. We are not told that they were Lycomids but it seems probable. Some day it may be proved that the downfall of Themistocles, like many other unexplained facts in Greek history, was due to the persistent rivalry between Hellenic and Aegean elements in the Greek population.

<sup>2</sup> I pass over the first three divisions of the chapter merely noting that the townships (demes) of Alimus and Prospalta had sanctuaries of Demeter and the Maid, and Anagyrus had a sanctuary of the Mother of the Gods; as was to be expected these demes, these "pagi," were conservative, true to the older worship of the land.

homely domestic god (*κτήσιος*), guardian of the peasant's humble wealth, especially of his lucky finds. "Earth, whom they name the Great Goddess . . . Demeter, the Sender-up of Gifts . . . the First-born Maid . . . and the Goddesses named Venerable"—these are the august unchanging divinities of the Greek peasant faith at Phlya.

We have here no mention of Eros and in no other passage does Pausanias refer directly to the deme Phlya; but using the clue given us by Plutarch quoted above, we can gather from Pausanias several additional items of information as to cults that flourished within the deme. He is thoroughly aware of the fact that the great aristocratic clan of the Lycomids had interesting family rites connected with the deme Phlya, for hear him on the subject of Phlyus, name-hero of the deme, and Lycus, name-hero of the clan.<sup>1</sup> "The Athenians say that Phlyus himself was the Son of Earth and they are supported by the hymn which Musaeus composed on Demeter for the Lycomids." Lycus "raised to higher honor" in Arcadia "the Mysteries of the Great Goddesses," which were held to have been introduced by a grandson of Phlyus.

These men belong to myth, but in historic times there lived a man named Methapus, by descent an Athenian, "a deviser of mysteries and all sorts of orgies," for whom it was claimed that he "purified the paths of Demeter and of the First-born Maid," in the rites which had been introduced into Arcadia by Phlyus and raised to higher honor by Lycus. The statue of Methapus on which this claim was inscribed was set up, Pausanias relates, in a *klision* of the Lycomids.<sup>2</sup> Pausanias does not locate this *klision*, but Frazer in commenting on the passage did not hesitate to write: "The 'chapel of the Lycomids' to which Pausanias here refers was no doubt the one at Phlya in Attica."

Further on in this article something will be said in regard to the curious word (*κλισιον*) in this passage which Frazer translates "chapel." The translator believes that Methapus revived the Arcadian rites after the victory of Epaminondas at Leuctra in 371 B.C. He says: "Since the statue of Methapus stood in

<sup>1</sup> Paus. IV, 1, 5 and 6. Mr. Champlin Burrage tells me that he has read the name *Lukos* on an early Aegean seal. His article entitled 'Studies in Minoan Hieroglyphics, I, The Phaestos Whorl,' which has recently appeared in *Harvard Studies in Classical Philology*, gives but a hint of the mass of material on old Aegean scripts which he hopes soon to publish in book form.

<sup>2</sup> Paus. IV, 1, 7.

the chapel of the Lycomids, we may conclude that Methapus was a Lycomid himself." He thinks Methapus composed the epigram on his own statue and erred, through a mistaken etymology, in attributing the origin and exaltation of the Mysteries in Arcadia to the mythical Phlyus and Lycus; but if this mistake was made, it was certainly due to a habit of associating the Lycomids with Phlya and the rites of the Goddesses.

The existence of this association of ideas in Greek minds of the fourth century is thus established in the first chapter of the fourth book of Pausanias; our good guide accepts it. We are, therefore, justified in supposing that whenever he speaks elsewhere of the rites of the Lycomids without further qualification, he is referring to the clan's family worship at Phlya. Let us continue our quest.

In describing the contents of the picture gallery in the north wing of the Propylaea at the entrance of the Acropolis, Pausanias mentions a picture of Musaeus. He adds this noteworthy comment: "I have read verses in which it is said that Musaeus received from the North Wind the gift of flying; but I believe that the verses were composed by Onomacritus and that nothing can with certainty be ascribed to Musaeus *except the hymn which he made on Demeter for the Lycomids.*"<sup>1</sup> We have already seen that Pausanias, in his account of Arcadia, refers to this hymn on Demeter, composed by Musaeus for the Lycomids, as verifying the statement of the Athenians that "Phlyus himself was the Son of Earth."

Again, in mentioning the Thespian worship of Love and the famous statue of Eros made by Praxiteles for the Thespians, Pausanias writes: "The general impression is that Love is the youngest of the gods and that he is a son of Aphrodite. But Olen the Lycian, author of the oldest Greek hymns says in his hymn to Ilithyia that she is the mother of Love. After Olen were the poets Pamphos and Orpheus, *both of whom composed poems on Love to be sung by the Lycomids at the performance of their rites.*" At the grave of the Muses on Mount Helicon, Pausanias has much to say of Orpheus and ends his discourse with these words: "Whoever has studied poetry knows that all the hymns of Orpheus are very short, and that their total number is not large. *They are known to the Lycomids, who chant them at the celebration of the rites.* For poetical beauty they may rank

<sup>1</sup> Paus. I, 22, 7.



next to the hymns of Homer, and they have received still higher marks of divine favor."<sup>1</sup>

We have learned, therefore, from Pausanias that the Lycomids in their "chapel" at Phlya sang hymns of the mystic poets—a hymn on Demeter composed for them by Musaeus and hymns on Love composed for them by Orpheus and Pamphos. Pamphos also wrote verses on "The Maid, the daughter of Demeter."<sup>2</sup>

All these passages in Pausanias make it highly probable that an artist decorating the chapel of the Lycomids at Phlya in the early fifth century would give a conspicuous place to Demeter, Persephone and Eros; such a place they have in the monument of which the Boston relief is a part.

But we must not forget that at Phlya there was one divinity even more revered than the three just named. Pausanias in his description of the deme mentioned an altar of "Earth, whom they name the Great Goddess." Frazer in his commentary sends us to a Christian author who appears to have been a younger contemporary of Pausanias. St. Hippolytus in his *Refutation of all Heresies*,<sup>3</sup> discussing the doctrine of the Sethites, a Gnostic sect, tells us that the entire system of their doctrine was derived from Musaeus and Linus and from Orpheus "who elucidates especially the ceremonies of initiation as well as the mysteries themselves." He continues: "These Bacchic rites of Orpheus were celebrated in Phlium of Attica before the rite of initiation was established in Eleusis; for older than the Eleusinian Mysteries are the orgies in Phlium of her they named the Great One." Frazer identifies Phlium of Attica with the deme Phlya.

This passage is most important. It points to the existence of a tradition that the Mysteries at Phlya of Earth, the Great Goddess, antedated the Mysteries at Eleusis of the Great Goddesses, Demeter and the Maid. Evidently we can hardly overestimate the ancient prestige of Phlya in the matter of mysteries. This explains (1) why Arcadians were proud to claim that Phlyus,

<sup>1</sup> Paus. IX, 30, 12.

<sup>2</sup> Paus. IX, 31, 9.

<sup>3</sup> St. Hippolytus, Bk. V, ch. XV. τετέλεσται δὲ ταῦτα (τὰ βακχικὰ τοῦ Ὀρφέως) . . . πρὸ τῆς . . . ἐν Ἐλευσίῳ τελετῆς, ἐν Φλοιοῦντι τῆς Ἀττικῆς, πρὸ γὰρ τῶν Ἐλευσινίων μυστηρίων ἐστὶν [τὰ] ἐν τῇ Φλοιοῦντι τῆς λεγομένης Μεγάλης ὄργια. ἔστι δὲ παστὰς ἐν αὐτῇ· ἐπὶ δὲ τῆς παστάδος ἐγγέγραπται μέχρι σήμερον ἢ πάντων τῶν εἰρημένων λόγων ἰδέα. Πολλὰ μὲν οὖν ἐστὶ τὰ ἐπὶ τῆς παστάδος ἐκείνης ἐγγεγραμμένα· περὶ ὧν καὶ Πλούταρχος ποιεῖται λόγους ἐν ταῖς πρὸς Ἐμπεδοκλέα δέκα βιβλοῖς.

son of Earth, brought them their mysteries, (2) why Methapus, "deviser of mysteries and all sorts of orgies," had his statue in the "chapel" of the Lycomids at Phlya, (3) why the epigram on his statue represented him as saying

"And I marvelled how Lycus, son of Pandion,  
Established all the sacred rites of Atthis in Andania,"

(4) why, when the great Attic family of Triptolemus became extinct, a century after our reliefs were executed, the office of second priest or Torchbearer at Eleusis, which that family had always held, was given to the Lycomids of Phlya.<sup>1</sup>



FIGURE 3.—"SONS OF EARTH": ORNEUS, PALLAS, NISUS AND LYCUS:  
CRATER FROM THE ACROPOLIS.

It is certain that the historic clan of the Lycomids attached itself particularly to a family cult of Demeter, Eros and the Maid, but it cannot have neglected the even older deme cult of the Great Goddess, Mother Earth. In fact, it claimed descent from Lycus, son of Pandion, son of Erechthonius, son of Earth (see Fig. 3), just as the deme of Phlya as a whole claimed descent from Phlyus, son of Earth, when they took him for their name-hero.<sup>2</sup>

<sup>1</sup> Xen. *Hell.* 3, 3, quoted by Ridgeway, *Dramas and Dramatic Dances*, p. 29. To Sir William Ridgeway my debt is exceedingly great, since it is his spirit that has put reality into the legends of Greece.

<sup>2</sup> J. Toepffer, *Attisches Genealogie*, III, Der Attische Landesadel: *Λυκόμιδαι*, pp. 208–225. Toepffer shows a connection between Phlya and the Haloo (p. 213), and between Phlya and the cult of the Argive Hera (p. 214); this is interesting in view of Casson's attempt to prove that the Ludovisi Throne was associated with the cult of the Argive Hera, *J.H.S.* XL, 1920, pp. 137 ff. Toepffer admits a close connection between Phlya, Eleusis and Andania, but

Greek piety would oblige the Lycomids to give to their divine Mother the place of greatest honor in their sanctuary. If they were erecting an oblong monument, in shape not unlike a temple, supposing for our convenience that it was oriented, they would give the central position at the east end to the great Mother Goddess.

There is no central figure of a goddess on the Boston relief; let us consider, then, for convenience, that this is the west end of our monument, and look to the relief in the Museo delle Terme, Rome, the so-called "Ludovisi Throne," which is now generally acknowledged to be the opposite end of the same monument (PLATE II, A). Here we have, I believe, a figure that fulfills the requirements in a most interesting fashion. The archaeologists who have written on this relief are divided into two camps, those who see in the central figure a goddess being born (Aphrodite) and those who see in it a goddess giving birth. I do not hesitate to align myself with the latter. I do not agree with Studniczka, that the sculptor of the relief in the Museo delle Terme would have thought fit to represent the act of childbearing, if he set about it, with more precision than he has shown. He was not a vase-painter, not a maker of terra-cottas. He was not choosing his theme; his theme was chosen for him by the traditions of the place and by persons for whom this important commission was undertaken. The space at his command was determined by the special shape required for this monument. He did not need to be specific; all who saw the monument would be well versed in its interpretation. It was not intended for export as were so many of the vases and terra-cottas, and the people of Attica knew their mythology. He was free to work as an artist, with supreme aims of beauty of composition and of line. To introduce in the place of honor on such a monument the painful, unbeautiful details of childbearing would have offended Attic taste of the early fifth century immeasurably.<sup>1</sup> The screen, the

rightly insists that this connection antedated the Mysteries and was actually based on the indigenous worship of the Great Goddess (and her counterparts, the Great Goddesses), not on any acts of the legendary heroes, Phylus and Lycus.

<sup>1</sup> In supposing that the east pediment of the Parthenon showed Athena as a small figure actually springing from the head of Zeus in the manner of vase-paintings, Miss Harrison failed to credit Phidias with a comprehension of the essential difference between the demands of sculpture and pottery, *Mythology and Monuments of Ancient Athens*, p. 434.

uplifted arms of the goddess, the gentle but firm support given by her attendants, were enough to embody for the people the tradition they knew so well. They were enough to convey the idea to me before I had read a single authority endorsing it.

Parallels are not lacking. The beautiful upturned head of the goddess seems to have been copied by the contemporary maker



FIGURE 4.—THE BIRTH OF ERECHTHONIUS:  
TERRA-COTTA IN BERLIN.

of a rude terra-cotta relief now in the Berlin Museum, which represents the birth of Erechthonius. Mother Earth gives the child to Athena in the presence of Cecrops, the mythical ancestor of the tribe Cecropis, to which the family of the Lycomids originally belonged (Fig. 4).<sup>1</sup> The Earth Mother with upstretched arms and supporting attendants is found on an early

stamped Boeotian amphora in the National Museum at Athens.<sup>2</sup> In pre-Hellenic days the supreme Goddess créatrix was represented again and again with upstretched arms, by the makers of crude images, *e.g.* in the shrine at Gournia, Crete.<sup>3</sup>

Our artist was content to represent Earth "the Mother of us all," and I doubt whether his orders had been more explicit. But no doubt many an eager discussion took place before his exquisite figure, if our hypothesis is correct that it stood in the sanctuary at Phlya. A Lycomid might assert, "Of course this is the Great Mother giving birth to my ancestor, Erechthonius"; his humbler townsmen might retort, "No, it is Mother Earth bearing our ancestor, Phlyus." An Orphic, remembering Olen,

<sup>1</sup> Harrison, *Mythology and Monuments of Ancient Athens*, p. xxvii, fig. 2, and Reinach, *Répertoire des reliefs*, II, p. 14. Cf. a British Museum hydria, Reinach, *Répertoire des vases peints*, II, p. 77 (10).

<sup>2</sup> Harrison, *Prolegomena to the Study of Greek Religion*, pp. 264, 265, figs. 60, 61.

<sup>3</sup> *E.g.* Hawes, *Gournia*, pl. XI, 1.

might whisper to himself, "It must be Ilithyia, mother of Love"; or Euripides may have seen in it Semele, mother of Dionysus, supported by the Ismenian nymphs. For Semele is but another form of Earth;<sup>1</sup> Pausanias mentions the Ismenian nymphs together with "Earth whom they name the Great Goddess," when he enumerates the altars at Phlya,<sup>2</sup> and in his *Bacchae* Euripides of Phlya associates "Ismenus' shore"<sup>3</sup> with the birth of Dionysus and links Dionysus with Love.<sup>4</sup> As a boy the great dramatist (born in the year of Salamis) must have heard the Lycomids sing their Orphic hymns in praise of Eros, and must have watched the restoration of their sanctuary; our reliefs may have played an important part in forming his ideas. He must have known the tradition, surprising to us, that placed a House of Lycus beside the Tomb of Semele near the Ismenus.<sup>5</sup> We should sin against the spirit of the major arts of the early fifth century if we tried to decide between these four versions—all of them possible, not one of them essential.

It is now time to determine if possible the character of the monument. On this point I follow Petersen in believing that the reliefs are parts of a ritual couch or couch-altar.<sup>6</sup> Now the Greek word for couch is *κλινή*, and we have seen that Pausanias calls the "chapel" of the Lycomids at Phlya the *κλισιον*, or Place of the Couch, a word nowhere else applied to a sanctuary.<sup>7</sup> St. Hippolytus, in a continuation of the passage already quoted, says that at Phlya there was a *παστάς*, a word which is often used of a bridal chamber, therefore reasonably of a small sanctuary that contained a ritual couch or couch-altar.<sup>8</sup>

<sup>1</sup> Harrison, *op. cit.* p. 405.

<sup>2</sup> Paus. I, 31, 4.

<sup>3</sup> *Bacchae* 7. The Ismenus is a river of Boeotia flowing north from Thebes. A fifth century inscription from Thebes mentions a sanctuary of Earth in that neighborhood and uses two Orphic epithets for the Goddess. Earth-born Dionysus is pictured on two red-figured vases in British collections. Harrison, *op. cit.* p. 405, fig. 128, and p. 406, fig. 129; p. 408, note 1 and p. 409.

<sup>4</sup> *Bacchae*, 769.

<sup>5</sup> Paus. IX, 16, 7.

<sup>6</sup> Petersen, *Vom alten Rom*<sup>4</sup>, pp. 143, 145.

<sup>7</sup> Cf. Paus. IV, 1, 7.

<sup>8</sup> The latter part of this passage refers without doubt to mural paintings, but I see no reason for Miss Harrison's belief that it is one of these paintings which Hippolytus describes in a later chapter. On the contrary the mural painting described by Hippolytus appears to belong to a wholly different building from the *pastas*.

Nor do I think that we are dependent entirely on literary evidence for endorsement of the view that our monument is a couch-altar and stood within a sanctuary. The excellent preservation of the marble surface would have been impossible in a less sheltered position. A fine red-figured crater in the Hermitage Museum,<sup>1</sup> ascribed by Beazley to "the Kleophon painter"<sup>2</sup> who



FIGURE 5.—SACRIFICE AT A FAMILY ALTAR: RED-FIGURED CRATER IN HERMITAGE MUSEUM.

worked in the middle of the fifth century, shows men and boys of the best Athenian types engaged in sacrifice at a family altar (see Fig. 5). This altar is peculiar in shape. It appears to be oblong. The near end has a gable top (cf. Pl. V, F); the middle of the far end of the altar on the Hermitage vase is of the same height as the middle of the near end, but the height of the far end at the corners, although not quite so great as at the middle point, is considerably greater than the height of the near end at the corners, giving the far end an almost flat top (cf. Pl. II, A). Above this top is an object which I take to be a pillow, presumably of stone, banded as are the couch-cushions in many Attic

<sup>1</sup> Hermitage, No. 774; Stephani *Catalogue* II, No. 1636; *Compte-rendu de la Commission de Saint-Petersbourg*, 1869, pl. VI; Reinach, *op. cit.* I, p. 29.

<sup>2</sup> J. D. Beazley, *Attic Red-Figured Vases in American Museums*, p. 182.

vase-paintings of the best period.<sup>1</sup> I regret very much that I have not been able to study the vase itself or a photograph; either the drawing reproduced in Figure 5 is inaccurate or the vase-painter was careless in detail—for example, where the line of the man's mantle joins the edge of the altar on the left side, and in the upper part of the couch-altar, where at least one line is omitted and others are rendered in a haphazard manner that is wholly confusing. Nevertheless, the main outlines of the couch-altar are discernible and agree with the main outlines of our reliefs; the altar on the Hermitage vase has no acroterion such as once crowned the gable of the relief in Boston, but we find this ornament surmounting a similar altar on a red-figured crater in Bologna.<sup>2</sup>

On the Hermitage vase the couch-altar stands on a low platform having but one step. Only one of the four men stands on the platform. The dimensions of the near end of the altar as measured by his height correspond admirably to the dimensions of the Boston end of our monument (height at centre 0.96 m.). Experiment has proved that our reliefs look best when raised some five feet above the ground. This is a wholly reasonable elevation for an altar on a platform in a small sanctuary. It is not the elevation of the couch-altar in the vase-painting, but I do not claim that this vase-painting represents the actual couch-altar at Phlya; yet I do not admit that the vase-painter, if representing the couch-altar at Phlya, might not have simplified it and made his platform lower and smaller than the real one, in order to preserve unity and balance in his beautiful composition.

Let us add this item, therefore, to our hypothesis and suppose the monument we are studying to have been a ritual couch or couch-altar which stood within the sanctuary of the Lycomids at Phlya. The size and style of the monument make it reasonably certain that the sanctuary was small and of the Ionic order, like the shrines so frequently seen on red-figured vases.<sup>3</sup> The breadth of the marbles in Rome and in Boston measured inside is the same;

<sup>1</sup> Cf. Reinach, *op. cit.* I, pp. 32, 56 (5), 217 (7), 232 (2), 233, 241, 247. Miss Richter, whose knowledge of Greek furniture is much greater than mine, dissents from this view.

<sup>2</sup> Reinach, *op. cit.* I, 233. Mr. Parsons considers that an acroterion would mar the beauty of the Boston relief and thinks that the piece set in was nothing more than the top of the gable.

<sup>3</sup> *E.g.* Reinach, *op. cit.* I, pp. 105, 158, 167.

outside the Boston piece is larger by the width of the scroll frame which the relief in Rome has lost. Except on their carved surfaces, both marbles show a noticeable lack of the regularity and finish which are characteristic of fifth century work. Not only must their inner surfaces have been invisible, but it is hard to understand how they could have formed parts of any carefully constructed object. These irregularities suggest the interesting possibility that the marbles enclosed a mound of earth or turf, which would be thoroughly appropriate as couch or altar of the Great Earth goddess. The stone pillow and the scroll frames would give sufficient definiteness to the meaning of the monument.

We seem to be on the verge of the great Attic mystery. Into the couch of Mother Earth was probably sprinkled seed grain; this seems to be what the man officiating on the Hermitage vase is doing, using for the purpose a fluted bowl of special type. The couch becomes the tomb of the grain. Carefully tended, the seed soon sent up tender green shoots, the *χλοερὸν στάχυον*, which, at Eleusis, "reaped in silence"<sup>1</sup> typified the culminating mystery of birth, or, to Orphics, of rebirth. Probably the same meaning was attached to the rite at Phlya. On the Hermitage vase the older youth bears a shallow bowl in which are set sprays of willow. A slender tree, probably a willow, stands behind the group of men. We know that Polygnotus, whose influence was very great in all the arts of the fifth century, painted Orpheus "touching some sprays of willow."<sup>2</sup> The mystery of the growing plant is pictured on many Attic vases; once it appears with Orpheus,<sup>3</sup> once women are regarding it,<sup>4</sup> once it is in a small shrine;<sup>5</sup> sometimes a tree seems to spring from an altar.<sup>6</sup> We remember that at Phlya Dionysus was called Flowery, and Demeter the Sender-up of Gifts (Anesidora), epithets that clearly have to do with vegetation. The other youth on the Hermitage vase holds an object like a spit as if for burnt sacrifice, but it is to be noted that the sacrificial fire, although close to the altar, is very carefully

<sup>1</sup> St. Hippolytus, *op. cit.* Bk. V, ch. III, quoted in full by Harrison, *op. cit.* p. 549, note 1, and p. 550.

<sup>2</sup> Paus. X, 30, 6, quoted by Harrison, *op. cit.* p. 603.

<sup>3</sup> Reinach, *op. cit.* II, p. 2 (3).

<sup>4</sup> Reinach, *op. cit.* II, p. 3 (1).

<sup>5</sup> Reinach, *op. cit.* II, pp. 17, 18.

<sup>6</sup> Reinach, *op. cit.* II, pp. 78, 90.



depicted as not issuing from it. Not burnt offerings, but first fruits were the gifts of the ancient cult of which the Hermitage vase and our reliefs are memorials.

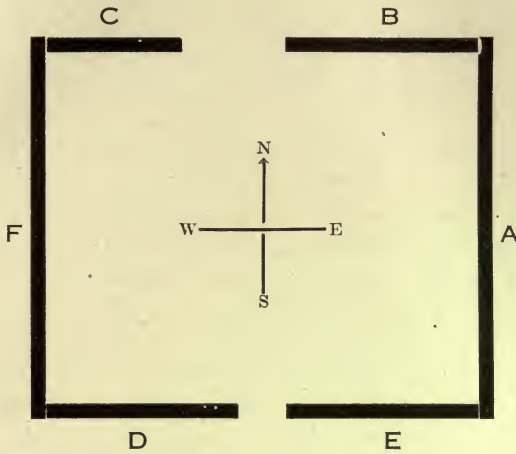


FIGURE 6.—PLAN OF COUCH-ALTAR.

On the principal end (A), at the head of the couch-altar (Fig. 6), was carved with exquisite grace the Earth Goddess; on the other end (F) were Demeter, Eros and Persephone; the four side pieces (B, C, D, E,) adjoining the two ends, were also carved and must now be studied. Following the principles of fifth century composition, we should expect the figures on them to be not gods, but mortals.

The veiled figure B has suggested to many minds a priestess, engaged in some mystic rite. I would give her either the general name hierophant, or the more specific name Telete. We know that Phlya was a centre of Orphism; on Helicon, Pausanias saw "a statute of Orpheus the Thracian with Telete standing by his side."<sup>1</sup> Miss Harrison translates Telete as "Rite of Initiation." It is an appropriate title for this mysterious figure with the censer standing before her, into which she gravely drops incense from a pyxis held in her left hand.

Facing her is an older woman C. The other mortals, B, D, E, as well as Demeter and the Maid sit upon cushions. This old crone sits upon the ground—the ground hidden by a scroll-frame so beautiful that only a Greek hand could have carved it. Her

<sup>1</sup> Paus. IX, 30, 4.

dress, the arrangement of her hair, proclaim her lowly station, her age is marvelously depicted, but I find no suggestion of degradation; in fact, the artist has given character, even dignity to her deeply wrinkled face, her quiet pose, and furrowed hand.

The realism revealed in the figure is a surprise, but I think we are only at the beginning of lessons we have to learn about Greek realism of the fifth century. I have recently seen a fifth century gem that will rank with the art of any land and any time in the faithful portraiture of an intellectual man.<sup>1</sup> Overbeck<sup>2</sup> gives a fifth century date (460–420 B.C.) to the Attic sculptor Demetrius, who was so renowned for his realism that Lucian called him “a maker not of statues but of men.” The fame of this artist rested largely on his statue of an aged priestess. According to Pliny, “*Demetrius Lysimachen (fecit) quae sacerdos Minervae fuit LXVIII annos.*”<sup>3</sup> Dr. Reisch connects with this masterpiece an inscribed base from the Acropolis (*C.I.G.* II, 3, 1376) which must belong to the earlier half of the fourth century and thinks the working period of Demetrius lay between 390 and 350 B.C.<sup>4</sup> He follows Michaelis (second edition Jahn’s *Arx Athenarum*) in believing that another inscribed base found on the Acropolis (*C.I.G.* II, 3, 1378) supported a statuette of an old woman which is mentioned by Pausanias.<sup>5</sup> If Dr. Reisch is right, this old woman was not Lysimache herself, but her helper in the temple service (*διάκονος*), for whom Reisch supplies the name Syeris, wrongly transcribed *εὐήρις* in manuscripts of Pausanias. He argues that the likeness of Syeris, wrought by the painter-sculptor Nicomachus not later than 330 B.C. was one of the popular wonders of the Acropolis, more subtle in its realism than the work of Demetrius. He thinks the inscription was cut at a later date, when the statuette was moved to a more conspicuous position. Copies of these statues of the priestess and her ministrant he recognizes in a marble head in the British Museum and a bronze figurine in the Hof Museum at Vienna. The interest and realism displayed in depicting old women of the fourth century would suggest, even without the evidence of the Boston relief, that earlier experiments had been made in that direction. Greek artists of successive generations were wont to try their hand on the

<sup>1</sup> Beazley, *The Lewes House Collection of Ancient Gems*, pl. III, 50.

<sup>2</sup> Overbeck, *Gesch. d. griech. Plastik*,<sup>4</sup> I, p. 503.

<sup>3</sup> Pliny, *N. H.* XXXIV, 76.

<sup>4</sup> *Jh. Oest. Arch. I.* XIX–XX, pp. 299–316. I thank Mr. Dinsmoor for this reference.

<sup>5</sup> Paus. I, 27, 4.

same stock of themes and the importance of the "old woman" in Attic Mysteries would invite their attention.<sup>1</sup>

We cannot call the old woman of the Boston relief Lysimache or Syeris, but I do propose for her the general title ministrant (*διάκονος* translated "deaconess" in the New Testament) and I think it worth while to note that below the epigram on the base that is supposed to have supported the statue of Lysimache, in a broken line which once gave the name of either the subject or the donor of the statue, occurs the demotic "of Phlya." Reisch completes the line as referring to "Lysimache, mother of Hierokles of Phlya." The fragment certainly points to a link between the aged priestess so realistically portrayed by Demetrius and the deme where our Boston relief was carved, with its admirable representation of an old woman. Is this a mere coincidence, or is there here a real contact that deserves further investigation? At present I have not the data needed to answer this question.

An important question confronts us now. What did the old ministrant hold in her hand and what stood in front of her, crowding her and yet permitting her right foot to be completed in a way curious indeed for a relief? The object held in her hand has been carefully chiseled away; a piece of marble is missing that must have completed the design below to the extent of the scroll, making a width equal to that of the priestess wing. One can hardly do more than suggest a reason for these mutilations. May it not be that when this monument had been carried from Attica to Rome, pagans, out of reverence for the Mysteries, or Christians, out of hatred for the Mysteries, destroyed certain mystic emblems that were carved upon it? It may be rash to attempt a restoration. A careful study of the stone, however, has led me to the belief that the object held in the old woman's hand was a horn,<sup>2</sup> symbol of fertility—an important mystic at-

<sup>1</sup> J. Bankó, *Jh. Oest. Arch. I.* XIX-XX, p. 298.

<sup>2</sup> I wish to record here my special debt to my husband, who patiently denied me one false restoration after another, carefully drawing for me the marks on the stone. Dr. Caskey's drawing, *A.J.A.* 1918, p. 115, fig. 5, I find somewhat misleading. The left hand as restored in it does not seem to me convincing; the marks left on the stone by the object held in the right hand have been confused, I think, with the unevenness of the background, notably on the right side above the thumb. The background of D is quite as uneven as this part of C and there is no doubt that the artist sought to achieve contrast and play of light by leaving his backgrounds slightly rough (this point was brought to my attention by my friend, Mrs. Eleanor Winslow, who has a practical understanding of painting and sculpture). It is to be remembered that an

tribute of the Great Goddesses and of Hades-Dionysus, which was often carried by mortals in their worship.<sup>1</sup> It probably has prehistoric connection with Crete and, as the cornucopia, it had a



FIGURE 7.—AGED WOMAN WITH HORN RESTORED: BOSTON.

object carved in relief, when chipped away, may leave an outline on the stone somewhat different from its own form in profile, and also that the hand of the destroyer may slip. Yet, with even these allowances, the restorations which have been proposed by Studniczka and others are impossible, as is agreed by all who have studied most closely the original marble reliefs in Boston.

<sup>1</sup> The horn held in the hand of feasters at funeral banquets is too frequent to need citation; the same is true of the horn in the hand of Dionysus. On a black-figured lecythus in Vienna six women seem to be carrying horns, led by a minstrel, whom I name Orpheus rather than Apollo; the figure behind them is sprinkling from a shallow bowl upon an altar. Cf. Fig. 5 above (Reinach, *op. cit.* II, p. 224, 2).

very popular late history among the Romans in the hands of Ceres and all her derivatives, Abundance, Fortune, etc. The horn, as it appears on many monuments, has that combination of straight top and tapering curves which the marks on the marble require. *The hand could grasp it and yet leave visible the deep wrinkle in the palm.* The tapering end might easily follow the curve of the old woman's knee, conforming to the indications that we find and stopping short at the exact point where one feels a ridge in the marble. By a remarkable coincidence, our Boston Museum of Fine Arts possesses, in its collection of musical instruments, a Forester's Horn that fits almost exactly the space once filled by the unknown object, which the old woman held in her hand. It is an ox-horn with metal flare, metal bands, and mouthpiece. A photograph of the horn, minus the metal additions at the two ends, has been applied to a photograph of the relief and the two rephotographed together, affording a more convincing proof than any drawing could be (Fig. 7). Artistic considerations, which are of prime importance in dealing with a fine piece of sculpture, seem to favor this restoration; for the curves of the horn are in themselves beautiful and they combine admirably with the other lines of the composition in respect to both relief and background. Appropriate objects to have occupied the space in front of the ministrant would be the mystic winnow-corb (*liknon*) and the oar-shaped winnow-fan (*ptuon*), or the still more mysterious Snake.<sup>1</sup>

At first I was inclined to attribute the position of the old woman—the fact that she sits without cushion on the ground—to her humble station in life. But as the conviction has grown upon me that she is closely connected with the celebration of the Mysteries of the Great Goddesses, I am led to believe that her attitude has a ritual significance. Plutarch's statement in reference to the great Athenian festival, "the women fast at the

<sup>1</sup> An ex-voto from Delos shows a snake with two worshippers carrying horns (*B.C.H.* 1907, p. 526; Reinach, *Répertoire des reliefs* II, p. 328). A Roman relief (Reinach, *Répertoire des reliefs* II, p. 5 (2, 3)) has an altar with an offering of first fruits, the horn and a snake; it is connected with the cult of Thibilis (Annona), a personification of the year's produce—an interesting fact, since our reliefs were unearthed in Rome near a site that was associated with Annona. The winnow-corb and fan occur with the horn on many Roman statues of Ceres, Abundance and Fortune (see Reinach's *Répertoire de la statuaire grecque et romaine*). St. Hippolytus, *loc. cit.*, has much to say about the worship of the snake.

Thesmophoria, seated on the ground,"<sup>1</sup> probably gives the clue. The autumn festival of the Thesmophoria, like the winter Haloa, was celebrated in honor of the Great Goddesses; with whom Dionysus is associated at the Haloa.

Probably the closest parallel in extant art to our old erene is the foremost figure on a relief from Olympia now in the Ny Carlsberg Museum at Copenhagen (Fig. 8).<sup>2</sup> It represents an old



FIGURE 8.—RELIEF FROM OLYMPIA: COPENHAGEN.

woman watching a horse-race and recalls the fact that the only matron allowed to see the Olympic games was the priestess of Demeter *Chamyne*, who sat upon a white marble altar opposite the umpires.<sup>3</sup> This epithet *Chamyne*, derived from the word *χαμαι*, meaning "on (or of) the ground," identifies Demeter with the Earth Goddess,<sup>4</sup> and the same thought wove the story of Demeter sitting on the Laughless Stone by the side of the Well of Fair Dances, sorrowing for the loss of her Daughter.<sup>5</sup> It is altogether fitting, therefore, that the ministrant of Demeter's Mysteries at Phlya should so far impersonate the goddess as to be seated on the ground.

If this interpretation is correct, the reliefs on the north side of the ritual couch had to do with the august Mysteries of the Great Goddess and her counterparts, Demeter and the Maid, the reliefs on the south side celebrated the Mysteries of Love. All belonged to the Orphic circle, and sharp discrimination must be avoided.

On the south side the youth playing the lyre (D) is a typical young aristocrat of Athens, a Lycomid, in fact, whose son will represent him in the cavalcade of youthful knights on the Parthenon frieze. We know how often Attic vase-painters of the best period took their themes directly from Homer. Pausanias

<sup>1</sup> Plut. *de Is. et Os.* LXIX, quoted by Harrison, *op. cit.* p. 128.

<sup>2</sup> For this interesting parallel and the illustration I am indebted to Miss B. Kahnweiler.

<sup>3</sup> Paus. VI, 20, 9.

<sup>4</sup> Harrison, *op. cit.* p. 405.

<sup>5</sup> Harrison, *op. cit.* p. 127.

quotes two lines from Homer's description of Achilles' shield which exactly fit this figure.<sup>1</sup>

“And in their midst a boy upon a clear-toned harp  
 Played charmingly, and as he played he sang of Linus fair.”

St. Hippolytus has associated Linus with Musaeus and Orpheus in his notice of the orgies at Phlya. Pausanias has told us “the poets Pamphos and Orpheus composed poems on Love to be sung by the Lycomids at the performance of their rites”: “The Lycomids know them (the hymns of Orpheus) and chant them over their rites.” I think we need not inquire further for the identity of the beautiful boy. The artist may have remembered the verses of Homer, but he had seen the young Lycomid in the flesh.

Finally we come to the flute-player, E, who, like the singing boy, is an art type dear to the vase-painters of Athens. Miss Radford<sup>2</sup> was right in insisting upon the close connection between the figure on the relief and the hetaira on the psycter,<sup>3</sup> signed by Euphronius, which we hope still exists in the Hermitage Museum. The sculptor was a younger contemporary of the vase-painter. They may have been friends. The vase was painted several decades before the relief was carved; but, as Dr. Caskey pointed out, it is not probable that the relief was copied from it. A more natural explanation is that the relief takes the place of an older one, destroyed by the Persians, from which Euphronius drew his inspiration. Beside the flute-player on the vase is scratched retrograde the word ΣΕΚΛΙΝΕ; the flute-player of the relief was actually carved on the ceremonial *kline* in the *klision*. Whether the punning name Sekline is an imperative *σε κλινε* “lie down”<sup>4</sup> (the position of the reflexive pronoun does not seem to me correct for this translation, especially in rapid speech), or a colloquial form for *εις κλιωήν* “to bed!” (clipping the beginning and end and inserting ε)<sup>5</sup>—in either case the meaning is the same. A certain air

<sup>1</sup> Paus. IX, 29, 7.

<sup>2</sup> *J.H.S.* XXXV, 1915, p. 111.

<sup>3</sup> *Stephani Catalogue* II, No. 1670; *Compte rendu de la Commission de St. Pétersbourg*, 1869, p. 219; Hoppin, *A Handbook of Attic Red-Figured Vases*, I, p. 404; Reinach, *op. cit.* I, p. 32 (1, 2). Cf. Caskey, *A.J.A.* XXII, 1918, p. 117, fig. 6.

<sup>4</sup> P. Kretschmer, *Griech. Vasenschriften*, p. 209, quotes Klein *Lieblingsnamen*, p. 65.

<sup>5</sup> Jannaris. *Hist. Gr. Gram.* §130, 536. App. III, § 22, 24. These changes, although recorded only for later times, may have occurred in slang during the classical period.

played on the flute may have had this meaning. In the chapel of the Lycomids the rites of Love belonged to the realm of ideas, the flute-player there was a ritual figure; on the Euphronius vase the meaning was festal, sensual.

Our interpretation of the reliefs is finished. In brief form what are our conclusions? For the sake of simplicity, I will summarize them as statements of fact, although I am well aware that they are disputable and must submit to critical examination.

The so-called "Ludovisi Throne" and the Boston relief formed the ends and adjoining side pieces of a couch-altar made between 479 and 471 B.C. for the sanctuary of the Lycomids at Phlya, which had been burnt by the Persians in the Second Persian War and was restored by Themistocles. The Lycomids ranked first among the rural aristocracy of Attica and claimed to be autochthonous; tradition placed a home of the clan near the Ismenus river in Boeotia. Their clan sanctuary in Phlya, a fertile deme five miles northeast of Athens—the home of Euripides (born 480 B.C.)—was well known for at least seven hundred years; it was called by Plutarch a *telesterion*, Place of Initiation, by Pausanias a *klision*, Place of the Couch, by St. Hippolytus a *pas-tas*, Marriage Chamber. We may surmise that the Persians burned it out of enmity for their most determined opponent, Themistocles, who was in some way connected with the Lycomid clan. After the Greek victory Themistocles took pains to rebuild the sanctuary, and our reliefs form a part of his restoration. The shrine was decorated with mural paintings and is known to have contained at least one statue.

The couch-altar stood on a stepped platform about five feet above the ground. Probably the reliefs enclosed a mound of earth, which played the part of the marriage bed of the Great Earth Mother; into it the seed was cast, from it the first tender shoots of grain were reaped in Mysteries which are known to have antedated the Mysteries at Eleusis, and which were concerned chiefly with the miracle of Life.

The relief at the head of the couch-altar, which, for convenience I call the east end, represented Earth the All-Mother, supported by two attendants; the idea may be further defined as Earth giving birth to Erechthonius, mythical ancestor of the Lycomids, or to Phlyus, mythical hero of the deme, or in the rôle of Ilithyia to Eros, or as Semele to Dionysus, a later impersonation of Eros; if the last explanation is preferred, the birth may be



supposed to take place on Ismenus' shore (Euripides, *Bacchae* 7) near the ancient home of the Lycomids, and the attendants may be called the Ismenian nymphs. The relief at the foot of the couch-altar (west end) showed Eros, erect, weighing the lots of men, with Demeter seated on the left and Persephone seated on the right—the former a very human goddess of the upper world, the latter already withdrawn into the remoteness of the underworld. On the north side of the couch-altar two women were seated, facing each other; at the left end a priestess or hierophant, who may be called Telete, the Rite of Initiation, at the right an aged ministrant, holding in her hand the mystic horn, with other mystic emblems at her feet. These draped figures have to do with the mysteries of Earth, who was called at Phlya "the Great Goddess," and of her counterparts, Demeter and Persephone. On the south side of the couch-altar two nude figures were seated, facing each other, who have to do with the mysteries of Love; at the left end a young Lycomid playing his lyre as he sings the hymns of Orpheus, at the right end a young woman playing on the flute an air which may have been a call to the rites of Eros. The ideas embodied in all these reliefs are of the class called Orphic; derived from the pre-Hellenic religion of the Aegean islands and adjacent coasts, they were made to live anew by contact with the humanizing, story-telling faculty of the Hellenes. There is in these reliefs a dignity and beauty worthy of Greek genius at its best, that is as different from the too numerous caricatures of Orphism in the minor arts as is a play of Euripides from the coarsest buffoonery of the Greek satyric drama.

If this interpretation of the much admired reliefs is confirmed and they are recognized as adornments of a couch-altar that stood in the sanctuary which Themistocles restored for the Lycomids at Phlya, it will be hard to exaggerate their importance for the history of art, the older religion of Greece, Orphism, clan-cults of Attica, and the background of Euripides. The fact that they were found in Rome is not a stumbling-block. Pausanias seems not to have seen them, unless they are implied under his mention of the altar of "Earth whom they name the Great Goddess." More probably the reliefs were no longer in the sanctuary when Pausanias visited Phlya. He tells us that the marble statue of Love made by Praxiteles for the Thespians was carried to Rome by Caligula, restored by Claudius, and carried away again by

Nero. In fact, Roman connoisseurs especially coveted representations of Love. We readily understand how much the reliefs must have pleased the Romans although they were quite incapable of understanding them. Their meaning has not been recognized by archaeologists because it is associated with the Mysteries and Orphism, of which we have heard much but known little.

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A CHILD PORTRAIT OF DRUSUS JUNIOR  
ON THE ARA PACIS

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CHILD portraits probably do not throw much light on the character of the mature individual, yet their sentimental and personal interest is undeniable (witness the family album!), and if there be offered the opportunity of correcting, with reasonable probability, the accepted identification of such a portrait of a prince of the house of Augustus, it is tempting to make the trial.

The excavations of 1903 under the Palazzo Fiano, on the Roman Corso, led to the publication of a series of studies of the Ara Pacis, as a result of which our knowledge of the monument has been considerably advanced.<sup>1</sup> Its general plan and appearance, as established by these researches, are familiar to students of Roman archaeology. The altar itself was surrounded by a rectangular wall, some 37 by 33 feet in periphery and 20 feet in height, with doors at the east and west ends. The exterior of this wall was decorated with figured reliefs, some of which are still *in situ*, some undiscovered or represented by tantalizing fragments, and others in a good state of preservation in various European museums. Their arrangement has been the centre of controversy, but in general it is clear that the east and west ends were adorned with individual subjects,<sup>2</sup> including the well-known Tellus, on

<sup>1</sup> A. von Domazewski, 'Die Familie des Augustus auf der Ara Pacis,' *Jh. Oest. Arch. I.* VI, 1903, pp. 57 ff.; Mrs. Arthur Strong, *Roman Sculpture from Augustus to Constantine* (1907) pp. 39 ff.; J. Sieveking, 'Zur Ara Pacis Augustae' *Jh. Oest. Arch. I.* X, 1907, pp. 175 ff.; F. Studniczka, 'Zur Ara Pacis,' *Abh. Sächs. Ges. XXVII*, 1909, Phil.-Hist. Kl. pp. 911 ff. E. Petersen's exhaustive study, *Ara Pacis Augustae* (1902), was unfortunately published in the year preceding these excavations.

<sup>2</sup> It ought to be noted that the discussions of this question by Petersen and Mrs. Strong have been rendered obsolete by the suggestions of Sieveking and Studniczka, involving *inter alia* the exclusion of the Valle reliefs. Probably the correct arrangement is that outlined by Studniczka, with Tellus and the Dea Roma flanking the east door, and the *ficus ruminalis* and sacrifice of the sow by Aeneas in corresponding positions at the west. A. W. Van Buren, *J. R. S.* 1913, p. 134, suggests a tempting new identification of the "Tellus" figure as Italia.



FIGURE 1.—SOUTH FRIEZE OF THE ARA PACIS.

panels flanking the doors, while on the north and south sides was represented the religious procession, a portion of which we are about to study. On each side, as in the case of the Panathenaic frieze of the Parthenon, the figures advance in the same direction, from east to west.

The relief which I wish to discuss is the famous one in the Uffizi, consisting of several slabs from the south side of the monument (Figs. 1 and 2).<sup>1</sup> There is no absolutely conclusive proof that the family of Augustus is here represented. One may hold, with Gardthausen,<sup>2</sup> that these persons of distinguished appearance, with the four attractive youngsters who parade so charmingly in the solemn procession, constitute merely a *Volksgruppe*. However, Gardthausen's view has not satisfied the majority of the critics, who point out that the group in question holds the place of honor immediately behind the *flamines*, and contrast the dignified charm of the individual figures, some of whose faces suggest strongly the Julio-Claudian features, with the less impressive and obviously less important personages of the north frieze. To the objection that the *Hauptfigur* of Augustus himself is not to be found in the group,<sup>3</sup> it is answered that he is to be thought of as proceeding, accompanied by his immediate family, ahead of the *flamines* at the very forefront of the procession, on a slab of which we have only some small fragments. And indeed certain scholars claim to recognize his damaged portrait preserved upon them.<sup>4</sup>

As to the remaining figures, on the Uffizi slabs, it is true that widely varying identifications proposed by different scholars at different times tend at the outset to discourage further study. But as a matter of fact most of the earlier attempts were based on misconceptions which were largely cleared away in 1903 by

<sup>1</sup> Reproduced from photographs with Petersen's numbering of the figures (*op. cit.* taf. vi) which I have used in this article.

<sup>2</sup> *Augustus und seine Zeit* 1.2 (1896) p. 855. Cf. Bernoulli, *Römische Ikonographie* 2.1 (1886) p. 262.

<sup>3</sup> Amelung's identification of the priestly figure (Petersen 20) as Augustus, in his *Führer durch die Antiken in Florenz* (1897) p. 107, is impossible on comparison with the known portraits, and has found no supporters.

<sup>4</sup> Sieveking, *op. cit.* p. 182 and fig. 57, warmly supported by Studniczka p. 916 and taf. iv, recognizes Augustus in the badly damaged veiled head of the Terme fragments, which Mrs. Strong p. 46 and pl. x doubtfully followed Petersen, *Röm. Mitt.* 1903, p. 331, in identifying as the *rex sacrorum*.

Domazewski,<sup>1</sup> whose theory that we are dealing with a representation of small family groups, arranged in the order of their relationship to the emperor, has been generally accepted as a basis for subsequent criticism.

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FIGURE 2.—SOUTH FRIEZE OF THE ARA PACIS.

Since that time the tall military figure with the Claudian features (31 Petersen) has commonly been taken as a starting-point and identified as the elder Drusus,<sup>2</sup> with his wife, the beautiful Antonia (28), looking back toward him, while she holds by the hand their child, the toddler Germanicus (29). Following this group there has been a strong disposition to see her older sister, Antonia *maior* (34), with her husband Lucius Domitius

<sup>1</sup> Pp. 61-62. His theory is approved by Studniczka, *op. cit.* p. 909.

<sup>2</sup> *E.g.* Studniczka, *op. cit.* p. 911, calls the Drusus figure "den sichern Ausgangspunkt." Even Petersen, *op. cit.* p. 106 had regarded it as "den festesten Anhaltspunkt."

Ahenobarbus (37), and their two children, Gnaeus (33), to become the father of the emperor Nero, and an older sister of uncertain name (35). Though Gnaeus holds to his uncle's toga, the restraining position of his mother's right hand makes certain her relationship to him.<sup>1</sup> And preceding the family of Drusus, on the adjoining slab, it has been difficult not to recognize his older brother Tiberius (26), whose features as here portrayed agree essentially with those of his accepted portrait busts. Who are the figures immediately preceding him, behind the *flamines*—I mean the fair lady (24), the tall priest (20), and the little boy with tunic and curls (22) in whom our study is centred? The tunic and curls show him clearly enough as playing the rôle of *camillus* to the tall priest, but his pose also suggests his connection with Tiberius and the fair lady, as well as with the feminine figure in the background (23), whose hand rests on his head.

It is in connection with these figures that scholars have been compelled to face a critical difficulty. We know from the *fasti anni Iuliani*<sup>2</sup> and the *res gestae* of Augustus<sup>3</sup> that the Ara Pacis was begun (*constituta*), with a ceremonial, July 4, 13 B.C., that the anniversary of this day was to be observed each year with a sacrifice attended by magistrates, priests, and Vestals, and finally that the altar was not formally dedicated (*dedicata*) until four years later, January 30, 9 B.C. Which of these religious ceremonies constitutes the setting of the procession represented on the relief? The answer to this question vitally affects the identification of the figures we are considering. For between 13 and 9 B.C., to be precise in the years 12–11, occurred certain events which may well have affected the plans of those in charge of the design—namely, the death of Agrippa, which left Julia a widow,

<sup>1</sup> Petersen, *op. cit.* p. 107 erred in including all three children (29, 33, and 35) in the family of Drusus, the younger boy as Claudius, the older as Germanicus, and the girl as Livilla. The restraining gesture of Antonia's right hand makes certain the grouping proposed by Domazewski and thereafter undisputed.

<sup>2</sup> *Fast. Amit. ad 4. Iul. feriae ex s. c. quod eo die ara Pacis Augustae in campo Martio constituta est Nerone et Varo cos.*; *Fast. Praen. ad 30. Ian. feriae ex s. c. quod eo die ara Pacis Augustae in campo Martio dedicata est Druso et Crispino cos.*

<sup>3</sup> *Mon. Anc. 2, 37–41* (partially restored from the Greek text) *cum ex Hispania Galliaque rebus in his provinciis prospere gestis Romam redii Ti. Nerone P. Quintilio consulibus, aram Pacis Augustae senatus pro reditu meo consecrari censuit ad campum Martium, in qua magistratus et sacerdotes et virgines Vestales anniversarium sacrificium facere iussit.*

the consequent divorce (*de convenance*) of Tiberius and Vipsania, and the ensuing marriage of the widowed Julia with the unwilling Tiberius. How did the designers, acting doubtless under official guidance, solve the problem thus presented?

Domazewski, defending the thesis that the relief represents those present at the ceremonial of 13,<sup>1</sup> without change, recognizes the family group of Tiberius at that time,<sup>2</sup> without raising the point of its somewhat shocking inappropriateness at the time of the dedication four years later. The fair lady at Tiberius' side, according to this scholar, is his first wife, Vipsania; the tall priestly figure is her father Agrippa; and the woman in the background, whose hand rests on the boy's head, is her aunt, Agrippa's sister, Vipsania Polla. The boy, our *tunicatus*, he identifies as Agrippa's own son; and to be sure the younger one Lucius,<sup>3</sup> though as a matter of fact both he and his brother Gaius had actually been adopted by Augustus in 17 B.C. Gaius, because of his seniority, he thinks of as accompanying Augustus and Livia on a missing portion of the relief.<sup>4</sup> Drusus Junior, Tiberius' only son, is not mentioned.

Studniczka, on the other hand, supposes the designer to be looking forward to the final ceremony of the dedication as the setting of the relief,<sup>5</sup> and to be making necessary adaptations as occasion demanded. He, therefore, recognizes in the fair lady Julia, Augustus' daughter and second wife of Tiberius. The priest, whose identification as Agrippa he follows Sieveking in rejecting,<sup>6</sup> after a careful comparison with the accepted Agrippa portraits, he is content to think of as a *promagister* representing Augustus, *pontifex maximus* since 12 B.C., at this point in the procession. The feminine figure in the background becomes for him a nurse to the *tunicatus*, who remains Lucius Caesar,<sup>7</sup> in attendance on his adoptive father's priestly representative. Gaius, as the older brother, is near Augustus himself, on

<sup>1</sup> Domazewski, *op. cit.* p. 57.

<sup>2</sup> Domazewski, *op. cit.* pp. 60, 62.

<sup>3</sup> Domazewski, *op. cit.* pp. 62, and 66 n. 51: "Caius besass den. . . . Vorang des Alters. Deshalb ist der Knabe, der Agrippa begleitet, sicher Lucius Caesar." Gaius was born B.C. 20, Lucius B.C. 17.

<sup>4</sup> Domazewski, *op. cit.* p. 66 with n. 51.

<sup>5</sup> Studniczka, *op. cit.* pp. 909-910.

<sup>6</sup> Cf. Sieveking, *op. cit.* p. 184. This rejection seems to me inevitable. It must be noted that Agrippa was never *pontifex maximus*.

<sup>7</sup> Studniczka, *op. cit.* pp. 913, 915.



a missing part of the fragmentary section.<sup>1</sup> The question of the presence or absence of the younger Drusus is again not raised.

Of these two theories, that of Studniczka seems *a priori* the more probable, in view of the circumstances above outlined, and it unquestionably leads to the less embarrassing identifications. It cannot be doubted that the presence of Vipsania as the wife of Tiberius on a monument erected in the emperor's honor would have been an offense to the latter after Tiberius' marriage with his daughter Julia. Due regard may not improbably have been had for the peace of the immediate family, as a modest part of the greater *pax Augusta*, with the result that the figure originally designed as Vipsania was remodelled as Julia.<sup>2</sup> Also the case against the Agrippa identification may be regarded as decided, though Studniczka's recognition of the priest as an anonymous *promagister* is, perhaps, not final. To be sure, Studniczka's conception of the designer with eye steadily fixed on a future ceremonial of uncertain date seems somewhat forced. One may prefer to think of him as having been compelled to alter certain details in his representation of the processional of 13 B.C., by reason of the rearrangements in the imperial house, with the probable result that the idea of definitely dating the event depicted was simply lost sight of. This is especially possible in view of the annual recurrence of the ceremony. However, Studniczka's main point, that changes took place in the design of the relief, seems almost inevitable.

It is my contention, nevertheless, that in the case of the little *tunicatus* Studniczka has failed to carry his theory to its logical conclusion. If we reject Agrippa, there is no pressing reason for continuing to regard the boy as his son, especially if there is a genuine claimant for the place. I see such a claimant in Drusus Junior, the son of Tiberius and Vipsania. It is true that we do not know the exact year of his birth. Gardthausen<sup>3</sup> gives it as about 16 B.C., Bernoulli<sup>4</sup> as 15, another scholar<sup>5</sup> as still later.

<sup>1</sup> Studniczka, *op. cit.* p. 918.

<sup>2</sup> I have disregarded Mrs. Strong's identification, *Roman Sculpture*, p. 48, following Petersen's optional view, *Ara Pacis*, p. 107, of this figure as Livia, to balance the supposed figure of Augustus on a slab since proved by Sieveking, p. 175, to have belonged to another monument than the Ara Pacis.

<sup>3</sup> *Augustus und seine Zeit*, 1, 3 (1904) p. 1116 with notes 34-35.

<sup>4</sup> *Römische Ikonographie* 2, 1 (1886) p. 198 with references.

<sup>5</sup> Stuart Jones, *Roman Empire* (1908) p. 33.

There is little to help us except the statement of Suetonius<sup>1</sup> that Drusus' *deductio ad forum* was postponed until his father's return from the East, which was in the year 2 A.D., and our knowledge that this ceremonial ordinarily took place at the age of seven-teen. Now we know that Germanicus was born in 15, and it is obvious that on the relief the figure of the *tunicatus* is the senior of that of the toddler, Germanicus, by two or three years. Are we to account for this by positing a somewhat earlier date for the birth of Drusus than any of those suggested? This is, perhaps, possible. But I find it easier to explain the apparent discrepancy by the theory, just reviewed, of the redesigning of the relief in 12-11 B.C. For it is precisely the slab on which the supposed family of Tiberius is represented (15 Petersen) that would necessarily have been redesigned, while that upon which the toddler Germanicus appears would have required no change.<sup>2</sup> Accepting this explanation, we find it altogether conceivable that Drusus, a two- or three-year-old in 13, should have been reprotayed as a four- or five-year-old in 11, suiting precisely the figure of the *tunicatus*.

Applying the Drusus identification, now proved possible, we immediately recognize an unquestionably skilful treatment of a difficult problem—that of representing Drusus with Tiberius and Julia in such a manner as to suggest that Julia is not his mother. He is the focal point in the group, his pose indicating at once his service to the priest and his connection with his father and step-mother. But the maternity of Julia is subtly discounted by the clever device of permitting the nurse in the background to lay her hand on his head, while Julia maintains a restrained, if kindly, attitude toward him. This is in striking contrast to the maternal gestures of the two Antonias toward their children, and was noticed by Domazewski, who used it as an argument to prove that there was no relationship between the boy and the woman,<sup>3</sup> though he was thinking of Vipsania and Lucius Caesar. His acknowledgment of such a relationship would have forced him to recognize the boy as Drusus; his denial of it inevitably suggests

<sup>1</sup> Suetonius, *Tib.* 15: *Romam reversus deducto in forum filio Druso*. . . .

<sup>2</sup> Studniczka, p. 911, recognizes the difficulty here raised by the babyish appearance of the Germanicus figure, but notes merely: "Hier macht sich eben ein etwas früherer Zeitpunkt der Ausführung bemerkbar, nichts sonst."

<sup>3</sup> Domazewski, *op. cit.* p. 62.

that recognition to one who admits the more reasonable premises of Studniczka.<sup>1</sup>

It will be remembered that Drusus married the toddler's younger sister Livilla, and grew up as a possible heir to the principate, only to be poisoned by Sejanus in 23 A.D. As for the place of Lucius Caesar in the relief, I hazard the suggestion that his figure may some day be found, with that of his brother Gaius, near Augustus and Livia, at the head of the procession. Studniczka conceives of the older son as ministering to his illustrious adoptive father, emperor and *pontifex maximus* in the garb of *camillus*.<sup>2</sup> If Gaius holds the *urceus*, I am tempted to think of Lucius as carrying the *acerra*.

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<sup>1</sup> It is unnecessary to discuss the optional suggestion of Sieveking, *op. cit.* p. 184 that the boy is the grandson of Lepidus. His theory of the identification of the priest as the one time *triumvir*, who was *pontifex maximus* till his death in 12 B.C., has been discredited by Studniczka on political grounds. Moreover Sieveking himself prefers to recognize the boy as one of the imperial princes, and in either case the absence of the younger Drusus from the group remains unaccounted for.

<sup>2</sup> Studniczka, *op. cit.* p. 918. He calls attention to a then recently discovered fragment of a *camillus*, which may deserve consideration in this connection. So far as I know it is still unpublished.

THE APPEARANCE OF THE HORSESHOE ARCH IN  
WESTERN EUROPE

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THE question of the horseshoe arch, and especially of the horseshoe arch in Spain, has been discussed time and again by archaeologists in histories on architectural development as well as in separate articles. But as the results obtained so far are unconvincing and often obscure, the present paper has as one of its objects the intention to clear the air as much as possible, aided by a study of the monuments bearing directly on the subject.

The contention concerning the appearance of the horseshoe arch in Spain has generally centred about two assertions: 1, that the horseshoe arch was a heritage from the Visigoths which was taken over by the Moors on their arrival in Spain; and 2, that the horseshoe arch was introduced into Spain by the Moors. The first hypothesis has been championed by most Spanish scholars, more especially by Sr. Lamperez y Romea,<sup>1</sup> and in many cases has become a matter of patriotism rather than of archaeology. The second has been upheld chiefly by Le Clercq, Rivoira, and Dieulafoy.

The first group usually cite the churches which were built during the Visigothic period, and emphasize the fact that the Visigothic arch differs from the Moorish in that it is constructed on two curves as against the single curve of the Moorish arch. The second group combat these arguments by stating that no monument in Spain displays the horseshoe arch before the coming of the Moors, and that the horseshoe arches found in Visigothic churches are works of repair and later construction. They consider the horseshoe arches on the Leon stelae of the second century A.D. to be sporadic examples, and in the absence of intervening examples refuse to recognize a connection between such early examples and the horseshoe arches of the eighth century.

Leicester B. Holland, in a recent issue of the AMERICAN JOURNAL OF ARCHAEOLOGY<sup>2</sup> fairly represents the two points of view

<sup>1</sup> *Historia de la Arquitectura Cristiana en la Edad Media.*

<sup>2</sup> XXII, 1918, pp. 378 ff.

when he says: "It is a matter of considerable debate whether the horseshoe arch as found in the north (of Spain) is a derivative of the oriental form brought by the Moors from Africa and ultimately from Arabia and Mesopotamia, or whether it has a proper autochthonous existence free from oriental influence, and only resembles by chance the similar form in the south." The problem is thus restricted to two possibilities. Either the Moors are responsible for the horseshoe arch in northern Spain, or else it existed there free from oriental influence. A third possibility, which emerges from a more extended study of history and monuments, has hitherto escaped the notice of both parties.

The third hypothesis which results from such a study is the following:

- I. That the horseshoe arch, originally oriental, was known throughout Europe wherever Europe felt the influence of the East (especially of Asia Minor and Syria).
- II. That, in Europe, it was first known in Italy, southern France and Spain, *i.e.* within the bounds of the old Roman Empire, and later during the eighth, ninth, and tenth centuries, in the Danube and Rhine countries, in western France and Belgium, as the result of the Renaissance at the time of Charlemagne.
- III. That the Moslem, learning his first lessons in architecture in Syria and Mesopotamia, brought the horseshoe arch, for which he seems to have had a special predilection, to the west where it was already known.

It is not the purpose of this paper to discuss the origin of the horseshoe arch. We are merely concerned with its appearance in Europe after it had become a well-known feature in Syria and Asia Minor. The earliest known example of the horseshoe arch in Syria is in a tomb at Brâd (Fig. 1) and dates from the middle of the second century A.D., or early in the third century. The latest example dates 606 A.D., and is in the west church at Mu'allaka. Between these two dates the arch occurs in at least twenty other monuments in the northern parts of Syria so far explored. Besides these, there are many impost blocks of collapsed nave arcades and apse arches which, as I am told by Howard Crosby Butler,<sup>1</sup> indicate by their mouldings that the collapsed

<sup>1</sup> I wish to acknowledge my indebtedness to Professor H. C. Butler, to Professor C. R. Morey and to Mr. A. M. Friend of Princeton University for valuable information and suggestions in the preparation of this study.

arches were originally horseshoe in form. Rivoira is, therefore, in error when he says that Syrian examples of the horseshoe arch do not exist prior to 540 A.D.<sup>1</sup> Holland is under a similar misapprehension when, in minimizing a possible Syrian influence on Visigothic style, he states that "in Syria at this time the horseshoe arch was rare," and after mentioning Serdjillā, Danā, and Ruwêhā, continues, "These are the only instances of this form which I have been able to find in Syria at this period."

In these Syrian monuments, the horseshoe arch is employed



FIGURE 1.—TOMB AT BRĀD.

both in plan and elevation. In some cases it is only used in the plan of the apse, *e.g.* east church of Zebed; in others, only in elevation, *e.g.* church at Bātūtā; and in others still, both in plan and elevation, *e.g.* east church at Bourdj Hêdar. Holland, troubled by finding apses of horseshoe plan in Spain and southern France prior to the Moorish invasion insists that "the horseshoe apse in plan bears no relation to the horseshoe arch in elevation," and "that the argument from the horseshoe in plan to the horseshoe in elevation must be barred out as architecturally unsound." It is true that the horseshoe in plan does not necessarily imply its use in elevation, but it certainly indicates knowledge of the form, and in Syria at least the two were used together.

It is also important to note, not only in this connection but for comparison with a Spanish apse<sup>2</sup> to be cited later on, that in some of the Syrian examples the entire structure of the apse takes the horseshoe form. In other words, the first few courses of stone in the half dome take an outward curve before turning in toward the top of the apse. This feature is found in the churches of

<sup>1</sup> *Moslem Architecture* (Rushforth translation), p. 133.

<sup>2</sup> S. Juan de Baños. The eastern end is not really an apse but a tunnel vault with a flat end.

Bourdj Hêdar and Bâtûtâ in Syria, and in the bishop's residence at Resapha-Sergiopolis in Asia Minor, and is considered by H. C. Butler to be the first step in the development of the bulbous dome.

In Syrian manuscripts of the same period as the architectural monuments cited, the horseshoe arch is profusely used, *e.g.* in the illuminated pages of the Syrian gospels at Florence, and of Syrian manuscripts in the British Museum and in the Bibliothèque National at Paris (Fig. 2).<sup>1</sup> The Florentine manuscript was written by Rabula in 586 A.D.<sup>2</sup>

Other eastern examples<sup>3</sup> of the early Christian period may be found 1, on a Sidamara sarcophagus (of a class of monuments important in their relation to later sculpture in the West); 2, in the apse plan of the early Christian church uncovered at Thabaraca in Northern Africa; 3, in the architectural background of a series of silver plates found at Cyprus and in Spain; 4, on an Eastern consular diptych of the sixth century, now in the British Museum which found its way to the northwest and was sculptured on the reverse with a religious theme in the ninth century; 5, on a lead sarcophagus from Syria in the museum of the University of Pennsylvania at Philadelphia; 6, in some of the arches of Sta. Sophia<sup>4</sup> at Constantinople.

The horseshoe arch was carried west in the wake of that remarkable inundation of Italy, Gaul, and Spain by eastern immigrants, traders, and ecclesiastics which has been described and demon-



FIGURE 2.—HORSESHOE ARCH IN SYRIAC MANUSCRIPT: PARIS.

<sup>1</sup> See Appendix II.

<sup>2</sup> Rivoira, *op. cit.* p. 136 claims that the horseshoe arches in the Rabula Canon Tables were "later insertions"!

<sup>3</sup> See Appendix II.

<sup>4</sup> *Antoniades*: "Εκφρασις τῆς Ἀγίας Σοφίας I, pp. 81, 89; II, p. 24. I am indebted to E. H. Swift for my knowledge of this work.

strated, especially for Italy and Gaul, by Brehier<sup>1</sup> and Scheffer-Boichorst.<sup>2</sup>

The presence of eastern colonists is no less certain in Spain than in Italy and France. I have been able to gather almost forty Latin inscriptions<sup>3</sup> from Spain wherein names of Syrian origin occur. These inscriptions fall into four categories. First, inscriptions of colonial officials living in Spain, who had seen service in Syria. Second, cognomina indicating general origin in Syria, such as, Syrus or Surus, Syra or Sura, Syriaeus or Suriaeus. Third, cognomina indicating direct origin from Antioch, *e.g.* Antioeus or Antioeis. And fourth, miscellaneous names common in Syria or Asia Minor, or indicating origin elsewhere than Antioch, such as the inscriptions of a family from Serdjillā, or Ter. Flavius Neapolitanus,<sup>4</sup> or of such names as Sosius, Epiphania,<sup>5</sup> and Eucharistos. The most famous Greek inscription in this connection is the one referring to Claudius, the *prostates* of the Syrians at Malaga.<sup>6</sup>

Nor are the evidences of a continued connection between Syria and Spain lacking during the early Christian centuries. The founding of the Christian church is attributed directly to St. Paul (*I Romans*, XV, 24). And legend tells of the coming of St. James and his nine apostles. Two of these apostles remained in Spain while the other seven returned to Palestine, and later brought back the body of St. James. On their way back, the legend states, they were ordained in St. Peter's at Rome as bishops of seven cities in Spain.

But we do not have to rely on legend to establish the connection. The old Spanish liturgy is a strong witness to the fact. The Mozarab liturgy for Ascension Day corresponds exactly to the Syrian iconography of the ascension.<sup>7</sup> Isicius, "*monachus*

<sup>1</sup> *Byz Z.* 1903, pp. 1 ff.

<sup>2</sup> *Mitteilungen des Instituts für Oesterreichische Geschichtsforschung*, IV, 1885, pp. 521 ff.

<sup>3</sup> See Appendix I.

<sup>4</sup> Flavia Neapolis was a city in Palestine.

<sup>5</sup> Epiphanes was the surname of Antiochus IV, king of Syria, and Epiphania was the name of the modern Hama.

<sup>6</sup> The Council of Narbonne, held in 589 A.D. under Recarred the first orthodox Visigothic king of Spain, decreed that Goths, Romans, Syrians, Greeks, and Jews should do no work on Sundays. (Mansi, *Concilia*, IX, pp. 115, 117. Canons IV. and XIV.).

<sup>7</sup> *P. L. (Patrologia Patrum Latinorum)* 86, cols. 652, 655; *P. L.* 85, cols. 398 ff.



*palestinus*," a man especially renowned in poetry, prose, and oratory, became bishop of Toledo.<sup>1</sup> Spanish pilgrims, in turn, visited holy places in Syria. Theodoret mentions the Spaniards as among the most fervent pilgrims who gathered about the column of St. Simeon Stylites, at Kal'at Sim'an.<sup>2</sup>

The presence as well as the importance of Syrians in the Western Empire is, therefore, hardly to be called into question, and their influence on art still less. For much of what was originally from Syria and Asia Minor in decorative *motifs* and plans of buildings passed over into what became known as Byzantine art, and has been attributed to or associated with Byzantine influence whenever found in the West, the term "Byzantine" having become a very convenient one for any non-Roman influence appearing in Italy and in northern French and Germanic centres, just as the term "Visigothic" serves the same purpose in southwestern France and northern Spain.



FIGURE 3.—SARCOPHAGUS IN VILLA MATTEI: END.

We have seen that the use of the horseshoe arch in plan, elevation, and decoration was well established and familiar in Syria. It also occurs frequently in the oldest churches found in Asia Minor.<sup>3</sup> Thence it must have passed into the West. In Italy, the earliest example known to me is to be found in the apse arch of one of the municipal buildings at the lower end of the

<sup>1</sup> *P. L.* 19, col. 439.

<sup>2</sup> *P. G. (Patrologia Patrum Graecorum)* 82, col. 1472.

<sup>3</sup> See Appendix II. Antoniadès, *op. cit.* II, 24, No. 56 says "The architects of Asia Minor made use of the horseshoe arch from the fourth century A.D. onwards."

Forum at Pompeii. Another is found over the main entrance inside the Pantheon at Rome. As later examples,<sup>1</sup> and in closer relation to the movement of eastern colonists to the West, it is to be found (1) on a sarcophagus of the Sidamara type (Fig. 3) in the Villa Mattei at Rome;<sup>2</sup> (2) on two sarcophagi in San Apollinare in Classe at Ravenna; (3) on a relief in the Lateran Museum

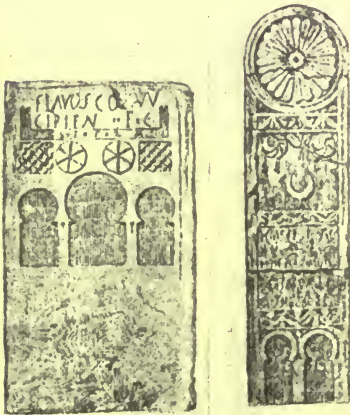


FIGURE 4.—PAGAN STELAE: MUSEUM OF LEON.

at Rome; (4) in the apse arch itself of San Apollinare in Classe at Ravenna; (5) in the exedrae arcades of S. Vitole, at Ravenna; (6) in the baptistry at Albenga, where the relieving arch over the doorway is filled with a pierced slab of horseshoe form, similar to examples at It Tuba and Sheik Ali Kasoun in Syria; (7) in the apse plan of the cathedral at Parenzo; and (8) in the apse plan of Sta. Maria at Grado.

The earliest known examples of the horseshoe arch in Spain appear on the famous, much-discussed Leon stelae (Fig. 4) which are undoubtedly memorials of some devotee of an Eastern cult. Yet they are not the only ones to be found prior to the coming of the Moors as one is led to believe. It can be found on other stele in the museums of Madrid (Fig. 5) and Mertola. The best preserved of these at Mertola<sup>3</sup> concerns one "*Andreas famulus dei princeps cantorum sacrosancte aelisiae Mertilliane*—." This epitaph is dated 525 A.D. and is under a perfect horseshoe arch, on which and on the columns supporting it appears the twisted cord *motif*. The horseshoe arch also appears on funeral urns at Aventina la Vall de l' Arbust and at Bausen in Catalonia.<sup>4</sup> On the former

<sup>1</sup> See Appendix II.

<sup>2</sup> The arches on the Mattei sarcophagus are too intimately connected with prototypes like those of the Sidamara sarcophagus to be dismissed by Mr. Holland as due to the "whim of the carver."

<sup>3</sup> See Appendix II.

<sup>4</sup> *Ibid.*

the horseshoe and semicircular arches are found side by side enclosing bust portraits of the deceased.

The horseshoe arch also occurs on (1) a stele in the museum at Frejus; (2) and (3) reliefs at Vaison; (4) gateway at Die; (5) relief at Narbonne; (6) stele at St. Cassien; (7) reliefs on an altar at Bordeaux (Fig. 6). These monuments<sup>1</sup> although in southern and southwestern France bear directly on the question of the horseshoe arch in northern Spain. For northern Spain and south-western France had the same traditions under the Roman Empire and under the Visigothic kings. In fact Bordeaux and Narbonne were important cities of the Visigothic kingdom.

The foregoing examples make it quite clear that Mr. Holland<sup>2</sup> was mistaken in his statements that "there is no evidence of the horseshoe arch used as a decorative motif in northern Spain before the middle of the ninth century with the exception of the stelae at Leon;" and again<sup>3</sup> "there is no certain evidence of the existence of the horseshoe arch in Spain in any form before its introduction by the Moors in the South."

We have seen how the horseshoe arch was not merely restricted to Spain, but was known contemporaneously all over the Western Empire as the result of the infiltrations from the East. But we must at this point give our special attention to its continued use in Spain, since the examples found during the eighth, ninth, and tenth centuries in the Visigothic churches of Asturias and in the manuscripts of Beatus have been the great bone of contention among those who claim the existence of the horseshoe arch in Spain either for the Visigoths or for the Moors. In order to show that these so-called



FIGURE 5.—STELE IN  
ARCHAEOLOGICAL MU-  
SEUM: MADRID.

<sup>1</sup> See Appendix II.

<sup>2</sup> *A.J.A.* XXII, 1918, p. 398.

<sup>3</sup> *Ibid.* p. 396.

Visigothic horseshoe arches are merely the continuation of an earlier use in Spain, and, at the same time to obviate a certain confusion in Spanish art history whereby everything from the fifth to the ninth century is classified as "Visigothic," and from the ninth century to the Romanesque period as "under Moorish influence," let us give a brief review of certain important facts

concerning the history of the province, of its church and of its art, during these early Christian centuries.



FIGURE 6.—PORTION OF  
GALLO-ROMAN ALTAR:  
BORDEAUX.

The western provinces of Rome were all culturally on the same basis, and kept the greatness of the Empire alive long after Rome itself had begun to disintegrate. With the disintegration of the Empire, however, a difference was bound to emerge between the various provinces according to the relative strength of this or that factor in the mixture of Eastern, Latin, or barbarian elements which made up the civilization of the dying Empire. In Gaul and Spain eastern connections are traceable from the earliest days of the Empire to the sixth century. During the fifth century, the Vandals, Suevi, and Goths overran Spain, and the Visigoths

established their Empire which lasted until the Moorish invasion. Byzantine colonies, however, still clung to the coast of Spain during the Visigothic period. With the advent of the Moor, the remnants of the Visigoths fled to the provinces of Leon and Asturias where they perpetuated their civilization throughout the eighth, ninth, and tenth centuries. Many of the persecuted Goths are recorded as having fled to "Asturias and Gaul."<sup>1</sup> It was during this period, too, that northern Spain came into closer contact with the Carolingian Empire. During the eleventh century Moorish unity broke down, and the period of the reconquest began which finally reclaimed Spain from the Moslem.

In the matter of ecclesiastical history, we have already noted

<sup>1</sup> *P.L.* 91, col. 855.

the early connection of the Spanish church with the East. In fact, the church in Spain grew to be one of the most important branches of the Catholic faith, and for a long time maintained a ritual independent from Rome drawing its inspirations rather from Syria and Africa. Spanish churchmen were at the great church councils beginning with Nicea<sup>1</sup> in 325 A.D. They travelled to Constantinople<sup>2</sup> and the East, and were ever in touch with the churches of Rome<sup>3</sup> and of the East. After the establishment of the Visigothic kingdom, the church was sufficiently powerful not only to maintain itself against the efforts of the new rulers to convert it to their Arian heresy, but also actually to convert the Visigoths to the orthodox Spanish faith.<sup>4</sup> The so-called Visigothic church dates, then, from the baptism of Reccared, the first of the orthodox kings, but as a matter of fact it is merely the continuation of the old Spanish church which had maintained itself in spite of two centuries of Visigothic hostility. After the Moorish invasion, the traditions of the old church were kept alive in the kingdoms of the north, as well as in the cities of Seville, Cordova, and Toledo which had fallen under Moorish domination. And the old ritual continued in use until the last quarter of the eleventh century when the Roman rite was introduced, a change largely due to the influence imported into Spain by its connections with France dating from the Carolingian period.

The course of art history parallels that of the political and ecclesiastical history. During the early centuries of the Christian era, when Spain was still a Roman province, we find the customary traces of decadent Roman art in the sarcophagi, stelae, and other funerary monuments, some bearing closer resemblance to the West, *e.g.* in the figure style of the sarcophagi, others to the traditions of the East, *e.g.* especially in decorative motives and in the technique as found on stelae. By the fourth century, the collapse of the figure style reduced sculpture to a linear and incised technique which suggested the East more and more. What is true of Spain is equally true of southern France and northern Italy at this time. The funerary reliefs of Spain, Gaul, and Italy, showing busts of the deceased under both horseshoe and semi-circular arches supported by twisted cord columns, are

<sup>1</sup> *P.L.* 16, col. 862.

<sup>2</sup> *P.L.* 80, col. 626.

<sup>3</sup> *P.L.* 13, col. 195; *ibid.* 80, col. 622.

<sup>4</sup> *P.L.* 22, Epistle LXIX.

only one instance of this similarity. With the final disintegration of the Empire, came waves of proto-Byzantine and barbaric influences. Of these the proto-Byzantine is far the more definite as in it we can recognize the crystallizing style of the East. Italy was most influenced by this proto-Byzantine style, but western Europe and Spain much less. As for the barbaric influences, it is



FIGURE 7.—INTERIOR OF SAN JUAN DE BAÑOS.

a question whether one can speak of such in Gaul and Spain prior to the eighth century. For what is generally referred to as "barbaric" is much more likely to be the reduction of eastern and western Roman art to its lowest terms. Certainly in Spain the old traditions of the late Empire existed even after a century or more of Visigothic rule, as the sixth and seventh century stelae already cited show. It is to be noted that these stelae bear the twisted cord motive which was widespread in its use throughout the old Empire and on Byzantine monuments as well.<sup>1</sup> This twisted cord, or column, though perhaps eastern, was long domesticated in the West before the Visigoths came to Spain, and was adopted by them in the goldwork of their crowns and in the decoration of their eighth, ninth and tenth century churches. It is questionable whether the Visigoths imported many Eastern

<sup>1</sup> Victor Chapot, *La colonne torse et le décor en hélice dans l'art antique*, 1907.

and Syrian motives into Spain. Probability as well as evidence indicate that many of these elements which appear in Visigothic ornament were adopted from what already existed in Spain at the time of their arrival. The same is certainly true to a great extent of the relation between proto-Byzantine art and the Ostrogoths at Ravenna.

When, then, with these things in mind, we turn to the architecture of the Visigothic churches of the eighth, ninth, and tenth, centuries in northern Spain, it is not surprising to find late Roman and Eastern motives such as the star, the helix, the grape vine, and the twisted cord perpetuated. The reliefs on the walls and at the bases of columns with figures and busts under arches borne on twisted cord columns (Sta. Maria de Naranco and S. Miguel de Lino) are the direct descendants of the funerary reliefs of the fourth and fifth centuries. And when, as at San Salvador de Val de Dios, the horse-



FIGURE 8.—PORCH OF CHURCH NO. 12 (RAMSAY AND BELL).

shoe arch is used in combination with the cord column and side by side with the semicircular arch it is not necessary to invent any Moorish influence.<sup>1</sup> As for the churches of the earlier period, e.g. the crypt of Palencia cathedral, San Juan de Baños, and San Pedro de Nave, even granted that the arches and vaults were restored in the ninth century, it is more probable to suppose that the repairs were carried out according to the original appearance of these arches and vaults. Note here especially the similarity of the apse vault of San Juan de Baños to the horseshoe vault in one of the Asia Minor churches (Figs. 7 and 8).<sup>2</sup> It is no longer necessary to suppose that the Spanish Christians restored their churches by substituting a new architectural feature of the enemy who had destroyed them, nor that fleeing, persecuted monks were at this time propagandists for the style of their persecutors, knowing as we do that the horseshoe arch was a familiar feature before the arrival of the Moor. For if the horseshoe were a purely Saracenic motive, why are no other Saracenic

<sup>1</sup> The Syrian and Asia Minor churches and Sta. Sophia offer sufficient authority for such use, even in the same building.

<sup>2</sup> Ramsay and Bell, *Thousand and One Churches*, Church No. 12, fig. 88.

decorations found on the same churches and in the same manuscripts in which the horseshoe arch occurs? It is only later, at the end of the eleventh century that a composite style known as the "mudejar" is evolved which contains many elements of both

Christian and Moorish art.

After the conversion of the Frankish and Germanic tribes to Christianity which brought to the north-west the culture of the South, the first great Renaissance was initiated by Charlemagne. And the art which resulted during the Carolingian and Ottonian periods was a combination of Eastern, Western, and native or Merovingian elements. The Eastern elements were largely transmitted via the Danube and Ravenna through court and church connections. Syrians who had been driven from their country



FIGURE 9.—HORSESHOE ARCH IN MEROVINGIAN MANUSCRIPT, NO. LAT. 11627: PARIS.

by the invasions of the Persians and Arabs had scattered to Byzantium and to the West. The Western elements came up through Italy and Gaul.

The most important monuments of art in the Carolingian and Ottonian periods, exclusive of architecture are manuscripts, ivories, and goldwork, the products of the great monastic centres. And from the study of these we acquire a great deal of information concerning the architectural forms of these periods, just as relief



and wall paintings are often the only source for architectural information in ancient Egypt and Persia.

It is interesting to note that the horseshoe arch is used even in manuscripts<sup>1</sup> of the Merovingian period (Fig. 9) together with other Eastern motives. It is commonly used throughout the Carolingian schools<sup>2</sup> even in the earliest groups, *e.g.* the Franco-Saxon (Fig. 10) and Ada groups. It is most frequently found in the canon tables side by side with semi-circular arches, and its form is certainly architectural. There is every reason to suppose that the canon tables represent nave arcades or wall arcades running about the apse (a specific Carolingian feature), just as the semi-circular fields above the canon tables of the Ada group, with representations of Christ in Glory or with the symbols of the Evangelists, represent apse mosaics or mosaics in the half domes of a central planned church, such as San Vitale at Ravenna or Aix-la-Chapelle.<sup>3</sup>

Examples of the horseshoe arch among Carolingian<sup>4</sup> ivories are similarly interesting as reflecting an architectural tradition. Even in the field of architecture itself,<sup>5</sup> although monuments of this period are rare, the horseshoe arch is to be found in the apse plans of the Vaison baptistry and of the church at Münster in Switzerland, and both in plan and elevation in Theodulf's church at Germigny les Près.

The appearance of the horseshoe arch in Merovingian and



FIGURE 10.—HORSESHOE ARCH IN CAROLINGIAN MANUSCRIPT, BIBLIOTHÈQUE NATIONALE, NO. 257: PARIS.

<sup>1</sup> Appendix II.

<sup>2</sup> *Ibid.*

<sup>3</sup> Cf. apse construction of Venasque baptistry. Lasteyrie, *op. cit.* fig. 111.

<sup>4</sup> *Ibid.*

<sup>5</sup> *Ibid.*

Carolingian art cannot be attributed to any Moorish influences. Moorish details do not occur in northern art before the appearance of "mudejar" architecture in Spain. Its appearance is due solely to influences from the east transmitted primarily by eastern churchmen and manuscripts as well as through Ravenna. The very presence of Syrians in the court of Charlemagne is attested by Thegan who writes that the emperor corrected the Gospels shortly before this death "*cum Graecis et Syris.*"<sup>1</sup>

It is also conceivable that the horseshoe arch was transmitted in part into Carolingian art through Spain, as the connection between Spain and the Northeast was quite close at this time. Charlemagne himself made an expedition into Spain. Theodulfus, the Visigoth, fled from the Moorish invasion of Septimania and was received at the court of Charlemagne. Spanish heretics were called to the Council of Frankfort<sup>2</sup> by Charlemagne. The Council of Aix-la-Chapelle in 817 decreed St. Iago di Campostela and other Spanish shrines as places of pilgrimage, and Louis the Pius made these pilgrimages obligatory to the French. The same monarch brought the relics of St. Cucufat, the martyr saint of Barcelona, to St. Denis. Charlemagne had previously taken them from Barcelona and placed them in an Alsatian abbey. In 870, Charles the Bald imported a priest from Toledo to celebrate the old Mozarab or Visigothic ritual at the French court.

Our conclusions, therefore, which we have already stated at the beginning of this paper, might be restated as follows. That the appearance of the horseshoe arch in western Europe is due directly to influences from Syria and Asia Minor, carried by Eastern colonists to the West. That in Spain, it survived into the Visigothic period along with other Eastern motives of late Roman art, and became a well-known feature in the art of that country at that time, existing side by side with the semicircular arch as it had in Syria. That it developed in the north of Europe from the seventh and eighth centuries on, under the influence of Eastern scholars and Eastern manuscripts, as well as under the influence of Spain which stood in close connection with the countries of the North at this time.<sup>3</sup>

<sup>1</sup> *Monumenta Germanorum Scriptorum*, II, 592.

<sup>2</sup> Beatus at the Council of Frankfurt, *P.L.* 96, 894. Elipandus of Toledo writes to Charlemagne, *P.L.* 96, 867.

<sup>3</sup> The use of the horseshoe arch in Armenia should also be noted (Strzygowski, *Die Baukunst der Armenier und Europa*, Vienna, Scroll, 1918, I, figs.

It is easy to see in the light of this evidence how neither of the two former hypotheses regarding the horseshoe arch in Spain can stand. They are both right and they are both wrong. Knowledge of the horseshoe arch did exist before the coming of the Moor, and at the same time the Moor brought it with him to Spain. For we must not ignore the fact that the horseshoe arch was a favorite *motif* with the Moor, that he used it almost to the exclusion of the semicircular arch, and that his use of it in Southern Spain undoubtedly affected and stimulated its use elsewhere in Spain, especially after the two civilizations had merged during the eleventh century. Yet the very existence of the horseshoe arch prior to the Moorish conquest accounts for its ready use in Mozarab churches and manuscripts during the eighth, ninth, and tenth centuries where no other Moorish decoration is found. For had the form been a purely Saracenic one, and not traditional to their own art, the fleeing monks would never have built them in their churches, nor would their Asturian brothers have used them in the decoration of manuscripts where they so often inscribed everlasting curses against the invader and arch heretic.

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37, 127, 130, 159, 171, 181, 492, *et alia*). But as the architecture of Armenia is in part an outgrowth from Syria and Asia Minor, and probably indicates what would have developed in those regions had it not been for the Persian and Arab invasions, the possible Armenian influence on western architectural forms seems negligible. Apparent similarities are more apt to be due to the common source from which each developed.

## APPENDIX I

## INSCRIPTIONS:

## First Group:

- (1) L. Valerius—Malaga. *C.I.L.* II, 1970.
- (2) Sex. Julio—Seville. *C.I.L.* II, 1180.
- (3) M. Accenna—Alcala de Guadaira. *C.I.L.* II, 1262.
- (4) Ael. Januario—Tarragona. *C.I.L.* II, 4135.
- (5) Q. Atrio Clonio—Tarragona. *C.I.L.* II, 4111.
- (6) M. Cornelio—Benagnazil. *C.I.L.* II, 3783 and 6013.

## Second Group:

## (A) Syrus or Surus:

- (1) *C.I.L.* II, 146, at Villaviciosa.
- (2) " II, 4542, at Barcelona.

## (B) Syra or Sura:

- (1) *C.I.L.* II, 4542, at Barcelona.
- (2) " II, 4031, at Almazora.
- (3) " II, 1788, at Cadiz.
- (4) " II, 1702, at Checa.

## (C) Syriacus or Suriacus:

- (1) *C.I.L.* II, 1702, at Checa.
- (2) " II, 5094, at Cartagena.
- (3) " II, 1093, at Alcala del Rio.
- (4) " II, 3371, at Giaena.
- (5) " II, 724, at Albuquerque.
- (6) " II, 1313, at Medina.
- (7) " II, 1003, at Salvatierra.
- (8) " II, 1035, at Villagarcaia.

## Third Group:

## Antioeus or Antioeis:

- (1) *C.I.L.* II, 4970, 33 at Tarragona.
- (2) " II, 4144, at Tarragona.
- (3) " II, 4970, 541, at Tarragona.
- (4) " II, 5515, at Cordova.
- (5) " II, 43, at "Troya."
- (6) " II, 415, at Tarragona.
- (7) " II, 2223, at Cordova.
- (8) " II, 712, at "Norba."
- (9) " II, 2292, at Cordova.
- (10) " II, 2334, at Penaflor.
- (11) " II, 3434, at Cartagena.
- (12) " II, 5171, at Placencia.
- (13) " II, 830, at Placencia.

## Fourth Group:

- (1) Serjillā—Sergia Gemella. *C.I.L.* II, 1886, 5977.
- (2) Eucharistus. *C.I.L.* II, 2991, at Zaragoza.
- (3) Epiphaniae (Christian). *C.I.L.* II, 957, at Rio Tinto.
- (4) Flavius Neopolitanus. *C.I.L.* II, 515.

## APPENDIX II

## A. Examples of the Horseshoe Arch in Syrian Architecture:

1. Tomb at Brâd, middle of second or early third century. Butler: *The Princeton University Archaeological Expedition to Syria in 1904-5, and 1909*. Division II, section B, p. 299, fig. 329, plate XXV.
2. Southwest church at Brâd, portal decoration, 6 century, *ibid.* p. 311, figs. 342-3.
3. Bâkirhâ, church dated 546, portal into prothesis, *ibid.* p. 199, fig. 204.
4. Church at Bâtûtâ, apse arch and entire dome, 4 or 5 century, *ibid.* p. 330, figs. 374-5.
5. East church at Burdj Hêdar, plan of apse, apse arch, and half dome of apse, *ibid.* p. 290, figs. 313-4.
6. North church at Dâna, dated 483, apse arch. Butler: Part II of the *Publication of an American Archaeological Expedition to Syria in 1899-1900*, p. 143, fig. 54.
7. Tower at It Tûbâ, relieving arch filled in with a slab. Butler, *P.A.E.S.* p. 21, fig. 18.
8. West monastery at Dêr Sim'ân, apse arch, *ibid.* p. 373, figs. 291-2.
9. Kal'at Sim'ân, two relieving arches over the two middle portals of the narthex of the main church, 5 century, *ibid.* p. 184, pl. XXIV.
10. Kalb Lauzeh, apse plan, Butler, *A.A.E.S.* fig. 89.
11. Kasr Ibn Wardân, window arches, Butler, *P.A.E.S.* p. 29, fig. 26, and pl. I.
12. Church at Khirbit Têzîn, dated 585, apse arch, *ibid.* p. 204, fig. 209.
13. West church at Mu'allak, dated 606, apse plan, Butler, *A.A.E.S.* p. 307, fig. 116.
14. South church at Mu'allak, apse plan, *ibid.* p. 306, fig. 114.
15. Bizzos church at Ruwêhâ, end of 5 century. Two arches of narthex, and open relieving arch over west portal, Butler, *P.A.E.S.* p. 143, pls. XV-XVI.
16. Church at Serdjillâ, 4 century, apse plan, Butler, *A.A.E.S.* fig. 33; apse arch, Butler, *P.A.E.S.* p. 114, pl. XII.
17. Serdjillâ, niche decoration, de Voguë, *La Syrie Centrale*, pl. 33.
18. Shêhk 'Ali Kâsûn, church, closed relieving arch, Butler, *P.A.E.S.* p. 8, fig. 2.
19. Church of St. Mary at Shêhk Slêmân, late 5 century, apse plan, *ibid.* p. 340, fig. 389.
20. Church dated 602 at Shêhk Slêmân, apse plan and apse arch, *ibid.* p. 337, fig. 385-6.
21. East church at Zebed, 5 century, apse plan, Butler, *A.A.E.S.* p. 303, fig. 111.
22. West church at Zebed, apse plan and apse arch (fallen), *ibid.* p. 305, fig. 112.

NOTE.—There are several Syrian churches, for example Kasr Ibn Wardân (*P.A.E.S.* fig. 25), and Midjleyyâ (*A.A.E.S.* fig. 34), which exhibit an apse plan of horseshoe form which is not produced by the continuation of the circle beyond the semicircle, but by a line starting off on a parabolic curve on each

side after the semicircle has been completed. These are interesting in the light of similar horseshoe forms, both in plan and elevation, in the Coptic examples cited, as well as in many of the Spanish monuments of the Visigothic period and tradition, e.g. San Juan de Baños. (Note its use also in the Carolingian ivory at Schloss Hrádek, Fig. 11.)



FIGURE 11.—IVORY IN COLLECTION OF COUNT HERRACH: SCHLOSS HRÁDEK: BOHEMIA.

(b) Examples from Syrian Manuscripts:

- (1) Gospels of Rabula, 6 century, Bibl. Laurentiana, Florence.
- (2) Ms. 14528, Brit. Mus., London.
- (3) Bib. Nat. Syr. 38, Paris.

B. Other Representative Eastern Examples from the Roman and Early Christian Periods:

Sidamara sarcophagus, Constantinople Museum, *Mon. Piot.* IX, pls. XVII–XIX.

Silver clipei:

- (1) of Theodosius, found in Spain, 4 century, Dalton, *Byzantine Art*, fig. 356.
- (2) from Cyprus, 6 century, Dalton, *op. cit.* fig. 358.
- (3) *ibid.* in Morgan Coll. Metr. Mus., N. Y., Dalton, *op. cit.* fig. 61.

Ivory consular diptych, Brit. Mus., 6 century, Goldschmidt, *Elfenbeinskulpturen aus der Zeit der Karolingischen und sächsischen Kaiser*, Vol. 3, fig. 132–b.

Lead sarcophagus from Syria, University Museum, Philadelphia.

Thabaraca, Egypt, apse plan, 5 century, *Mon. Piot.* XIII, pl. 181.

Der Abu Makar, Egypt, wood screen, 9 century, *B. Metr. Mus.*, November, 1921.

Asia Minor: plans and elevations, Ramsay and Bell, *Thousand and One Churches*, pp. 41 ff. and 316 ff.

Church No. 1

No. 6, figs. 23, 35.

No. 12, figs. 86, 88.

No. 29, fig. 116.

No. 31, figs. 120, 123, 127, 128.

No. 33, fig. 134.

Church at Mahatch, figs. 203, 206.

Church at Maden Dag, figs. 219, 221.

*Ibid.* at Resapha Sergiopolis, apse arch and apse, 5-6 century, *B.C.H.* 1903, p. 289, fig. 8.

*Ibid.* Douleh, arch of nave arcade, and apse arch, Bell: 'Notes on a Journey through Cilicia and Lycaonia,' *R. Arch.* 1906, p. 235, figs. 6-7.

Arches of the nave arcade within the four-corner exedrae, in Sta. Sophia, Constantinople, Antoniades, *op. cit.* I, pp. 81, 89 and II, p. 24.

C. Representative Western Examples of the Horseshoe Arch:

1. Italy:

Akse arch, municipal building, Pompeii.

Interior entrance arch, Pantheon, Rome.

Sarcophagus, Villa Mattei, Rome, 3-4 century (see Fig. 3).

*Ibid.* San Apollinare in Classe, Ravenna, 4-6 century, Dutschke, *Ravennatische Studien*, fig. 32.

*Ibid.* 4-6 century, Dutschke, *op. cit.* fig. 35-b.

Akse arch, *ibid.* 5 century, Lasteyrie, *L'architecture religieuse en France à l'époque romane*, fig. 15.

Arches of exedra arcades in San Vitale, Ravenna, Antoniades, *Sta. Sophia*, II, p. 24, No. 56.

Relief, Lateran Museum, Rome, No. 55.

Albenga baptistry, relieving arch over door, 6-9 century, Lasteyrie, *op. cit.* fig. 171.

Parenzo cathedral, apse plan, 6 century, Lasteyrie, *op. cit.* fig. 17.

Grado, Sta. Maria, apse plan, *ibid.* fig. 69.

2. Southwestern France and Spain:

Fréjus museum, stele, 4-5 century, Espérandieu, *Recueil des bas-reliefs de la Gaule-Romane*, I, fig. 31.

Vaison, relief, 4-5 century, Espérandieu, I, fig. 293.

Vaison, relief, 4-5 century, Espérandieu, I, fig. 295.

Die, gateway, 4-5 century, Espérandieu, I, fig. 316.

Narbonne, relief, 4-5 century, Espérandieu, I, fig. 636.

St. Cassien, stele, 4-5 century, Espérandieu, II, fig. 1077.

Bordeaux, altar, 4-5 century, Espérandieu, III, fig. 2462.

Leon museum stelae, 2-3 century, Puig y Cadafalch, *L'Arquitectura romanica a Catalunya*, I, figs. 298-9.

Madrid museum, stelae from Leon and Palencia, *ibid.* I, fig. 295.

Vall de l'Arbust, St. Pere at Aventina, funerary urns, *ibid.* I, fig. 301.

Bausen, funerary urn, *ibid.* I, fig. 309.

Mertola museum, Christian stelae, 6-7 century, Huebner, *Inscriptiones Hispaniae Christianae*, Nos. 304, 318, 325.

Beatus, Morgan Library, N. Y., dated 894 (earliest known Beatus).  
Baños, church of San Juan, apse, arches, portal, 7-9 centuries,

Rivoira, *Architettura Musulmana*, figs. 217, 218, 219.

Palencia cathedral, apse in crypt.

San Pedro de Nave, arches, apse, 7-9 centuries.

As carrying on the tradition:

Bamba, Sta. Comba, 9 century.

Sta. Cristina de Lena, altar screen, 9 century.

S. Miguel de Escalada, arches, 9-10 century.

San Salvador de Val de Dios, windows, 9 century.

Fragments in the Visigothic tradition set in the walls of the tower of Santo Tome, Toledo, and

Window of San Gines in the Museo Arqueologico, Madrid, *Monumentos Arquitectonicos*, I, pp. 46, 34.

D. Some Examples from the Merovingian and Carolingian Periods.

1. Manuscripts:

Missale Gothicum, Rome, Regina, 317, Zimmermann, *Vorkarolingische Miniaturen*, Vol. I of plates, 46.

Paris, Bib. Nat. 11627, Hieronymus, *ibid.* Vol. II, pls. 109-110.

*Ibid.* 213, Bastard, *Peintures et ornements des Manuscrits*, pl. 65.

Lex Salica, St. Gall, 794, Paleographical Society: *History of the Art of Writing*, pl. 140.

Gospel of St. Denis, Paris, Bib. Nat. 9387, 8 century, Boinet, *La Miniature Carolingienne*, pl. 5.

Schuttern Gospels, Holkham Hall, *Mélanges de E. Chatelain*, p. 294, early 9 century.

Berlin, Royal Library, Phillips 1676, end of 8 century, Boinet, *op. cit.* pl. cxlvii.

Brit. Mus. Gospels, Hart. 2788, early 9 century, Boinet, *op. cit.* pl. xiv.

Lothair Gospels, St. Martin, Tours, early 9 century, Bastard, *op. cit.* II, 151.

Francis II Gospels, Paris, Bib. Nat. 257, 9 century, Boinet, *op. cit.* xevi.

Folchard Psalter, St. Gall, 870, Boinet, *op. cit.* pl. cxli-ii.

Codex Aureus, St. Emmeran, Regensburg, 870 Boinet, *op. cit.* pl. cxv.

Second Bible of Charles the Bald, Paris, Bib. Nat. 2, end of 9 century, Boinet, *op. cit.* pl. c.

Brit. Mus. 8849, Weber, *Einbanddecken, etc., aus Metzger liturgischen Handschriften*, pl. xxxiii.

2. Ivories:

Paris, Cabinet des Médailles, Evangelists, early 9 century, Goldschmidt, *op. cit.* I, fig. 19.

*Ibid.* Cluny, Ascension, 7-8 century, Goldschmidt, *op. cit.* fig. 184.

Schloss Hrádek, Apostle, early 9 century, *ibid.* fig. 182.



Berlin, Kaiser Friedrich Mus. Annunciation, 9-10 century, *ibid.*  
fig. 125.

*Ibid.* Apostles, 10 century, *ibid.* fig. 61.

Munich, Nat. Mus. Apostles, 10 century, *ibid.* fig. 59.

3. Architecture:

Germigny des Près, arches and apse, 806, Lasteyrie, *op. cit.* figs.  
127, 128.

Münster, Switzerland, apse plan of church, 8 century, *Die Ent-  
wicklung der Kunst in der Schweiz*, fig. 104.

Vaison cathedral, apse plan, Lasteyrie, *op. cit.* fig. 161.



## ARCHAEOLOGICAL NEWS<sup>1</sup>

### NOTES ON RECENT EXCAVATIONS AND DISCOVERIES; OTHER NEWS

SIDNEY N. DEANE, *Editor*

*Smith College, Northampton, Mass.*

#### GENERAL AND MISCELLANEOUS

**ALBANIA.**—**Miscellaneous Antiquities.**—B. PACE describes a number of inscriptions and votive and sepulchral reliefs discovered in Albania during the war. The site of ancient Apollonia is especially rich in antiquities. Many fragments are incorporated in the walls of the monastery of Shinamari at this place. The church of the monastery and its Byzantine inscriptions are described. (*Ann. Scuol. It. At.* III, 1916–1920, pp. 286–290; 3 figs.)

**CONSTANTINOPLE.**—**The Palace of the Philopation.**—J. PAPADOPOULOS reports that at Toptchila, ten minutes from the Adrianople gate of Constantinople, two remarkable Byzantine capitals were recently discovered, together with a number of fragments of reliefs. Other antiquities were found on the same site some years ago. Near by is an ancient structure in which a modern fountain is installed; it may have been the *piscina* of a bath. A subterranean gallery, perhaps an aqueduct, also extends along the same field. The great number of remains shows that there was originally a Byzantine palace on this site. Examination of the literary evidence proves that it cannot have been the palace of the Aretai, constructed by the emperor Diogenes. Its situation rather corresponds to what is recorded of the palace of the Philopation, which is frequently mentioned by writers of the twelfth century. This building was occupied by Louis VII in his crusade. (*C. R. Acad. Insc.* 1921, pp. 276–282.)

**NECROLOGY.**—**Howard Crosby Butler.**—Professor Howard Crosby Butler of Princeton University died suddenly in Paris on August 13, 1922. He was in perfect health at Smyrna on his return from Sardis. He reached Paris from Naples on August 11 in an exhausted condition, and was taken to the American hospital at Neuilly on the 13th, where he died that same night. His body is being sent to this country.

Professor Butler was an influential member of the Archaeological Institute,

<sup>1</sup> The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor DEANE, Editor-in-charge, assisted by Professor SAMUEL E. BASSETT, Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Dr. T. A. BUENGER, Professor HAROLD N. FOWLER, Professor ELMER T. MERRILL, Professor LEWIS B. PATON, Professor JOHN C. ROLFE, Dr. JOHN SHAPLEY, Professor A. L. WHEELER and the Editors, especially Professor BATES.

No attempt is made to include in this number of the JOURNAL material published after June 30, 1922.

For an explanation of the abbreviations, see pp. 129–130.

President of its New Jersey Society, and chairman of its Research Commission.

A more detailed estimate of his work at Princeton, his explorations in Central Syria, and his excavations at Sardis must be reserved for future notice. R. V. D. M.

**Otto Crusius.**—Born at Hanover in 1857, Otto Crusius died at Munich, December 29, 1918. He was one of the best Hellenists of his time. His most important work is perhaps his edition of the mimes of Herondas (sixth edition 1914), but his other writings, largely on mythology, are not inconsiderable. (S. R., *R. Arch.* XIV, 1921, p. 401, with partial bibliography.)

**Gaston Darier.**—A good and conscientious worker in the field of archaeology, Gaston Darier, died while still young at Geneva in September, 1921. His name is especially connected with the discovery of the sanctuary of the Syrian gods on the Janiculum. (X, *R. Arch.* XIV, 1921, p. 402, from *Journal des Débats*, September 16, 1921.)

**Ignaz Goldziher.**—The illustrious orientalist Ignaz Goldziher, Professor at the University of Budapest, was born at Stuhlweissenburg, Hungary, in 1850 and died in November, 1921. He was a member of many learned societies, and held honorary degrees from Cambridge, Aberdeen, etc. See the article 'Goldziher' in the *Jewish Encyclopedia*. (S. R., *R. Arch.* XIV, 1921, p. 399.)

**Basil Latyshev.**—The eminent epigraphist Basil Latyshev, Professor in the University of Petrograd, died in August, 1921. His two chief works are the collection of Greek inscriptions of Southern Russia (1885, 1890, with supplements in 1889, 1894, 1896) and *Scythica et Caucasica* (1893-1899). In his later years he worked also in the field of Russian hagiography. (S. R., *R. Arch.* XIV, 1921, p. 400.)

**Jean Lesquier.**—Born at Lisieux in 1879, Jean Lesquier died at Neuilly-sur-Seine, June 28, 1921. His writings on Greek papyri and the military establishments of the Macedonian and the Roman rulers of Egypt are numerous and admirable. (P. JOURQUET, *R. Arch.* XIV, 1921, p. 402 f.)

**Oscar Montelius.**—In *R. Arch.*, fifth series, XIV, 1921, pp. 396-397, is an appreciative notice, with bibliography, of Oscar Montelius (September 1843-November, 1921), who created and developed the scientific archaeology of proto-historic times,—a prince of archaeologists.

**Carl Robert.**—Carl Robert, Professor of Classical Philology and Archaeology and Director of the Archaeological Museum at the University of Halle since 1890, died at his home in Halle on January 17 after a two weeks' attack of influenza. He was born at Warburg on March 8, 1850, the son and grandson of university professors. He studied philology and archaeology at the Universities of Bonn and Berlin, taking his doctorate at the latter place in 1874. Two years later he became *Privatdozent* at Berlin and in 1877 Professor. In 1890 he was called to Halle where he was Professor for thirty-two years till his death. In 1906-1907 he was Rector of the University of Halle. He was also *Geheimrat* and *Regierungsrat*, and held an honorary degree from the University of Athens. He made several extended scientific journeys to both Greece and Italy. For many years he had been editor of *Hermes*. His scientific writings were many and ranged over almost the entire classical field. Herewith is appended a list of the more important names: *De Apollodori bibliotheca* (Diss. inauguralis) 1874; *Eratosthenis catasterism. reliquia*, 1878;

*Thanatos*, 1879; *Bild und Lied*, 1881; *Archaeologische Maerchen*, 1886; *Antike Sarkophag-Reliefs*, I-III, 1890-1904; *Hallische Winkelmannsprogramme*, 1890-1903; *Studien zur Ilias*, 1901; new edition of Preller, *Griechische Mythologie*, 1903; *Szenen aus Menanders Komoedie*, 1908; *Menander*, 1908; *Pausanias als Schriftsteller*, 1909; *Sophokles' Spürhunde* (with translation), 1913; *Archäologische Hermeneutik* 1919; *Griechische Heldensagen*, I, 1921.

Though for some years bodily incapacitated Robert enjoyed to the end his full mental vigor and extraordinary capacity for work. He had just completed the second volume of his *Heldensagen* and, in fact, at his death was at work on the Index. The second volume will be brought out by his colleague, professor Otto Kern, who is likewise preparing Robert's biography. In the latter work Dr. Kern wishes to include the academic activities of Robert's many American pupils, which accounts may be sent either to Dr. Kern in Halle (Friedenstrasse, 23) or to the undersigned, who will forward them. On July 1 Dr. Kern delivered a memorial address on Professor Robert in the Museum at Halle, which has been renamed in honor of Robert the *Robertinum*. Professor Wissowa, who provisionally has taken over the editorship of *Hermes*, will edit all of Robert's unpublished papers.—WALTER WOODBURN HYDE, University of Pennsylvania.

**Demetrios Stavropoulos.**—The Greek Ephor of Antiquities, Demetrios Stavropoulos, died November 19, 1919. He was born in 1872. He carried on investigations at Eretria, Delphi, Thebes, Sparta, and Olympia; but his chief activity was on the island of Rheneia (1898-1900), where he discovered the enormous mass of pottery resulting from the "purification" of Delos in 425 B.C. This material is now, thanks to him, methodically arranged in a special museum at Mykonos. (X, *R. Arch.* XIV, 1921, p. 404, from 'Εφ. 'Αρχ. 1919, p. 103.)

**Oreste Tommasini.**—Oreste Tommasini was born July 8, 1844, and died December 9, 1919, at Rome. He was prominent in politics and education, and especially interested in the mediaeval history of Rome and in Machiavelli. The sixth Historical Congress, meeting at Rome in 1895, owed much to his efforts and generosity. (LUCIO MARIANI, *B. Com. Rom.* XLVII, 1919, pp. 234-236.)

**Georg Treu.**—The well-known archaeologist Georg Treu was born at St. Petersburg in 1843 and died in Dresden, October 3, 1921. He was first attached to the museum in St. Petersburg, then to that in Berlin. He took an active part in the excavations at Olympia and published (1878) the first treatise on the *Hermes* of Praxiteles. The great volume on the sculptures in marble and stone found at Olympia is due to him. As director of the *Albertinum* at Dresden he made that museum a unique place for the study of sculpture. He was the author of several important monographs on Greek art and also (1897-1905) on the three modern sculptors Constantine Meurier, Max Klinger, and Rodin. He had an artistic nature and was withal a most lovable man. (S. REINACH, *R. Arch.* XIV, 1921, pp. 400 f.)

**Frederick Versakis.**—Born at Piraeus in 1880, Versakis studied architecture in Germany and, after his return, as Ephor of Antiquities (1910) studied the Odeum of Herodes, the choregic monument of Nicias, the archaic temple at Coreyra, where he established a museum, also the monuments of Laconia and Messenia. To him is due especially the description, in the *Πρακτικά* of 1912, of

the excavations at Coreyra continued at the expense of Wilhelm II. (X, *R. Arch.* XIV, 1921, p. 404, from 'Εφ. 'Αρχ., 1919, p. 104.)

**ZANZIBAR.**—**Cufic Inscriptions.**—Our knowledge of Cufic inscriptions is based chiefly on materials found in Egypt, Syria, Asia Minor and Upper Mesopotamia. Little material from the eastern part of the Mohammedan world has thus far been discovered. This small stock of inscriptions has recently received a remarkable addition through the discovery by Major F. B. Pearce, British Resident in Zanzibar, of several Cufic inscriptions in the mosque of Kisimkazi. The style of the inscriptions and of the art suggests South Persian influence. These are reported and described by S. FLURY, in *J.R.A.S.* 1922, pp. 257-264 (6 plates).

## EGYPT

**ACTIVITIES OF THE SERVICE DES ANTIQUITÉS, 1920-1921.**—M. LACAU has published a brief report on the work of the Service des Antiquités of the Egyptian Government during the winter of 1920-1921 (*C. R. Acad. Insc.* 1921, pp. 308-316). At **Philae** the temples maintain themselves well. Only the gate of Hadrian has been injured; and that will be easily repaired. The small temple at **Tufah** has collapsed and will have to be reconstructed at some point beyond the reach of the water. At **Denderah** the great *mammisi* or chapel of nativity connected with the temple of Hathor has been completely uncovered. Although the front part of the superstructure has been destroyed, the original plan can be restored from the plan drawn on the platform by the ancient builders themselves. An interesting detail of this building is the careful provision for the discharge of rain water from the roof, by slopes directed towards water-spouts. The publication of the results of recent investigations at **Karnak** has been prevented by the death of M. Pellet. The only new undertaking here has been the study of the structure of the left side of the first great pylon. A transverse stairway, concealed by the ramps of construction of the first court, was discovered in the pylon. Above its roof was a series of chambers introduced in order to diminish the weight of the structure. At **Saqqara** the systematic study of the great necropolis has been continued. The funeral chapels of the pyramids of the Sixth Dynasty are to be excavated, and there is to be a more complete study of the mastabas, especially of their exteriors and of the relations of their parts. M. Firth has excavated in accordance with this plan the mastaba of Kagemma. The outside is faced with carefully finished blocks, on which is a representation of the occupant of the tomb, as well as texts. The shaft, which is twenty meters deep, leads to the sepulchral chamber, which is furnished with painted and sculptured representations of offerings. The stone sarcophagus was accompanied by various funereal objects: canopic jars, a gold collar clasp, and a number of rock crystal vases. These were not hollowed out, and it may be inferred that they were made simply for funerary use. In the early period of mastaba burial, the actual burial chamber was undecorated. But as a supplementary precaution this chamber as well as the room of offerings in the upper structure came to be provided with paintings and reliefs; and in the Middle Kingdom period, with figures sculptured in the round. At **Assuan** the great unfinished obelisk, which had been half buried, has been partially uncovered, and proves to be much longer than was known: the part uncovered measures 36 meters. At **Thebes**

the sarcophagus of Queen Hatschepsewet has been removed to the museum from its difficult position in an isolated valley to the south of the Valley of the Queens. She had prepared this place of burial for herself when she was only a queen. Later, when she had usurped the actual sovereignty, she had another sarcophagus made and placed in the Valley of the Kings. Both have been discovered and are now side by side in the museum. At **Benha** in the Delta was found a priest's tomb of the Greek period, remarkable in the fact that the sarcophagus was on the ground level, built into the masonry of the tomb, instead of being placed in a subterranean chamber. This peculiarity is due to the fact that lower levels in the Delta were flooded by subterranean waters. A number of Judaeo-Greek stelae were discovered at **Tell el Yahoudich**. Some are to be dated in the reign of Augustus, and confirm de Ricci's theory about the date of these monuments.

**LUXOR.**—A Papyrus of 88 B.C.—B. P. GRENPELL has published a letter of the Ptolemaic period (Greek Papyrus 465 of the British Museum) which was purchased in Luxor. Comparison of this papyrus with another letter of similar purport by the same writer—a certain Plato (*B.C.H.* XXI, 1891, pp. 141-142)—shows that it was written to the inhabitants of Pathyris in 88 B.C., encouraging them to maintain their loyalty during the revolt of the Thebans in the reign of Ptolemy Soter II. (*R. Ét. Gr.* XXXII, 1919, pp. 251-255.)

### BABYLONIA AND ASSYRIA

**PETRA.**—A Bronze Weight.—In *Pal. Ex. Fund.*, LIV, 1922, pp. 71-73, E. J. PILCHER describes a bronze weight that was found in the ruins of an ancient grave at Petra, and that is now in possession of Mr. Samuel Raffaeli, Conservator of Coins in the Museum at Jerusalem. The weight is inscribed with the denomination *hamesheth*, the same as the Egyptian *kedet*, which averages 946 grains. The characters are the same as those of the Nerab monuments, which belong to the sixth century B.C. It is thus three hundred years earlier than our first historical notice of the Nabataean kingdom. In this we have the first known specimen of the writing of the Edomites.

### SYRIA AND PALESTINE

**FRENCH EXCAVATIONS IN SYRIA.**—In *R. Arch.*, fifth series, XIV, 1921, pp. 405-406 (= *Débats*, September 7, 1921), GASTON MIGÉON reports briefly on French excavations in Syria. At **Sidon** (Saïda) Dr. Contenau resumed the excavations begun by him before the war. At **Omm-el-Amad**, south of Tyre, Eustache de Lorey, assisted by Mme. Denyse Le Lasseur, uncovered the acropolis and restored the important temple (or palace) with columns which dates from the times of the Seleucidae, while Mme. Le Lasseur recovered the traces of Phoenician structures and found a sepulchral grotto of Roman date decorated with curious and well preserved paintings. At **Damascus** Mr. de Lorey discovered Mussulman monuments of great importance, among them two magnificent wooden cenotaphs of the eleventh century and a funerary mosque of the thirteenth century; also some ancient pottery kilns. But the greatest work of 1921 was carried on at **Tell Nebi Mend**, south of Homs, by Maurice Pézard, who has attacked the vast tell, the presumed site of the Hittite fortress of Kadesh. He has discovered the ancient wall of the city and the canal, or moat, which protected it at the west and south. Among the numer-

ous documents brought to light the most important is certainly a stele of the Egyptian King Seti I, one of the great adversaries of the Hittite empire about 1315 B.C. These discoveries will be published in the periodical *Syria*, conducted by Edmond Pottier, Gaston Migeon, and Dussaud.

**THE ARCHAEOLOGICAL OUTLOOK IN PALESTINE.**—In *J. Bibl. Lit.* XL, 1921, pp. 1–22, J. P. PETERS calls attention to the vast number of mounds in Palestine that bear evidence of having been occupied from the earliest times. Few sites of prime importance have yet been excavated, and no site has been thoroughly explored. The site which above all others should be completely investigated at once before it is occupied by buildings is the east hill of Jerusalem south of the Haram area, the ancient Jebus, and the later City of David. The recent excavations of Parker and of Weill have touched only a small part of this region, and they have disclosed some very interesting facts. The next most important site is Samaria, which was abandoned just when the excavations were most promising. After this Gibeon (Jib) is most attractive. Here there is a rock-cut tunnel leading down to the water-supply similar to those in Canaanite Gezer and Jerusalem. This shows that Gibeon was a very ancient and important city. Shechem is another important site. Here in 1914 a tomb was found containing beautiful inlaid armour and weapons of the eighteenth dynasty. Hebron, Bethel, Shiloh, Dan, and Bethel are also important as ancient Hebrew religious centres.

**THE DEPARTMENT OF ANTIQUITIES IN PALESTINE.**—Soon after the establishment of the civil government in Jerusalem in July, 1920, a Department of Antiquities was created, consisting of a Director, a Keeper of Museums, and a Chief Inspector, each with a staff of assistants. There is also an Advisory Archaeological Board, including representatives of the learned organizations at work in Jerusalem. The activity of this department during the last eighteen months is described by J. GARSTANG in *Pal. Ex. Fund*, LIV, 1922, pp. 57–62. The principles of the Board have been twofold, namely, that the monuments of Palestine belong to Palestine, and that permits to excavate will be issued only to scientific bodies who guarantee the qualifications of the excavator. A museum has been established at Jerusalem, and others are projected at Askalon, Caesarea and Acre. The conservation of the monuments of Palestine has been taken in hand, and repairs have been made on monuments that were in danger of falling. With the permission and supervision of the Department, no less than eight well-equipped expeditions have been in the field. The French Archaeological School has been digging at Jericho. At Tiberias Dr. Slousch, working for the Jewish Palestine Exploration Society, has excavated Roman Tiberias and discovered sarcophagi of the Talmudic period. At Capernaum the Franciscans have continued their work of uncovering and preparing for reconstruction the ancient synagogue. At Beisān very elaborate excavations are being conducted by the University of Pennsylvania Museum (see *A.J.A.* XXVI, 1922, p. 97). At Samaria the expedition of Harvard University is again at work; and at Megiddo, the University of Chicago. The Exploration Fund has been digging at Askalon, and the British School will soon begin explorations at the mouth of the Plain of Esdraclon.

**ACTIVITIES OF THE JEWISH PALESTINE EXPLORATION SOCIETY.**—The recently formed Jewish Palestine Exploration Society has cleared the site of the synagogue at Hamata, discovering many ancient objects of art and



ritual, and has brought to light the ancient wall of the sanctuary, dating from the time of the Herodians. It has discovered the ancient Judaeo-Hellenic cemetery, with the tomb of members of the Synedrion or Council of Tiberias, and also the foundations of the acropolis of the kings Herod Antipas and Herod Agrippa II and of Berenice. The Society proposes to continue the work at Hamata. It has also secured permission to excavate the site of the so-called Pyramid of Absalom on the Mount of Olives, and to make trial trenches near the source of the Siloa. (*The Daily Telegraph*, London, April 1, 1922.) Further details of the excavation at Tiberias are given in another report. The synagogue is shown to have existed for a thousand years, from the first or second century to the middle of the thirteenth, when the city was destroyed by the Mongols. A striking find was a seven-branched candlestick in stone, which seems to be a replica of the one in the Temple which is represented on the Arch of Titus. It is carved out of a solid block. (*The Daily Telegraph*, London, April 12, 1921.)

**ASKALON.—Three Greek Inscriptions.**—In *Pal. Ex. Fund*, LIV, 1922, pp. 22–23, D. G. HOGARTH publishes three inscriptions in honor of benefactors in the temple at Askalon. One is particularly interesting from the fact that it names the centurion Aulus Instuleius Tenax, who on March 16, A.D. 65, scratched his name on the vocal Memnon at Thebes and declared that he had heard its voice.

**BYBLOS.—Recent Excavations.**—A series of letters from M. MONTET has been published, describing the progress of his excavations at Byblos, the Egyptian settlement on the coast of Syria. He has made trenches over a considerable area, and has discovered remains of several buildings, and numerous small objects of Egyptian and other origin. Of the buildings no complete account can yet be given. A circular structure seems to have been a sacred lake. Partly over it is the foundation of a temple of Roman date which apparently took the place of the Pharaonic temple. Part of another temple, before the façade of which were three colossal statues, has been discovered. M. Montet thinks that this building was Phoenician. The pottery and other small objects range in date from the Thinite to the Saitic period, proving the long occupation of the site by Egyptians. (*C. R. Acad. Insc.* 1922, pp. 7–20.)

**JERUSALEM.—The Excavations of M. Raymond Weill.**—The results of the excavations which were carried on from November 1913 to March 1914, which have been published by R. WEILL in *Rev. Étud. Juives*, LXIX, 1919, pp. 1–85; LXX, 1920, pp. 1–36, 149–176; LXXI, 1921, pp. 1–45; and by M. VINCENT in *R. Bibl.* XXX, 1921, pp. 410–433, 541–569; are analyzed by G. M. FITZGERALD in *Pal. Ex. Fund*, LIV, 1922, pp. 8–22. First, the wall and the system of fortifications of the ancient Canaanite stronghold of Zion have been disclosed. The wall is double, and the slope below reveals a series of glacis, each ending in a sheer drop of from four to six metres; the whole resembling a gigantic staircase with sloping steps. At the southern end of the acropolis M. Weill discovered a steep way, cutting like a groove through masonry and rock, like the entrance to the acropolis at Boghazkeui. This is doubtless the Stairs of the City of David mentioned by Nehemiah in immediate connection with the Pool of Siloam. Second, both outside and inside of the wall a number of tombs were discovered dating from the early Canaanite period down into Roman times. Three important tombs of the Jewish period which lie in the curious

bend of the Siloam tunnel, Weill and Vincent do not hesitate to identify with tombs of some of the kings of Judah. The fact that this region served as a quarry in Roman times leads one to fear that the tomb of David, if it was in this neighborhood, has been destroyed. Third, the problem of the aqueducts of earliest Jerusalem has been cleared up: (a) in the primitive period a trench was dug in the cave under the acropolis in which the Gihon (Virgin's Fountain) rises, so as to secure a constant supply of water at the spring. (b) In the Jebusite period a tunnel was constructed from the midst of the city down to the source of the spring, so as to ensure a water supply in time of siege. During the same period Canal I was constructed to lead along the eastern slope of the hill and irrigate the Kidron valley. (c) In the early Hebrew period Canal II was laid out, partly by channels in the rock and partly by short tunnels, to lead the water into the lower pool of Siloam in the mouth of the Tyropoean valley. Two windows of the tunnel were uncovered by Weill. (d) In the time of Hezekiah the famous Siloam tunnel was constructed running entirely under the City of David to the upper pool of Siloam that was built to receive the waters of Gihon.

**Greek and Latin Inscriptions.**—The archaeologist in Jerusalem has hitherto experienced great difficulty in determining whether inscriptions that he discovers have previously been published. Through ignorance of obscure journals inscriptions have often been published several times as new discoveries. This difficulty P. THOMSEN seeks to remove by publishing a complete index of all the Greek and Latin inscriptions that have been found in Jerusalem and its immediate neighborhood, together with references to all the places in which these inscriptions have been published. This most thoroughgoing and important list is given in *Z. D. Pal. Ver.* XLIV, 1921, pp. 1-61, 90-168.

**Excavations at Tell el-Fûl.**—W. F. ALBRIGHT, Director of the American School at Jerusalem, reports in letters the progress of excavations by the American School at Tell-el-Fûl, three miles north of Jerusalem, on the site of ancient Gibeah. Three superimposed fortresses or migdols have been found. The earliest yet discovered is assigned to the late Canaanite or earliest Israelite period, about 1300-1100 B.C.; the next to the pre-exilic period, about 1000-800 B.C.; and the uppermost to the post-exilic and Roman periods. (*Bulletin of the American Schools of Oriental Research*, No. 6, May, 1922, pp. 7-8; fig.)

**The New Building of the American School.**—Before the death of the lamented Dr. JAMES B. NIES in Palestine, a letter from him announced that he had arranged with a local architect, Mr. F. Ehmann, for the erection of the Jane Dow Nies Building which is to house the American School in Jerusalem. The plans of the building were drawn by Mr. P. E. Isbell of the Yale Art School. (*Bulletin of the American Schools of Oriental Research*, No. 6, May, 1922, pp. 2-7; 2 figs.; plan.)

**LEBANON.**—**The Old Lebanon Forest.**—In *Pal. Ex. Fund*, LIV, 1922, pp. 68-71, A. RUSTUM calls attention to a number of inscriptions that have been found throughout Mount Lebanon that read: IMP HAD AUG ARBORUM GENERA IV CETERA PRIVATA DEFINITIO SILVARUM (or DFS). These inscriptions show that part of the Lebanon was still covered with forests in Roman times, that four sorts of trees were reserved for the Government, and possibly that these four sorts were the same as those mentioned in Vegetius, V, 4, as the four sorts of wood that were suitable for shipbuilding.

**SAMARIA.**—*Megalithic Remains in the Southwest of Samaria.*—In *Z. D. Pal. Ver.* XLIV, 1921, pp. 62–70, J. LEWY describes extensive megalithic remains that he observed while commanding a Turkish artillery division along the west end of the boundary line between ancient Judea and Samaria. These were situated in the region between Wādy el-'Ayūn and Wādy Rabah in places known as Rās eṭ-Tīreh, east of Hableh, and Nejjarāh, south of Hableh. This is a region that has not been explored on account of its lack of connection with Biblical history. The monuments consist of castles constructed out of huge blocks of stone, of monoliths and lines and circles of standing stones of the Canaanite period, similar to those that have been excavated at Gezer and Megiddo. In view of the scarcity of megalithic remains west of the Jordan these monuments are of peculiar interest. Not far from here is Jiljūlīveh, the Gilgal, or "stone circle," of *II Kings*, iv, 33 ff., where a company of prophets was located in the time of Elisha.

### ASIA MINOR

**ADALIA.**—*Antiquities.*—B. PACE reports that a systematic destruction of the mediaeval walls of Adalia was undertaken by the local authorities in 1914. At the request of the Italian Archaeological Mission some picturesque portions of these walls have been saved, and attention has been paid to the preservation of architectural fragments and other antiquities which were incorporated in the walls. Dr. Pace publishes a number of Greek inscriptions which have been found in the walls and elsewhere in the city. These range in date from the first century of the Christian era to the eighteenth. The earliest and one of the most interesting is in honor of a certain Caecilia Tertulla who is described as a priestess of Julia Augusta, probably the deified Livia Drusilla, wife of Augustus. (*Ann. Scuol. It. At.* III, 1916–1920, pp. 3–21; 12 figs.)

**Fragmentary Sculptures.**—G. MORETTI describes some fragmentary sculptured marbles at Adalia: (1) a head of Heracles, mediocre but not wholly uninteresting work of the second century of our era, imitative of a type of the fourth century B.C. which is earlier than Lysippus, and recalls a Heracles which Furtwängler attributed to Praxiteles (*Meisterwerke*, pp. 575 ff; Brunn-Bruckmann, *Denkmäler*, pl. 609); (2) twenty fragments of a colossal sarcophagus. Seven of these are from the elaborately moulded and ornamented base, which is similar to that of a sarcophagus from Perge, to be published later; seven are from the cornice, with parts of human figures belonging to a zone of reliefs which extended around the sarcophagus above the cornice, and six are fragments of parts of this relief, which represented a battle of Greeks and Amazons. (*Ann. Scuol. It. At.* III, 1916–1920, pp. 23–27; 3 figs.)

**BROUSSA.**—*An Honorific Inscription.*—T. HOMOLLE has published with brief comment an inscription discovered at Broussa and communicated to the Académie des Inscriptions by Mr. Papadopoulos. It decrees a eulogy and a golden crown to Corrhagus the Macedonian. From the style of the lettering, and from the mention of *ῥέτα*, societies of young men which became prominent in the second century B.C., it appears that this Corrhagus was not the Macedonian officer of Alexander who bore that name (Aeschines, III, 165), but was the Corrhagus who was in the service of the kings of Pergamon, and who, according to Livy (XXXVIII, 13), took part in the Roman war against the Gallo-Greeks of Asia. (*C. R. Acad. Insc.* 1921, pp. 269–273.)

**CAUNUS.**—A New Survey of the Antiquities.—A Maiuri has published a report on the remains of ancient Caunus, which the gradual silting of the rivers Calbis and Indus and the attendant malaria of the district have made difficult of access. The site was visited by Collignon, who wrote a description of it (*B.C.H.* I, 1877, pp. 338 ff.). But the Italian report has the advantage not only of further observations, but of plans and striking illustrations of the imposing rock-cut tombs, the well-preserved walls, the theatre, and the noble landscape of the site. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 263-273; 14 figs.)

**IALYSUS.**—The Greek Necropolis.—The Italian Archaeological Mission in Rhodes has made excavations in the Hellenic necropolis at Ialysus, which lies at the foot of the low hills between Trianda and Cremasto, considerably to the west of the well-known Mycenaean cemetery. Private excavations were made here some years ago by the proprietor of the land, but no scientific observation or record was made. The Italian excavations show that a cemetery of Hellenistic and Graeco-Roman date, belonging to the population of a late and relatively unimportant settlement on the site of Ialysus, had been intruded on the archaic Greek necropolis, utilizing the materials and even the furniture of the early graves, and introducing great confusion in the remains. Among the early vases found are (1) a covered stamnos in the style of the vases from Vroulia (Kinch, *Vroulia*, pp. 168 ff.); (2) a stamnos of fine shape with painted reticulate decoration; (3) an oenochoe of Rhodian geometric style; (4) a fragment of a great pithos with stamped ornament of the type found at Camirus (5) two vases ornamented with horizontal lines and serpentine brush-strokes, of a style found at Gela, Megara Hyblaea, and Thera. (A. MAIURI, *Ann. Scuol. It. At.* III, 1916-1920, pp. 252-259; 11 figs.)

**LAGON.**—A Temple.—On the site of Lagon, some three hours north of Adalia, G. MORETTI has studied the ruins of a small temple which was probably destroyed by earthquake. The well-preserved podium is 14.6 m. long and 8.55 m. wide.; the cella was 8.29 m. long and 7.17 m. wide. At the front was a flight of steps. The fragments of the superstructure show that the façade consisted of four columns with spiral flutings, standing on pedestals which were ornamented with sculptures in relief, representing the labors of Heracles. The columns supported an elaborately carved architrave and tympanum. Over the central intercolumniation the architrave is arched. The richly ornamented lintels and jambs of the door are in part preserved. In style the building is comparable to other late temples in Asia Minor and Syria. Analogies to its details may be found in the Palace of Diocletian at Spalato, in the small temple at Baalbek, and in temples at Mushennef and Kanawat in Syria. Among the ruins were found two stones on each of which is a Triton in relief. The two faced each other on an arch, and were not a part of the temple. Another stone showed two putti supporting a wreath. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 135-141; 6 figs.)

**PEDNELISSUS.**—A Hellenistic City.—Among the most imposing ancient monuments which have been recovered for the modern world in recent years without excavation are the walls and towers of a Hellenistic city on a remote mountain-side in Pisidia, some ten hours' journey to the northeast of Adalia. The identification of the site has been discussed by R. PARIBENI (*Ann. Scuol. It. At.* III, 1916-1920, pp. 73-78; map). From the literary evidence, especially

that of a passage of Polybius (V, 72, 76) he concludes that these remains belong to the city of Pednelissus. An inscription found on the site refers to the place as πόλις Γαλατῶν, but these words must be considered a description of the city and not its name. A town of a similar name, Pindenissus, was visited by Cicero during his proconsulship in Cilicia, but a study of the chronology and topography of Cicero's travels in this district shows that this place cannot be identical with the one recently explored by the Italian Mission in Asia Minor. The ruins themselves are described by G. MORETTI (*ibid.* pp. 79-133; 10 pls.; 26 figs.). They lie on the summit and slope of a mountain facing a valley tributary to the river Cestrus. The nearest modern settlement is the Turkish village of Cozan. The mountain extends from north to south. The site, as indicated by the ancient remains, has three main divisions: (1) the lower city, on a terrace at the foot of the mountain, and on an adjacent hill; (2) the upper city, on a now thickly wooded slope above this terrace; (3) the precipitous ridge of rock which rises above this slope to the east. The terrace has a shape approximately rectangular. The adjoining

upper city is much longer from north to south, and may be described as a long triangle with its apex at the south. At this end, where the slope to the valley is more gradual, and where the chief highway undoubtedly entered the ancient city, the upper town is defended by a double line of walls which the Italian archaeologists call the acropolis, although it is actually on a lower level than a considerable part of the town it protected. The outer wall is lower, the inner wall is built on a higher level and is more massive. Both adapt themselves to the natural irregularities and strategic advantages of the rocks on which they are built. They are sufficiently preserved to permit a complete reconstruction of this part of the defenses. At the north end of the upper city is a still more imposing square tower and a gate (Fig. 1), with an adjacent stretch of wall, remarkable for the extremely convex profile of its courses. On the west and south sides of the lower terrace there are considerable traces of the circuit wall. Here, in the south wall, is an arched gate in a square tower of



FIGURE 1.—TOWER AND GATE: PEDNELISSUS.

two stories (Fig. 2). Only one other tower-gate of Hellenistic date in Asia Minor is known, that of Güvercinlik. At the angle of the south and west walls is another square tower. Although the rocky ridge of the mountain itself formed a part of the defenses of the city, a wall was built to block a depression which might be crossed by enemies, and a guard was maintained on the summit. This wall and station were reached by a stair which was in part artificial and



FIGURE 2.—ARCHED GATE: PEDNELISSUS.

in part cut in the rock. Few traces of the buildings of the upper city have been preserved, but cuttings in the rock indicate that it was arranged in a series of north-and-south terraces, each of which probably had a longitudinal street, while the terraces were connected with one another by stairs. At the highest point under the mountain is a levelled space on which the outlines of the ancient agora and of some adjacent structures have been distinguished. On the east side of this square was a building of basilica plan, of which some details, apparently late in style, were found. Another monument of the upper city is a small tower, which may have belonged to an inner line of fortifications. In the lower city, aside from the towers, the most conspicuous monument is a somewhat carelessly constructed building of late Roman date. Towards the west it shows a wall divided by projecting courses into three stories, with three arched windows in the second story. Slight remains of a small temple were found at the northwest angle of this part of the city. The ancient cemeteries lay outside the north and south gates. Remains of heroa of Hellenistic date, though transformed for other uses in the Byzantine period, have been recognized in both these cemeteries. The sarcophagi which have been found are of Roman date. Ruins of two Byzantine churches are outside the city walls, one near the south gate of the acropolis, the other at some distance farther south. The city must have obtained its water supply from wells and cisterns.

Two wells are preserved and still furnish water to the shepherds. The sculptural remains are curiously few. Even the architecture of the city seems to have been almost wholly unadorned. Near the southern fortifications were found three panels of low relief which belong to a stage transitional between the late Roman and the early Byzantine styles. Within the acropolis was a sculptured stele on which a draped figure was represented, holding a laurel tree with the left hand, and extending an undistinguishable object in his right. It is apparently a grave stele on which the deceased person is figured as Apollo, in oriental costume. The only other sculpture of importance is a fragmentary sarcophagus, upon one side of which are represented three architectural niches, the middle one supporting a pediment, the other two low arches. In and between the niches are figures reminiscent of Greek statuary types. In the central niche is a seated figure, representing the person buried in the sarcophagus. The workmanship is crude in the extreme, but the object has some interest because of its apparent relation to the so-called Sidamara sarcophagi. There is no epigraphical evidence for the date of the walls of Pednelissus; but their structure resembles that of the walls of Priene. As Pednelissus is not mentioned among the strongholds which were reduced by Alexander, it may be inferred that the fortifications are of Hellenistic date, about the beginning of the third century B.C., that period when Hellenic enterprise, under the successors of Alexander, infused new life into the stagnant countries of the Persian empire. The location and fortification of the city were intelligently planned with reference to strategic and economic considerations. The Greek walls have outlasted most of the Roman structures of the place. These were carelessly built, and of second-hand materials. An inscription of late date describes one building as a *taurobolium*. This must have been sacred to the worship of Cybele, whose cult persisted in the mountains of Asia Minor even after the reign of Julian.

**A Galatian Priestess.**—DOMENICO COMPARETTI has published with a commentary an unusual inscription from ancient Pednelissus. It provides for the protection of a priestess named Galato from persecution and slander, decrees honors to her in her lifetime and prescribes the rites to be performed at her funeral. In this last particular it is unique among inscriptions set up in the lifetime of the person concerned. The language is barbarous Greek; and this fact, as well as the name of the priestess and the reference to the place as  $\pi\acute{o}\lambda\iota\varsigma$  Γαλατῶν shows that Pednelissus was occupied at some time by a community of Gauls. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 143-148.)

**Miscellaneous Inscriptions.**—A series of inscriptions from the ruins of Pednelissus is published by B. PACE (*Ann. Scuol. It. At.* III, 1916-1920, pp. 149-159). Five are from one structure and record the dedication of statues to five members of one family. One marks the dedication of a temple to the Augusti and Rome by a Mausolus and his son Timotheus. Several are honorific inscriptions.

**PISIDIA.**—**Antiquities of the Coast.**—B. PACE reports an archaeological survey of the coast of Pisidia from Adalia to Side, describing antiquities discovered near Adalia, between Adalia and the plain of Isbarta, at Barla, in the region of Lake Egherdir, and at Antioch in Pisidia. He adds notes on several excursions to sites in Lycia. Finds were for the most part inscriptions of Roman date. Attention is given to the plans and architectural details of

ruined Byzantine churches. A curious grave monument found near Lake Eglierdir has a barbarous Greek inscription and a relief showing a man who is spearing with a trident a large *cuprinas*. The *cuprinas* is a fish which is still abundant in the lake. Near the Pisidian Antioch were found three vases of familiar neolithic or aeneolithic type, and two seals, one of which has an intaglio swastika, the other a pair of griffins in heraldic position. At Edebessus in Lycia three rude reliefs were noted, two representing a group of nymphs, one showing three armed gods. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 29-71; 21 figs.)

**RHODES.—Topographical Notes.**—There are few monumental data to determine the position of the walls of ancient Rhodes. The mediaeval city was in great part constructed from the materials of the ancient. For the general view that the walls formed a more extended semicircle around the line of the present walls there is no convincing literary evidence; and this view does not take into account the strategic demands of the terrain. South of the city the line of the ancient walls is naturally given by the bed of a stream which descends from the plateau of Asgúru and is crossed by a bridge of two arches which is one of the most conspicuous monuments of antiquity in Rhodes. Beyond the bridge the lower courses of a massive structure which seems to have been a square tower in the ancient fortifications have been discovered. Another determinable point in the walls is on the ridge of the hill of Biber-Dagh overlooking the valley of Sandurli. Here also excavation revealed a portion of the ancient wall. It is evident that the fortification of Rhodes embraced the whole system of hills which form the crest of the rocky slope above Trianda, and that it descended to the east coast, availing itself of the natural line of defense provided by the stream Dermendere. The walls formed a complete barrier across the promontory for the defense of the maritime city on the land side. (2) Ten minutes west of the suburb of St. John is a depression of elliptical form which Newton recognized as the stadium of the ancient city. Excavation at various points has brought to light the seats of the structure. It does not appear to be earlier than the second century B.C. (A. MAIURI, *Ann. Scuol. It. At.* III, 1916-1920, pp. 259-262; 5 figs.)

**SARDIS.—Staters of Croesus.**—On the basis of an interview with Dr. T. LESLIE SHEAR, *The New York Times* (June 14, 1922) reports that the American Expedition at Sardis discovered in April, in a ruined tomb near the surface of a hill at Sardis, a pot containing thirty gold staters of Croesus. Other finds of the expedition include a Roman tomb of the second century decorated with paintings of great peacocks and of fruit and flowers, and containing a number of lamps, on one of which was a cross. An intact Greek tomb of the fourth century B.C. was also discovered.

## GREECE

**ATHENS.—Mr. Gennadius' Gift to the American School.**—Professor EDWARD CAPPS, as Chairman of the Managing Committee of the American School at Athens, announces that His Excellency Joannes Gennadius, for many years Minister of the Hellenic Government at the Court of St. James, has offered his library as a gift to the School. In a letter addressed to Professors Capps and Mitchell Carroll, Mr. Gennadius describes the collection, which includes more than fifty thousand volumes dealing with all phases of Greek



life, politics, religion, literature, and art in ancient, mediaeval, and modern times. There are many rare first editions of the Greek classics, many fine and historic bindings, a number of unpublished documents on the Greek War of Independence, a collection of historical medals and stamps, and thousands of wood-cuts, engravings and photographs illustrating Greek history, art, costumes, etc. The conditions of the gift include the provision of a separate building for the library, to be known as the Gennadeion in memory of George Gennadius, the father of the donor; the appointment of a competent bibliognost as librarian, and the opening of the library to Greek and other scholars. This magnificent gift has been accepted for the School by Judge W. C. Loring, the President of the Trustees of the School, on condition that adequate funds to carry out the terms of the gift can be secured. Professor Capps has reported that the Carnegie Corporation has given a generous sum for the building, and that the Greek Government has offered to give the land. (*Art and Archaeology*, XIII, 1922, pp. 199-208; 5 figs.; *ibid.* p. 281.)

The "Valerian" Wall.—The Italian School at Athens has kindly communicated the following report of a paper presented before the School by Dr. GIACOMO GUIDI at a meeting on March 12, 1921: 'Dr. Giacomo Guidi reported the results of his study of the provenance of the herms of the Cosmetae and the numerous Greek inscriptions which were found in the so-called "Valerian" wall, in the region of St. Demetrio Katiphori. He showed on a slide the course of the mediaeval fortification, which, descending from the western slope of the Acropolis, proceeded towards the ancient Agora, incorporating the Stoa of Attalus, from which it turned at an acute angle to join the south side of the Library of Hadrian. It then ascended the present Hadrian Street, and near the little church of St. Demetrio Katiphori, a small Byzantine church which was demolished before 1860, turned to the south to join the fortification on the south slope of the Acropolis. The almost universally accepted opinion is that this wall is a work of the Duke of Athens, Antonio Acciaoli, at the beginning of the sixteenth century. Against this view Sotiriou (*The Justinianean Wall of Mediaeval Athens*), reviving an old theory of Curtius and Bonn, has maintained that the wall belongs to the age of Justinian, arguing from the fact that in one portion of the wall are the door-jambs and architrave of a gate. He believes that this gate is contemporary with the foundation of Santa Sophia in Constantinople, since he has noted on it a small Byzantine cross of a form which does not occur in later periods. But the gate cannot indicate the chronology of the whole fortification; it is a matter of re-used material, as is the case with so many other epigraphic and architectural fragments of Greek and Roman date. And it cannot be admitted that in the period of Justinian Athens was reduced to the diminutive city which was named from its "Valerian" enclosure. The herms of the Cosmetae and the numerous ephebic inscriptions found near St. Demetrio Katiphori have given rise to the theory, recently taken up by Grainger (*B.C.H.* 1915, p. 242) that there must have been in this region a gymnasium, or, more precisely, the Diogeneum mentioned several times in ephebic inscriptions. Guidi, however, arguing from the fact that many similar inscriptions have been found—also in the Valerian wall—near the Stoa of Attalus, which bounded the ancient Agora on the east, and since the express words *στῆσαι ἐν ἀγορᾷ* occur in these inscriptions (*I.G.* II, 316, 338, 465, 468, 469, 470, 471), maintains that also the inscriptions of St. Demetrio, as well

as the herms, must have come, not from a gymnasium, but from the ancient market-place, and that it is idle to look for the Diogeneum in the vicinity of St. Demetrio Katiphori. All this coincides with the following passage of Aristotle (*Ath. Pol.* LIII, 4): "In ancient times the epebes inscribed their names on white stelae, with the name of the archon under whom they were enrolled and of the eponymous archon of the preceding year. Now, however, they inscribe their names on a bronze stele and the stele is placed in front of the Bouleuterion, near the Eponymous Heroes." The expression "in front of the Bouleuterion" corresponds exactly to the phrase *ἐν ἀγορῇ*, since we know that this building faced on the Agora. In the course of centuries the inscriptions were not always made in bronze, but also in marble; though even these in



FIGURE 3.—YOUTHS EXERCISING: BASE FROM THEMISTOCLEAN WALL:  
ATHENS.

their technique, the form of the characters, and the way in which the crowns are carved on them, will always recall metal prototypes. The other inscriptions found with the epebic at St. Demetrio were also certainly taken from buildings which stood either in the Agora or its vicinity, that is, the Theseum (*I.G.* II, 444, 445, 446), the Metroon (*I.G.* III, 67), the temple of Apollo Patrous (*I.G.* II, 1177, base with the signature of Leochares, who carved the statue of Apollo which stood on the market-place in front of the temple). The numerous bases of honorary statues of Greek and Roman personages, many of them with sculptors' signatures, cannot have come from a gymnasium, but certainly came from the Agora, in the neighborhood of which many other monuments of the same kind have been found. Guidi also called attention to the fact that a characteristic architectural fragment, consisting of two Ionic half-columns, back to back, also found in the Valerian wall at St. Demetrio, is derived from the Stoa of Attalus, the second story of which is decorated with similar half columns, in accordance with Pergamene taste. A curious Greek epigram by the poet Illyrius (*I.G.* III, 399) seen and copied by Ciriaco of Ancona, was found in the wall at St. Demetrio, and stands on the ground in that region. Another epigram (*I.G.* III, 400), similar in content and lettering, and certainly belonging, as Dittenberger has already observed, to the same building, was found on the other hand near the Stoa of Attalus, and this fact con-

firms the relation which exists between the materials of St. Demetrio and those of the Agora. It is evident that when the builders of the mediaeval walls excavated foundations and ditches for the fortification, they reached the archaeological level of the ancient market-place, and that this became a rich quarry of marbles for the construction of the walls.'

**Two Sculptured Bases from the Themistoclean Wall.**—The most interesting discovery of original Greek sculpture in recent years was made lately near the church of St. Athanasius, in the vicinity of the Ceramicus. In excavating for a garage two sculptured bases were found built into the Themistoclean wall, illustrating once more Thucydides' famous description of the hasty utilization of grave monuments and other casual material in the construction of the wall.



FIGURE 4.—WRESTLERS: BASE FROM THEMISTOCLEAN WALL: ATHENS.

From cuttings in the top of each base, it is evident that the stones were the bases of stelae. (1) The first base is about 0.78 m. square, and 0.30 m. high. The front and the two sides are sculptured, but the back is smooth, and probably was placed against a wall. The relief on the left side shows six youths engaged in athletic exercises (Fig. 3), a group of three facing a group of three. On the front is a wrestling match (Fig. 4). An attendant figure stands behind each wrestler, one holding a long pole. The scene on the right side is curious (Fig. 5). Two youths sit facing one another, one holding a dog on a leash, the other a cat, or at least an animal of the cat family, with its back characteristically arched. Behind each youth stands an older man. The style of the reliefs on this base, as well as the subjects, is strongly reminiscent of vase painting of the red-figured style. There are considerable traces of red color on the background. (2) The second base is rectangular: about 0.59 m. in width in front, and 0.80 m. in length on the sides. The back of this stone is also smooth. On each of the sides is a quadriga, driven toward the front of the base by a charioteer in a long tunic, who wears an Attic helmet (Figs. 6 and 7). A hoplite with Corinthian helmet, corselet, greaves, and round shield, mounts the chariot. Behind each quadriga are two armed men, one bearded, the other beardless. On the front are two youths who are apparently playing hockey (Fig. 8). Behind each are two other men; and three of these four figures hold hockey sticks. Remains of color indicate that the figures on this stone stood out in

dark color on a light background; and the style also seems related to that of black figure painting. The reliefs, both on the internal evidence of style and the external evidence of their connection with the Themistoclean wall, must be dated about 500 B.C. (T. LESLIE SHEAR, *The Classical Weekly*, XV, 1921-1922,



FIGURE 5.—CAT AND DOG FIGHT: BASE FROM THEMISTOCLEAN WALL:  
ATHENS.

No. 27, pp. 209-210). Another discussion of these reliefs has been published by ALEXANDROS PHILADELPHUS, and is accompanied by illustrations of the three sculptured sides of each stone. (*Monthly Illustrated Atlantis*, New York, XIII, June, 1922, pp. 14-15; 6 figs.) Mr. Philadelphus adds the interesting fact that another base was discovered on the same site. This had a painting on the front, and inscriptions. Both had been deliberately effaced. The painting seems to have represented a woman in a long chiton of flowered pattern, seated on a throne, and holding a sceptre or some other object in the left hand. Of an inscription to the left the following important words can be read: 'Ενδοῖος καὶ τόνδ' ἐποίησεν.



FIGURE 6.—FOUR HORSE CHARIOT: BASE FROM THEMISTOCLEAN WALL:  
ATHENS.

**CERINTHUS.**—The Ancient Acropolis.—LUIGI PERNIER describes the ancient remains still visible on the site of Cerinthus, which was identified by Ulrichs (*Reisen und Forschungen*, II, p. 227) as a height north of the modern village of Mantoudi, on the right bank of a stream, near the small bay of Peleki.



FIGURE 7.—FOUR HORSE CHARIOT: BASE FROM THEMISTOCLEAN WALL:  
ATHENS

The stream is the ancient Budorus. The relation of the site to the sea has been altered by alluvial deposits. On the north side of the hill, facing the Budorus, are imposing remains of ancient walls which are not properly polygonal, but pseudo-isodomic. There are other fragments of the acropolis walls on the south side. These were faced on each side with limestone blocks; the interior construction is rubble. On the summit are traces of a rectangular building, perhaps a temple, and of houses. Tombs covered with tiles are said to have been found to the northwest of the acropolis. Probably the house remains



FIGURE 8.—YOUTHS PLAYING HOCKEY: BASE FROM THEMISTOCLEAN  
WALL: ATHENS.

belong to the little settlement of late date which Strabo describes (X, p. 336), while the acropolis walls belong to the early city which was destroyed by the Cypselidae (Theognis, 891-894) in the sixth century B.C. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 273-276; 5 figs.)

**DELPHI.—The List of the Theorodochi.**—Eleven fragments of a great stele at Delphi have been united, giving the greater part of a list of the Delphic *theorodochi* and their cities. Four columns of the list are found on the front of the stone, and a fifth on the left side. The text of four of the fragments has been published before (*B.C.H.* VII, 1883, pp. 189-203; *Ath. Mitt.* X, 1885, pp. 101-103; Collitz, II, No. 2580). The *theorodochi* were persons in the several cities of the Greek world who were charged with the duty of receiving the Delphic envoys who came from time to time to announce the institution or the approaching celebration of a festival, and especially to make the periodic announcements of the Pythia and the Soteria. They might be named either by their own city or by the city which sent the *theori*. The latter type of nomination was the greater honor. Of only four or five persons mentioned in the Delphic list is it known that they held this position by the decree of the Delphians. The title of *theorodochos*, however, marked a lower grade of honor than that of *proxenos*. On the Delphic list are the names of four men who were afterwards made *proxeni*. For most of the cities on the list only one *theorodochos* is named; for sixty-six two persons are named; for nineteen, three (usually including at least two of one family); and for a few cities four, five, or even six *theorodochi* are appointed, still apparently limited to not more than two families in each city. Some names of women, sisters or mothers of men who are named, are included. The decree provides for seven *theoriai*, and in each case the cities are named in an order suggesting the itinerary of each party of envoys, as follows: (1) Cyprus; (2) Ionian cities; (3) Western Locris (?), Boeotia, Megara, Argolis, Arcadia; (4) Thessaly and Macedonia; (5) Crete and Cyrenaica; (6) Aetolia, Acarnania, and Epirus; (7) Magna Graecia and Sicily. There are some interpolations and additions by later revisers of the catalogue. The date of the original inscription is the first quarter of the second century B.C. It is impossible to determine how long the list was in use. Alphabetical indexes of the cities and persons mentioned in the inscription complete the report. (A. PLASSART, *B.C.H.* XLV, 1921, pp. 1-85; fig.)

**A Votive Plaque.**—In excavations at the temple of Athena Pronaia at Delphi R. Demangel discovered a thin bronze plaque of rectangular shape, originally attached to a board, and no doubt placed in the cella of the temple as an *ex-voto*. On the plaque is engraved the representation of a female figure, standing with profile to right. She is completely enveloped, except for the head and feet, in a chiton without folds and a mantle which she wears as a shawl, holding its edges before her with both hands. There is a simple fillet in the hair, which is represented in heavy curls over the forehead, and falls in a mass at the back. The eye is oblique and shown as in the full face; the mouth is smiling. The type is closely parallel to female figures on Chalcidian vases, and it is fair to conjecture that if this *ex-voto* was not offered by a Chalcidian bronze-founder, it was at least the work of a Euboean artist. (R. DEMANGEL, *B.C.H.* XLV, 1921, pp. 309-315; 5 figs.)

**GORTYNA.—Two Inscriptions.**—Since the projected publication of a *sylloge* of Cretan inscriptions has been necessarily postponed, D. COMPARETTI has in-

cluded in the latest report of the Italian School at Athens a discussion of two inscriptions of special interest from Gortyna. (1) The first was found on a block in the south wall. The stone belonged originally to another structure. The inscription, which is written *boustrophedon* in two columns, is considerably defaced, and a complete reading is hardly possible. It is the text of a decree relating to the mortgaging of land. One provision has to do with land injured by earthquake. This inscription is in the local alphabet. (2) The second is in the post-Euclidean Ionic alphabet, but is curious in the fact that it is carved both *boustrophedon* and *stoichedon*. Its contents are also unique. Its two columns record a decree by which, probably in some emergency of epidemic sickness, a physician named Areion, from Tralles, was provided at the expense of the city with the implements of his profession, and with medicines, wines, and disinfecting perfumes. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 193-202; 2 figs.)

**HISTIAEA-OREUS.—Topographical Investigations.**—B. PACE reports (*Ann. Scuol. It. At.* III, 1916-1920, pp. 276-282; 5 figs.) recent study of the topography and antiquities of the region of Xerochori in northern Euboea, the district anciently known as Histiaetis. Strabo (X, 1, 3) and Pausanias (VII, 26, 4) both state that the city originally called Histiaea later became known as Oreus. It has usually been held that Histiaea was on the site of the modern village of Orei, and Oreus on the hill called Molos some three kilometers to the west. But an examination of two relevant passages in Livy (XXVIII, 6 and XXXI, 46) has led Dr. Pace to another conclusion. It appears that the hill called Kastro from its present Venetian and Turkish walls, just above Orei to the north is the *maritima arx* described by Livy. In ancient times the sea was nearer this hill than now. The *altera arx, urbis media* is the hill now called Apano Chori, which is quite near, but further inland. Some remains of ancient walls are found on this hill as well as among the later fortifications of the Kastro. The space between the two hills and about the hill of Apano Chori yields many potsherds which are indications of ancient habitation. It is not exactly true that one site changed its name. The city contained two distinct, though adjacent quarters. The *maritima arx* belonged to Oreus, the other citadel to Histiaea. The relation of the two may be compared to that of the two parts of Buda-Pest. Some antiquities have been found in the region of the hill of Molos. These, however, do not prove the existence of a city on this site, but of suburban farms and villas, of which there must have been a considerable number in this region of famous vineyards.

**LIMNI.—Antiquities.**—B. PACE reports that a building at Limni, dedicated to the cult of the *Zoodochos Pege* is built on the remains of a Roman structure. It utilizes an ancient room of apsidal form with a mosaic floor. Some of the marble slabs which faced the wall are still in place. A rare and interesting object preserved here is an inscribed Byzantine polykandelon, dedicated by one Theodoritus and his family. An ephebic statue, of which the torso is preserved, belonged to the decorations of the Roman building. It is a copy of a Polyclitan type. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 282-284; 3 figs.)

**MACEDONIA.—The Prehistoric Mounds.**—LÉON REY has published the first part of an exhaustive monograph on the prehistoric mounds of Macedonia, the result of investigations made by the Service Archéologique of the French Army in the years 1916 to 1919. (*B.C.H.* XLI-XLIII, 1917-1919, pp. 1-176; 23

pls. 139 figs.) The first chapter is a general geographical survey of the region. In the second M. Rey presents a number of interesting generalizations on the situation, form, structure, and condition of the mounds. They are found (1) near the coast, (a) on cliffs partly submerged in the sea, (b) on cliffs separated from the sea by a littoral terrace, (c) on a low coast; (2) on plains, (a) towards the lowest point, often near marshes, (b) on the lower slopes of hills bordering the plain; (3) in valleys, (a) at the lowest point, near a stream, (b) on the lower slopes of hills. They vary in height from 15 to 225 meters; the greater number are less than 100 meters high. They have been considerably modified by erosion, due to the frequent and violent rains of Macedonia. In form they may be distinguished as (1) "*tombés*," with a small terminal platform, rounded edges, and steep sloping sides; (2) "*tables*," with a quite extended terminal platform, and gradually sloping sides, and more marked edges (*arêtes*). From some points of view the *tombé* is like a tumulus; but the tumulus is a burial monument, usually of far later date than the *tombé*; and in shape the *tombé* is elongated or elliptical, while the tumulus is circular. The "*tables*" have suffered less erosion than the *tombés*, and it may be inferred that they are of later date. At any rate the latest strata of the tables are always later than the early strata of the *tombés*. It may also be noted that the tables are regularly found in the neighborhood of *tombés*. It may be inferred that the tables mark a transference of a settlement. In some cases a *tombé* rises above a table. Here a distinct later settlement has been superposed on the site of an earlier one. The following chapters describe and illustrate the mounds of the Vardar Valley, the Vistritza Valley, the Galiko Valley, the plain of Salonica, the basin of Langaza, the valley of the Vasilika, and the Chalcidice. A table of prehistoric stations which were occupied in Hellenic or Hellenistic times is given. There is a brief appendix on the mounds of the plain of Monastir. A second part of this monograph will be devoted to the pottery discovered in the mounds.

THASOS.—Excavations, 1914-1920.—C. PICARD has published a detailed report on the excavations of the French School at Thasos, which were interrupted by the war, but resumed in 1920 (*B.C.H.* XLV, 1921, pp. 86-173; 30 figs.). Examination of the walls of the acropolis has corrected in some details the observations made by Mr. J. Baker-Penoyre (*J. H. S.* 1909, pp. 202 ff.) showing that some structures he designated as ancient are really mediaeval. In one of these was found the archaic colossal statue of Apollo Kriophoros which has already been described (*C. R. Acad. Insc.* 1920, pp. 218-223; *A. J. A.* XXV, 1921, p. 297). Late building on the acropolis has effaced all traces of the citadel of Telesicles. On a terrace at the west is a substructure of an ancient building, possibly a temple or a treasury; but a Byzantine chapel has taken its place. A gate of late epoch, approached by a stairway from within, was discovered on the northwest side of the citadel walls; and there are traces of another entrance on this side. The south gate seems to have been blocked with fragments of ancient buildings. In the lower city investigation of the remains of the Prytaneum has thrown light on the relations between the later structure and that of the fifth century, and has indicated the position of the ancient agora. On the east side of the market place was a small temple, which was connected by a stoa with the Prytaneum. Another stoa met this one at right angles and extended along the south side of the agora. The remains of



the temple of Aesclepius, not yet excavated, are conjectured to be under a house east of the Prytaneum. Traces of a circular temple dedicated to the Augusti and Rome have been found, but the exact site is not yet known. Excavations at the theatre have uncovered what is left of the proskenion, the skene, and the orchestra. In its present condition it shows approximately the Vitruvian plan, according to the late Hellenistic or early Roman type. With further study it will, perhaps, be possible to arrive at the earlier form of the theatre. The most important of the sculptures recently discovered is the colossal unfinished statue of Apollo. The proportions of this figure associate it with Chiot art, and with such works as the Apollo of Melos and the Apollo of Tenea, marking a transition between the Ionic and the Attic school. It is remarked that the Thasians had a predilection for colossal figures. The Silenus with a cantharus which ornamented one of the gates is also of huge size. Other sculptures described include (1) an archaic male torso, comparable to the ephebe of the Acropolis Museum in Athens; (2) an injured head of Zeus, showing some archaism, but to be dated in the fourth century B.C.; (3) a helmeted head, which is marked by an expressiveness which suggests a somewhat modified Scopaic influence, to be dated late in the fourth century B.C.; (4) a female head with a sakkos, also of the fourth century; (5) a fragment of a male torso of Praxitelean type; (6) a head with an oriental pilos, possibly Attis or Mithra; (7) a head of Julio-Claudian type broken from a high relief. Some architectural terra-cottas, figurines, vase-fragments, and coins were found. M. Picard concludes his report with the publication of the principal inscriptions discovered in the excavations. They are classified as laws and decrees, ex-votos, and sepulchral inscriptions.

## ITALY

**OSTIA.**—Carved Bone.—In *Dedalo*, II, 1921, pp. 352–358 (6 figs.), G. CALZA writes on four pieces of carved bone, two of which were found some years ago at Pompeii, the other two in recent excavations at Ostia. The carving is interpreted as representing such scenes as a myth of Persephone, a Homeric legend, and Dionysiac ceremonies. The Pompeian pieces were found in a house, those at Ostia in a tomb of the second century A.D. The most interesting question is that of use. The present author believes they formed parts of musical instruments.

**A Statue of Artemis.**—In *Boll. Arte*, I, 1922, pp. 395–402 (pl.; 4 figs.), G. CALZA publishes the nearly complete statue of Artemis, represented in her character of Amazon, found in the excavations at Ostia. It is an excellent Roman copy of a Greek work of the late fourth century B.C. The copy is assigned to the first century of the Empire. Clearly, the head has been somewhat changed from the idealized Greek type of the goddess to make of it the portrait of some Roman lady; but just whom the copyist has portrayed, it has not been possible to determine.

**ROME.**—Coins and Gems from Asia Minor.—L. CESANO describes a number of coins and gems which have been acquired for the Museo Nazionale in Rome by the Italian Mission in Asia Minor. These include (1) imperial bronze coins of Side-Perga (Tranquillina), Perga (Salonina), Antioch in Pisidia (Gordianus Pius), Alea in Phrygia (Antoninus Pius), Nicopolis ad Istrum (Geta), Thyatira in Lydia (Macrinus); a gold medallion of Alexander Severus, which with other

examples proves that such medallions were used as ornaments as early as the second half of the third century; and six intaglios of Hellenistic and Roman date. The bronze coin of Salonina from Perga has a mark of value; and in this connection Dr. Resano gives a list of imperial coins with similar marks from the Greek cities of the empire. (*Ann. Scuol. It. At.* III, 1916-1920, pp. 161-179.)

**TARENTUM.—A Fifth Century Tomb.**—QUINTINO QUAGLIATI (*Dedalo*, II, 1922, pp. 617-627; 9 figs.) describes the contents of a tomb of the fifth century B.C. which was discovered at Tarentum in 1917. It then yielded (1) a Panathenaic amphora, on the reverse side of which is a spirited quadriga group; (2) a black-figured cotyle, with a well-drawn Dionysiac scene; (3) a black-figured volute-handled crater, on the neck of which are two zones of figures: (a) Hercules and the Nemean lion, between two sphinxes and eyes, and (below) two warriors entering four-horse chariots, (b) a battle scene including a chariot and warriors on foot, between sphinxes and eyes, and (below) a symposium; (4) a fragment of a red-figured cylix of the severe style, showing a centauromachy. Resumption of the excavations in 1921 has brought to light the fragments of several black-figured vases: a hydria, three oenochoae, two olpae, a lecythus, three cotylae, three cotylisci, and sixteen cylices, all of Athenian provenance; a lecythus of Corinthian style, an oenochoe with black figures on a white ground, a celebe with figures in the severe red-figure style were also found, and several plain black vases. These objects have been installed in the Museum at Tarentum.

**TRIESTE.—A Late Antique Ivory Relief.**—By comparison with other reliefs, S. POGLAYEN-NEUWALL concludes in *Mh. f. Kunstw.* XV, 1921, pp. 174-180 (4 pls.), that an ivory relief in the Museo Civico, Trieste, is an example of the mixed style characteristic of Egyptian art in about the middle of the fourth century A.D. The relief represents the Dioscuri in the upper register and Europa in the lower. The accompanying putti are the best indices of the derivation of the style of the work. The plaque probably formed the lid of a jewel casket.

## SPAIN

**PREHISTORIC DISCOVERIES.**—HORACE SANDARS has reported to the Society of Antiquaries on the progress of archaeological research in Spain, with particular reference to the discovery of palaeolithic paintings in the northern and eastern parts of the peninsula. (*Ant. J.* I, 1921, pp. 342-345.)

## FRANCE

**CASTÉRA.—A Roman Tomb.**—At Castéra in the Haute-Garonne some laborers discovered in 1913 a Roman tomb of the fourth century of our era. It contained two terra-cotta ollae and a number of bronze coins, on the evidence of which the tomb is dated in the reign of Constantius II, 351-361 A.D. (E. DELORME, *B. Soc. Midi Fr.* 43, 1914, pp. 189-192; fig.)

**PARIS.—An Exhibition of Objects from Syria.**—An exhibition of antiquities discovered in the recent French excavations in Syria was opened at the Louvre in March. M. Montet showed specimens of the Egyptian remains found at Byblos, proving the existence of a great Egyptian colony in Syria from the fourth millennium B.C. M. Pézard describes his investigation of a site

which he believes to be that of the important Hittite centre Kadesh. Dr. Contenau showed various small objects discovered at Sidon, and a cast of the end of a sarcophagus on which a Syrian ship was picturesquely and completely represented. The researches of M. de Livrey at Damas and of Mme. Le Lasseur at Tyre were also represented. At Tyre a hypogeum decorated with paintings and with floral ornament was found. It contained some interesting examples of Phoenician decorative art. (*Le Temps*, March 21, 1922.)

USSAT.—Prehistoric Discoveries.—M. CUGUILLIÈRE and M. BACQUIE have discovered important remains of the Stone Age in the valley of Ussat, Ariège. Bones and rude pottery were found in the caves, and on the white walls were painted signs of the types known as soutiform, pectiform, and hastiform. Stalagmitic concretions over some of these prove their antiquity. There are sketches of animals, including horses and mountain goats. (*The Observer*, London, August 14, 1921.)

VIENNE.—Roman Centerings.—J. FORMIGÉ has published a description of the remains of wooden centerings used in the construction of the vaults supporting a stairway built at Vienne in the fourth century. Their position necessitated their abandonment in the construction itself. This accounts for their preservation as well as for the fact that they were made of poor materials. The width of the boards was about 30 cm. (*C. R. Acad. Insc.* 1921, pp. 286-292; 2 figs.)

## HOLLAND

THE ANCIENT COURSE OF THE RHINE.—J. H. Holwerda has studied the course of the lower Rhine in Roman times. The present Vecht has long been recognized as a former mouth of the river. The Linge, which is now but a narrow channel, was once the bed of the main stream. This fact explains the abundance of Roman remains on its banks. (F. CUMONT, *R. Ét. Anc.* XXIV, 1922, p. 48, summarizing an article in *Oudheidkundige Mededeelingen*, New Series, II, 1921.)

NYMEGEN.—Excavation of the Roman Citadel.—M. Daniels, who has excavated the summit of the hill of Valkhof above the Wahal to the east of Nymegen, reports that the hill was occupied during the first half of the first century and again from the beginning of the third until the fifth. In the peaceful interval of the second and third centuries the Romans were free to abandon the strategic height and to colonize the lowlands west of the present city of Nymegen (Noviomagus). (F. CUMONT, *R. Ét. Anc.* XXIV, 1922, p. 48, summarizing an article in *Oudheidkundige Mededeelingen*, New Series, II, 1921.)

## GERMANY

BERLIN.—Acquisitions of the Berlin Museums since 1903.—Brief descriptions of thirty-nine additions to the collections of ancient sculpture in the Berlin Museums since 1903 (*Arch. Anz.* 1903, cols. 29 ff.), with illustrations of pieces that have not been published elsewhere, are given by B. SCHROEDER in *Arch. Anz.* 1919 (cols. 89-117; 9 figs.). Sculpture in the round includes a sixth-century "Apollo" from Naxos, lacking the head and other parts but showing the arms partially detached from the trunk; an enthroned goddess, perhaps Persephone, of Parian marble, excellent work of about 480 B.C.; two small statues of old men fishing, with basket and rod, a late Hellenistic motive;

a little slave boy, asleep or resting and holding a lantern, decorative work of the first century A.D.; a white marble lion, singularly conventionalized, from Cnidus; and a tiny late archaic owl of sandstone, from Athens. The statuettes are: an archaic female figure wearing polos and chiton, from Chalcedon; an Athena copied from an Attic fifth century work; a Hecate, perhaps after Alcámenes; a Venus Genetrix and a standing Asclepius, from Cyprus, of about 350 B.C.; and a very small Amazon fallen in battle, from Pergamon. The heads comprise: a large archaic Greek head of a young man, which probably had a bronze helmet behind the rows of curls over the forehead; a colossal head of Heracles, from Pergamon; a female head from Naples, copy of a fourth-century original; the head of a Caryatid, from Cilicia, of late Roman times; and six Roman portraits—three men of the Republic; a young woman with sculptured eyes and a coiffure of the time of the younger Faustina; a man's head, also of the middle of the second century; and a portrait of the Gothic Emperor Maximinus, in which the blue eyes are rendered by insets of lead. There are eight votive reliefs: a Victory slaying a bull, from Pergamon, excellent late sixth-century work; a fragmentary relief of a god carrying off a goddess in a chariot, from Rhodes, good work of a time soon after that of the Parthenon; two limestone panels from Tarentum, each containing two figures about a foot high, conjectured to be Orestes and Electra and Antigone with the blind Oedipus, probably of the fourth century; a dedication to Attis and Agdistis, a form of Cybele, from the Piræus; a relief of a woman bathing before a herm of Pan; a single Dioscurus on the left-hand side of a square basis, the front of which, showing Jupiter Superantissimus, was already in the museum; and a tall stele of dark marble, from Gallipoli, with two scenes, a god with worshippers above and the sacrifice of a bull below. Six gravestones have been acquired: the middle part of a stele of the type of Alxenor's but several decades later and showing the influence of the Parthenon style; the inscribed stele of Sosias and Cephisodotus, two young warriors with an older man in priest's robe standing between them, period 450–400 B.C.; a large and elaborate palmette top of a stele, of limestone with faded colors, from Kertch in South Russia, beginning of the fourth century; the upper part of a tall, narrow stone having two rosettes and an erased inscription, probably metrical, replaced by the name of Demarchia, and an elaborate palmette supporting a mourning siren and two women; a limestone stele from Alexandria, showing some Egyptian characteristics, with an elderly man seated between two pillars; and a small slab with rounded top, as if for a painted acroterion, and the relief of a boy playing ball, inscribed in finely cut fourth-century letters.

κ]ούρος χρυσοκό[σ]

κ]εῖμαι πολλοῖς

π]θευός

**A Papyrus for the Dead.**—HERMAN GRAPOW publishes and comments on Papyrus No. 10482 of the Berlin Museum. It has a unique interest as a papyrus for the use of the dead dating from the early Middle Kingdom. In the period of the Old Kingdom such texts were inscribed on the walls of tombs. In the Middle Kingdom remains they are found on the inner surfaces of coffins. It is only under the New Kingdom that the provision of the dead with papyrus manuscripts becomes common. The text in Berlin, which is in hieratic writing, is said to have come from Siut (Lycopolis) in Upper Egypt. (*Sitzb. Ber. Akad.* 1915, pp. 376–384.)

**HILDESHEIM.**—Two Athenian Prize Amphorae.—Two prize amphorae said to be from a tomb in the Cyrenaica and now in the Pelizäus Museum at Hildesheim, belong to the second series of such vases, which was instituted early in the fourth century, probably after the formation of the second naval confederacy under Athens in 378, and is thus separated from the earlier series by nearly a century. These two vases, which are evidently from the same hand, belong early in the second group, as they show some characteristics of the former group which did not appear after about 372. The design on Athena's shield (the Tyrannicides of Critius and Nesiotes) is found also on an amphora in the British Museum (No. 605), and this may imply that all three are from a single year in which this detail was prescribed for the painters. The Hildesheim vases represent the chariot race and the foot race and the London vase the pentathlon. (F. BEHN, *Arch. Anz.* 1919, iii-iv, cols. 77-89; 7 figs.)

**LEIPZIG.**—An Early Greek Mirror.—Several bronze mirrors with a circular or disk-shaped end of the handle are discussed by F. STUDNICZKA apropos of an example acquired during the war by the University of Leipzig. They are all from South Russia and seem to be of Ionian origin. Their resemblance to objects from the Argive-Corinthian sphere may be due to the commerce in Corinthian oil flasks. (*Arch. Anz.* 1919, cols. 1-7; 5 figs.)

**MUNICH.**—A Guide to the Glyptothek.—A new illustrated guide to the Glyptothek in Munich, necessitated by new acquisitions and by re-arrangement of the collection, as well as by progress in the study of the Aeginetan marbles, has been prepared by PAUL WOLTERS. [*Führer durch die Glyptothek König Ludwigs I zu München*, von PAUL WOLTERS. Munich, 1922, Glyptothek. 56 pp.; 69 figs.; 12 mo.]

**RETHRA AND ARKONA.**—Recent Explorations.—CARL SCHUCHHARDT has made an *ad interim* report on his recent investigation of two pre-Christian Slavic sites on the Baltic coast of Prussia. (1) Through a new interpretation of a description by Thietmar of Merseburg (VI, 17, *Mon. Germ. Hist. Scr.* III, 812) he has been enabled to identify a hill known as the Schlossberg, an hour north of Feldberg, as the Slavic citadel of Rethra. The three "horns" of the city through which the three gates passed were not promontories, but wooden towers. There are considerable remains of the ancient wall on the north, west, and south sides of the citadel, and indications of two gates. On the east side the descent to the sea is precipitous, explaining Thietmar's phrase *horribile visu* applied to the aspect of the sea from the eastern gate. Investigation has not been carried far enough to reveal any remains of the temple which stood here. (2) Arkona is another Slavic stronghold. Its situation on the island of Rügen has long been known. Saxo Grammaticus has left a picturesque description of the citadel, of the temple and the monstrous image of the sun-god Swantewit who was worshipped here. The citadel was sacked by the Danes in 1168 A. D., and Saxo may have been an eye-witness of the capture. Considerable remains of the ancient wall are preserved on the west side of the citadel, and of the ditch within the wall. Adjoining this remains of houses have been found. At the extreme eastern side of the citadel excavations have uncovered the foundations of the temple described by Saxo. It was square in shape, and inside the rectangle were found the foundations of the four pillars which enclosed the inner sanctuary. The substructure on which the great four-headed image of the god was placed also came to light. The square shape

of the building is unique in German territory. In pre-Christian times this shape is found in Celtic shrines in France and in the Rhine and Danube valleys. An early mediaeval use of this form is illustrated in a church at Trier. Strzygowski has pointed out that the square church with a dome developed in Armenia and later became a favorite form in Eastern Europe. But he has neglected to take into account the early Celtic structures. The existence of such a form on a Slavic site suggests that the quadrate form was originally European, and that it may have been transmitted to Asia to be developed and returned through Byzantium. (*Sitzb. Ber. Akad.* 1921, pp. 766-774; fig.; 3 plans.)

## AUSTRIA

**KLAGENFURT.**—A Guide to the Antiquities.—An illustrated guide by RUDOLF EGGER makes the principal objects of the collection of antiquities at Klagenfurt accessible to the archaeologist. A sketch of the history of Carinthia in pre-Roman and Roman times is followed by a catalogue of the collection, including sculptures, of which the greater number are provincial grave monuments; mosaics; terra sigillata; glass; and small bronzes. [*Führer durch die Antikensammlung des Landesmuseums in Klagenfurt*, von RUDOLF EGGER. Vienna, 1921, Hölder (for the Austrian Archaeological Institute). 122 pp.; 100 figs.; map. 12mo.]

## GREAT BRITAIN

**BERKSHIRE.**—Wayland's Smithy.—The recent excavation of the prehistoric barrow in Berkshire known as Wayland's Smithy is the occasion of a historical account of the descriptions of the monument which have appeared since the seventeenth century (R. A. SMITH, *Ant. J.* I, 1921, pp. 183-191) and of a report on recent investigations by C. R. PEERS (*ibid.* pp. 191-197; 4 figs.). The barrow, which is of a long oblong shape lies in a general northwest and southeast direction. The sides have a revetment of sarsen rubble, and the barrow is also enclosed by a wall of upright sarsen stones. Four great upright stones form a sort of façade to the monument at the south end. Between the two central slabs a passage leads to the burial chamber, which is of cruciform plan. Remains of eight skeletons were found in the western transept, but were incomplete; perhaps the burials had been disturbed in neolithic times. A curious discovery near one of the facing slabs at the south end of the barrow was that of two flat iron rods. These are British currency bars such as are described by Caesar (*B.G.* V, 12), and may have been deposited here as a votive offering.

**CAMBRIDGE.**—Some Vases in the Lewis Collection.—Four Greek vases belonging to the collection left to Corpus Christi College in 1891 by its librarian, S. S. Lewis, are discussed and illustrated by C. D. BICKNELL in *J.H.S.* XLI, 1921, pp. 222-231 (5 pls.; 3 figs.). They are a red-figured cotyle from the Castellani collection, a red-figured cylix from the Lecuyer collection, a red-figured stemless cylix from the Barone collection, and a small early Cycladic multiple vase, presumably from Melos. The first two are excellent examples of the principle of decoration first seen in the later work of Euphronius and his contemporaries Hieron and Duris, of relating the different pictures to each other in subject. The cotyle has the rape of Tithonus by Eos on one side and

two of his companions startled by the strange occurrence on the other side. The cylix has a symposium divided between its three fields, the six banqueters on their six couches being shown, three on one side of the vase, two on the other side with a girl playing the flute, and the sixth one on the interior. With their lack of discipline in the rules of perspective, the ancients would find no difficulty in feeling the whole scene visible to an imaginary spectator at the same time, much as the procession of the Parthenon frieze was felt as a single spectacle. In this principle lies the explanation of the much-discussed Cephalus cylix in the Boston Museum of Fine Arts. The figures around the outside of the vase, excited and looking anxiously upward, are the companions of Cephalus gazing at the strange sight of the goddess carrying him away in her arms, as pictured on the interior.

**CAMBRIDGESHIRE.—Roman Roads.**—Excavations by the Cambridge-shire Antiquarian Society have proved that the ramp supporting the part of the Roman road from Haverhill to Cambridge known as Worstead or Wool Street is not, as has been supposed, of pre-Roman origin, but is itself of Roman construction. Investigation of the Fleam Dyke reveals successive reconstructions of Roman workmanship, and sherds indicate that these reconstructions were subsequent to the Claudian conquest. (*Ant. J.* II, 1922, pp. 57-58.)

**CAERLEONSHIRE.—A Roman Inscription.**—A fragmentary inscription found in the Roman cemetery at Ultra Pontem, Caerleon, commemorates a *primus pilus* of the second Legio Augusta. (*Ant. J.* II, 1922, pp. 62-63.)

**CARNARVONSHIRE.—The Excavation of Segontium.**—The Roman fort at Segontium, excavated under the direction of Dr. R. E. M. WHEELER, shows several successive stages of construction. A primitive earth work was followed by stone walls and gates. There seem to have been three main periods of occupation: *ca.* 80-125 A.D., 200-210 A.D., 350-385 A.D. (*Ant. J.* II, 1922, p. 63.)

**COOKHAM.—A Neolithic Bowl.**—E. NEIL JAYNES reports the discovery in the Thames at Hedson, near Cookham, of a number of prehistoric objects of which the most important is a complete pottery bowl of neolithic date. It is of yellowish brown clay, and is ornamented with fifteen lines of impressions. Twelve of these were made with a twisted sinew, and three with a reef knot. The latter are the first evidence to be discovered of knowledge of the reef knot in neolithic Britain. (*Ant. J.* I, 1921, pp. 316-319; 2 figs.)

**CORNWALL.—Settlements at Harlyn Bay.**—A number of antiquities discovered at Harlyn Bay on the north coast of Cornwall have been described by O. G. S. CRAWFORD (*Ant. J.* I, 1921, pp. 283-299; 12 figs.). (1) At Harlyn Bay a prehistoric cemetery was discovered in 1900. The graves are rectangular and are lined with slate slabs. The bodies were in a crouching position. Potsherds with incised geometric decoration were discovered, and bronze was also found, indicating a date transitional between the Bronze and the Iron Age, probably in this region about 400-150 B.C. (2) On Constantine Island in Constantine Bay there once stood a rude hut of slate slabs, elliptical in shape. Animals' bones and a bronze hammer were found in it, as well as a number of lumps of clay. It may be conjectured that the hut was a potter's shop. (3) On the mainland not far from this island is Constantine Chapel, built over boulders which were probably the objects of a pre-Christian cult. (4) Burials and some objects of pottery, bronze, and stone have recently been discovered

on the cliffs above Harlyn. (5) Two gold crescents discovered in this region are important because they were found in association with objects of the Bronze Age. The site would repay systematic excavation.

**DEVON.**—A Roman Villa.—Remains of a Roman villa, including a mosaic pavement and fragments of walls, were discovered by Major General Wright on his estate at Seaton in Devonshire. Since they are near a spring, they may have been part of a bath. (*Ant. J. I*, 1921, pp. 237-238.)

**DORCHESTER.**—Roman Spoons.—A group of silver spoons found at Dorchester in 1898 or 1899 together with coins of 360-400 A.D. is described and discussed by O. M. DALTON (*Ant. J. II*, 1922, pp. 89-92; fig.). Although associated with Roman Britain, the spoons are apparently of Christian origin. On the bowl of one is the inscription: AVGVSTINE VIVAS, a type of good wish not found on pagan spoons; and a fish which is represented on another is probably the Christian symbol. The curious animals' heads into which the volutes connecting the stem with the bowl of the spoon are sometimes shaped indicate a Teutonic influence. The discovery of similar objects at Vermand, near St. Quentin, suggests that the Dorchester spoons may have been imported from a Christian centre in Gaul, where there was at this time an immigrant Teutonic (Frankish) population.

**GLOUCESTERSHIRE.**—Roman Burials.—ST. CLAIR BADDELEY in a recent lecture before the Society for the Promotion of Roman Studies described fifty Roman burials discovered at Barnwood, near Gloucester, not far from the Roman road called Irmin Street. Both inhumation and cremation burials were found. (*Ant. J. I*, 1921, pp. 236-237.)

**HERTFORDSHIRE.**—Roman Remains at Welwyn.—G. M. KINDERSLEY (*Ant. J. II*, 1922, pp. 24-26; 5 figs.) reports the discovery at Welwyn Grange of Roman remains from a cemetery, apparently of the second century of our era. They comprise glass bottles and pottery, including some examples of terra sigillata with stamped signatures. A female bust moulded in pipe clay was also found.

**KENT.**—A Celtic Urn Field.—LEONARD WOOLLEY has excavated for the Society of Antiquaries an early British cemetery at Swarling in Kent. Cremated bones were found in pottery urns. Bronze and iron brooches indicate a date from about 50 B.C. to about 50 A.D. (*Ant. J. I*, 1921, p. 339.)

**LONDON.**—A Roman Building.—Excavations in Gracechurch Street have disclosed the lower courses of a Roman building. At a depth of thirteen feet from the present surface is a wall of ragstone which was faced with painted plaster. At right angles to this was a more massive wall. The room seems to have been partially filled in ancient times, for a floor of red tesserae was found at a depth of only eight feet and six inches. This filling accounts for the preservation of the plaster on the face of the wall. The plaster was painted with the outlines of square panels, and was apparently colored in imitation of marble. It is probable that these remains are to be associated with the more extensive remains of Roman building found in Leadenhall, which is not far away. (*The Daily Telegraph*, London, January 10, 1922.)

**An Inscription from Hermonthis.**—A hieroglyphic text of the eleventh Dynasty in the British Museum which had been published (*Hieroglyphic Texts from Egyptian Stelae in the British Museum*, Part 1, pl. 55) as obscure in meaning, has been re-transcribed by Dr. BUDGE and interpreted by H. O. LANGE,



who finds that it is from the same grave at Hermonthis with two inscriptions (in the Glyptothek at Copenhagen and in the Berlin Museum respectively) which he has already published (*Ägyptologische Zeitschrift*, 34, pp. 25-34, pl. 2). It is one of those unusual documents which may be described as contracts between the person buried in the tomb on the one part and certain priests on the other for the making of due offerings to the dead. (*Sitzb. Ber. Akad.* 1914, pp. 991-1004; pl.)

**OXFORD.**—A Roman Site.—A party of Oxford undergraduates has made excavations at Wood Eaton. Fragments of painted plaster of the Roman period were found, and some traces of walls. A few Antonine and Constantinian coins were discovered, a cross-bow brooch, two Samian stamps, and some rude pottery. The site had apparently been ruined by fire at least once in ancient times. (*Ant. J.* I, 1921, pp. 339-340.)

**STONEHENGE.**—Recent Excavations.—Lieutenant Colonel W. HAWLEY has made a second report on recent operations at Stonehenge, including the mechanical measures taken for the restoration and preservation of the monument and archaeological discoveries in the excavation of parts of the site. These investigations seem to prove that "the ditch and rampart were made at a time considerably anterior to Stonehenge." (*Ant. J.* II, 1922, pp. 36-51; 2 pls.; 5 figs.; cf. *ibid.* I, 1921, pp. 19-41.)

**WILTSHIRE.**—A Hallstatt Village Site.—Mrs. M. E. CUNNINGTON reports the discovery at All Cannings Cross Farm, east of Devizes, of an Early Iron Age village site. Excavations have yielded a great quantity of pottery and some other small manufactured objects as well as bones of animals used for food. The pottery is of Hallstatt type throughout. Many pots show rows of finger-tip impressions around the shoulder. Some of the better pieces are highly polished and ornamented with chevrons and small circles stamped or impressed. Two brooches of La Tène type were found. The site appears not to have been occupied before the Iron Age, and there is no trace of Roman remains. It is likely that the geometric style of ornament seen in the relics of this village continued in this district until the time of the Roman conquest, although a more advanced culture was found in Somerset, Oxfordshire, and Northamptonshire to the west and north. (*Ant. J.* II, 1922, pp. 13-19; 11 figs.)

**WINCHESTER.**—Iron Currency Bars.—R. W. HOOLEY reports the discovery on Worthy Down, near Winchester, of a series of British iron currency bars. They were found near a pit of prehistoric origin, in association with pottery of the La Tène period. There were no Roman remains on the site. (*Ant. J.* I, 1921, pp. 321-326; fig.)

## NORTHERN AFRICA

**BEZEREOS.**—New Inscriptions.—ALFRED MERLIN reports that in 1919 Colonel Donau made interesting discoveries at Sidi Mohamed Ben Aïssa, sixty kilometers from Kébili. An ancient cistern and a castellum had already been discovered at this place (*Bull. Arch. du Comité*, 1909, p. 35 ff.). Near the cistern was found an inscription of 201 A.D., commemorating the fact that the emperors Septimius Severus, Caracalla, and Geta had restored the fort on this site which had been built by Commodus. In the fort itself Colonel Donau found a block with inscriptions on the four lateral faces. This marked a dedi-

cation in honor of the same three emperors, though the name of Geta had been erased, as on the other inscriptions. The importance of this inscription is in the fact that it mentions the name of the military station as Bezereos. It shows that Bezereos was some thirty kilometers farther south than had been supposed and that the castellum had been originally established here by Commodus, in pursuance of a plan for the strengthening of the *limes Tripolitana* for the protection of caravan routes. Septimius Severus pushed the Roman posts still farther south. The garrison list on the second inscription shows that some three hundred men were stationed at Bezereos under Septimius Severus. (*C. R. Acad. Insc.* 1921, pp. 236-248.)

**CARTHAGE.**—**C. Julius Asper.**—L. POINSSOT has deciphered further parts of an inscription from Carthage, in honor of the Great Mother, of which five lines were published in *B. Arch. du Comité*, 1919, pp. ccxxxii-ccxxxv. Julius Asper, the proconsul mentioned, is a man of whom Tertullian speaks in a letter of 212 A.D. as showing some leniency towards the Christians. He was consul for the second time in 212. The date of his proconsulship is shown from other evidence to have been 200-202 or 204-205 A.D. (*C. R. Acad. Insc.* 1921, pp. 333-336.)

**CONSTANTINE.**—**Prehistoric Antiquities.**—The Commandant MENNETRIER has made a study of the prehistoric monuments of the district of Constantine in Algeria. (1) Near the coast are found large dolmens, consisting of a table, the dolmen proper, a sepulchral chamber, and an enclosure of standing stones. (2) On the Haut-Plateau are small dolmens. The table, although it has stone supports, has the appearance of resting on the ground. The sepulchral chamber is constructed carelessly, and the enclosure is small. That the two forms are related is indicated by the fact that pottery of identical type has been found in both forms of dolmens. (3) Megaliths of conical form mark burials in the great necropolis of Chouf el Hadj. The sepulchral chamber differs from that of the dolmens in having no lateral entrance. The bones discovered in these graves seem to have undergone the action of fire. (4) Megaliths of cylindrical form on the north slope of Ras bou Irhiel. These are constructed of blocks laid flat, forming small round towers. Another group of similar monuments was studied on Djebel Metrassi. The sepulchral chamber has a square plan and no lateral entrance, and the human remains seem to have been burned. A large slab recalling the table of the dolmens is laid over the centre of each of these cylindrical monuments. (5) Certain alignments of megaliths appear to have had a defensive purpose. The relations of these stones to groups of dolmens and other monuments suggest that they indicate the sites of *oppida* of the type which Caesar attributes to the Celts. M. Menetrier noted the survival in this region to the present day of customs of commemoration which suggest the practice of the megalithic period. (*Bulletin de l'Académie d'Hippone*, 34, 1914-1921, pp. 111-125.)

**CYRENAICA.**—**Unpublished Inscriptions.**—GASPARE OLIVIERO discusses a number of hitherto unrecorded inscriptions from Cyrene and Benghazi. In Cyrene he noted (1) an inscription of Claudius Gothicus, marking the establishment of the city of Claudiopolis after the suppression of the revolt of the *Marmariti*; (2) a votive inscription to the nymph Cyrene; (3) another dedicatory inscription, also probably to Cyrene, by Gaius Claudius Titianus Demonstratus, proconsul of Crete and Cyrene in the reign of Marcus Aurelius and Lucius Verus;

(4) a dedicatory inscription to Artemis, by Vettiena Aponia, a priestess; (5) a list of names; (6) minor sepulchral and other inscriptions. In Benghazi were found (1) a votive inscription to Asclepius and Hygieia, (2) an illegible sepulchral inscription. (*Not. Arch.* II, 1916, pp. 181-191; 11 figs.)

**CYRENE.—The Roman Baths.**—The official report on the excavations at Cyrene in 1914 includes a description of the Roman baths by G. GUASTINI (*Not. Arch.* II, 1916, pp. 117-151; 23 figs.). In the south tier of rooms two ante-chambers at the east end, paved with mosaic, but without seats or statuary, are separated by a pair of pilasters and two columns between them. For some reason probably connected with a previous structure on the site these pilasters and columns are not aligned exactly at right angles to the side walls. The columns are of the Corinthian order, the capitals carelessly executed. Another similar group of columns and pilasters leads to two halls belonging more properly to the baths. These rooms are paved with marble, furnished with seats and adorned with sculpture. Beyond the further room to the west is a large *piscina*. To the north of this range of rooms, and separated from them by a massive wall, is another series of rooms, some of which were reservoirs. Two were *piscinae* with steps descending from the doors leading into the south hall. Work of three different periods may be discerned in this structure, which in its final phase was the *frigidarium* of a great Roman bath. This is indicated by its northern exposure, by the great basins, and by the lack of any provision for heating water.

**The Sculptures from the Roman Baths.**—The excavation of the Roman baths at Cyrene in 1914, and the important series of sculptures discovered in this building are described by ERTORE GISLANZONI (*Not. Arch.* II, 1916, pp. 7-116; 6 pls.; 56 figs.). The principal marbles are the following: (1) a torso of Hermes, apparently a Roman copy from a bronze original of the Peloponnesian School, belonging to the earlier years of the fourth century B.C.; (2) a head of



FIGURE 9.—EROS FROM THE ROMAN BATHS: CYRENE.

Hermes, with the petasus, showing some Scopaic influence, but perhaps originally united with the torso just described (if so, the work is obviously eclectic); (3) a fragmentary statue base with the feet of a female figure; (4) a small male torso of indeterminable style; (5) a fragment of a male statue with the ends of locks of hair falling over the shoulders, probably from an Apollo or a Dionysus of fifth century type; (6) a head of Dionysus which is an Antonine copy of a well-known type (see Amelung, *Skulpturen des Vaticanischen Museums*, II, No. 258, pl. 48); (7) a headless statue of Hygieia, of Hellenistic type; (8) a headless statue of a dancer in transparent draperies, similar in type to a figure on a puteal from the Via Prenestina in Rome (*Not. Scav.* 1908, p. 445 ff.; Helbig-Amelung, *Führer*, 3d edition, II, No. 1525), and comparable to some well-known terra-cotta types of dancing figures; (9) a small head of Athena, derived from an original of the fifth century B.C.; (10) a statue of Eros stretching his bow, of the familiar type commonly attributed to Lysippus (Fig. 9), but conjectured by Ghislanzoni to be connected with the Attic school (the face of the Cyrene replica recalls Winkelmann's Faun); (11) a group of three Graces (two headless), the composition of which suggests derivation from a relief, since it is obviously intended for one point of view, and could be brought between two not widely separated parallel planes; (12) another group of three Graces, somewhat more plastically posed, but still based on a relief type, and carelessly executed; (13) a statue of Athena, of Antonine date, but of a fourth century type, with a head which does not belong to it, since the head is of Parian, the body of Pentelic marble; (14) a colossal statue of Hermes, of a type closely associated with the work of Polyclitus, and bearing a strong resemblance to the Idolino of Florence; (15) a youthful satyr of a common type which is a variation of the Praxitelean satyr; (16) a colossal statue of Alexander, not a direct copy from Lysippus, but probably based on an Alexandrian adaptation of the Lysippean type; (17) a seated statue of Hermes, a variation on the Hellenistic motive of the bronze seated Hermes from Herculaneum; (18) a fragment of a male head, perhaps from the statue just mentioned; (19) a fragment of a helmeted head of Athena; (20) a small male torso.

**The Temple of Zeus.**—Military excavations on the plateau to the southeast of the acropolis of Cyrene brought to light in 1914 fragments of a colossal statue and its pedestal. Further exploration proved that the statue was a cult image of Zeus, and stood at the back of the cella of a small temple. The inscription on the pedestal shows that the statue was dedicated in the reign of Hadrian and Antoninus Pius, perhaps in commemoration of the restoration of the city after the Jewish revolt of 116 A.D. The building has the form of a temple *in antis*, with two columns between the antae, on a podium 1.60 m. high. The podium has six steps in front, but as these are inconvenient for actual use, the temple was entered by flights of stairs at the right and left of the portico. The cella, which is 11.70 m. long and 8.70 m. wide, has a mosaic floor of geometric pattern. The statue is 2.18 m. high. Zeus stands beside a tree stump, near which is his eagle. The weight of the figure rests on the right leg. The left hand is raised and grasps a scepter; the right hand holds the thunderbolt. On the left shoulder hangs the aegis, on which a mask of Medusa is represented. The type suggests the Asclepius of Melos and the Zeus of Otricoli, and is possibly of Alexandrian origin. It has a noticeable stylistic resemblance to the colossal statue of Alexander discovered in the baths of Cyrene

(see p. 372). On one side of the front of the pedestal is the signature of the sculptor, Zenio, son of Zenio. (E. GHISLANZONI, *Not. Arch.* II, 1916, pp. 195-216; 4 pls.; 12 figs.)

**A Milestone.**—A milestone discovered on the ancient road from Cyrene to Apollonia records the fact that the road was restored by Hadrian after the Jewish revolt of 116 A.D. Near this stone was found a cippus with the name of the emperor Claudius, showing that the road was constructed or repaired in the reign of that emperor. Together with an inscription published in *Not. Arch.* I, p. 176, these stones prove that the road built or repaired by Claudius, and later repaired under Trajan, was damaged in the Jewish insurrection and reconstructed by Hadrian. (E. GHISLANZONI, *Not. Arch.* II, 1916, pp. 155-161; 2 figs.)

**Terminal Cippi.**—Three cippi have been discovered at Cyrene, commemorating the restoration to the public domain by Vespasian, in 71 A.D., of land originally bequeathed to the city by Ptolemaeus Apo, but later appropriated to private uses. (E. GHISLANZONI, *Not. Arch.* II, 1916, pp. 165-177; 5 figs.)

**HIPPO.—The Thermae of Socius.**—The Commandant MAITROT has published a description and history of the Baths of Socius at Hippo, where St. Augustine debated with the Manichaean priest Fortunatus (*Disputatio contra Fortunatum Manichaeum*). He distinguishes seven periods in the history of the site: (1) the first century B.C., to which belongs a pavement found at a depth of three metres; (2) the first century of our era, to which limestone walls and mosaic pavements on the site are to be attributed; (3) the first and second centuries, from which considerable remains of two villas date; (4) the third and fourth centuries, when the Thermae of Socius were constructed; (5) the fifth century; (6) the sixth and seventh centuries, in which the baths were remodelled; (7) the eighth century, in which further alterations were made and mosaics were destroyed, possibly by a Christian iconoclast, but more probably by a Mohammedan. (*Bulletin de l'Académie d'Hippone*, 34, 1914-1921, pp. 35-64; 3 figs.)

**A Wall of Disputed Date.**—C. DUPRAT attributes to the prehistoric period a fragment of "Pelagic" wall at Hippo, with which is associated a phallic emblem sculptured in relief (*Bulletin de l'Académie d'Hippone*, 34, 1914-1921, pp. 135-140; fig.). M. Gsell is quoted by O. DAMICHEL as asserting that the wall in question, as well as the relief, belongs to the period of the Roman empire (*Ibid.* pp. 141-145).

**TEBOUSSOUK.—An Imperial Estate.**—A boundary stone of the second or third century, discovered to the east of Teboursouk proves the existence of an imperial domain in this region. It can not have been large, and probably was set apart as a place for marketing the products of the great imperial *salvus* of this district. (L. POINSSOT, *C. R. Acad. Insc.* 1921, pp. 324-327.)

**TRIPOLI.—A Cippus from the Forte del Faro.**—An ancient relief which has long been visible in the wall of a structure adjacent to the Forte del Faro at Tripoli has been disengaged, and proves to be part of a cippus. On one side is the tripod of Apollo surmounted by a raven; on the opposite side are a cithara and a plectrum; while on one of the other sides is the inscription *Apolloni | sacrum | Aurelius Epa | gri f(i)lius d(e) s(ua) p(ecunia) d(edicavit)*. The lettering of the inscription belongs to the first century of our era. It may be remarked that the tripod and raven of Apollo are also represented on the Arch of Marcus

Aurelius at Tripoli, and that a statue of Apollo, now in Constantinople, was found here. The discovery of the cippus and of certain ancient columns in the walls of the fort suggests that a temple of Apollo stood in this region. His cult was probably introduced about the first century of the Christian era. For the Punic population the god probably was one of the manifestations of Baal Ammon. A fragment of another inscription recording a dedication by the son of Epagrus was found in earth removed from the Forte del Faro. (SALVATORE AURIGEMMA, *Not. Arch.* II, 1916, pp. 383-393; 8 figs.)

**The Fortifications.**—SALVATORE AURIGEMMA has published a detailed article on the history of the fortifications of Tripoli from ancient to modern times. The numerous figures and plates reproduce prints and plans of the city and its walls from the sixteenth century to the present day. (*Not. Arch.* II, 1916, pp. 217-300; 9 pls.; 22 figs.)

**The Demolition of the Walls.**—SALVATORE AURIGEMMA describes the removal of the walls of Tripoli under the direction of the Italian authorities in 1915-1916, calling attention to details of their structure, and to other points of archaeological interest. (*Not. Arch.* II, 1916, pp. 367-379; 13 figs.)

**Antiquities.**—Some archaeological discoveries have been incidental to the Italian modernization and improvement of the city of Tripoli. (1) In the demolition of the walls to the north of the city and in the removal of the Forte del Faro funerary monuments, ancient columns, ashlar masonry, and parts of an ancient paved street were found. The most important object discovered in this region, perhaps the finest piece of sculpture found in Tripoli, is a male torso showing on the shoulders the ends of long locks of hair. The quality of the surface suggests the style of Praxiteles. (2) In the levelling of a hill outside Bâb el Gédid the most interesting find was that of a group of rooms with finely executed mosaic floors. These are in part in geometric patterns, but in one room there were originally fifteen panels with realistic representations of game, fowls, and fruit, of the type called *xenia* by Vitruvius (VI, 10, 4). Only one of these is extant; the others had been removed in ancient times. Some sculptural fragments, small bronzes, and terra-cotta lamps were also discovered in this region. (PIETRO ROMANELLI, *Not. Arch.* II, 1916, pp. 303-364; 4 pls.; 43 figs.)

**TUNIS.—The Kerkennah Islands.**—O. DAMICHEL has published a historical and descriptive article on the group of islands off the coast of Tunis known as Kerkennah (ancient Cerecenna). Ancient remains are scanty, but include the broken arch of a Roman bridge, and Saracen structures. (*Bulletin de l'Académie d'Hippone*, 34, 1914-1921, pp. 91-103; map.)

**Two Lost Monuments.**—Two ancient monuments of Tunis which have disappeared in recent years are the subject of a recent article by L. CARTON. (1) The first is a carved stele from Henchir Roumâne about three kilometers west of the ancient Colonia Thuburnica, in the vicinity of Ghardimaou. Many stelae have been found in this region, as well as innumerable dolmens which form a link between the megalithic remains of Tunis and those of Algiers. The Libyan stelae seem to be the monuments of an entirely different people from that which left the dolmens. On the upper part of the stele in question is represented a crescent, on either side of which is a lotus blossom. Below is a figure which wears a short tunic and holds a palm in the left hand. An object of uncertain description—possibly a cake, possibly a vase—is held in the right hand,

resting on an object which bears some resemblance to an amphora. At the feet of this figure a pig approaches an altar. A bird resembling an owl is perched on the right arm of the principal figure. The relief is of the crudest character. A somewhat similar symbolism is found on stelae from the temple of Saturn in the adjacent colonia. Saturn is the late form of the Baal worshipped in this region. (2) The other monument, which has been entirely destroyed, was a mausoleum in the form of a square tower at Bir-Kouti in southern Tunis. Its lower story was adorned with pilasters of the Corinthian order, and separated by a cornice from the second story. The third story formed a niche. Some spiral columns found in the neighborhood probably came from this part of the monument. (*Bulletin de l'Académie d'Hippone*, 34, 1914-1921, pp. 81-90; 2 figs.)

**VOLUBILIS.—Recent Discoveries.**—L. CHATELAIN reports the discovery at Volubilis between the *decumanus maximus* and one of the secondary *decumani*, of the remains of a large building which had an Ionic portico. Twelve of the column bases are still in place. This portico faced an open area on the *decumanus maximus*. Near this area has been found an inscription which shows that the building was a palace equipped with baths, and that it was reconstructed at the expense of Gordianus III (238-241) by the governor of the province, M. Ulpian Victor. An atrium with a peristyle enclosing a great basin, a tablinum, and several other rooms have been uncovered. A good many of the floor slabs and some parts of the marble facing of the walls have been found in place. Two interesting objects of art which have been found at Volubilis are a mule's head in bronze, which decorated a *bisellium* or chariot; and a marble portrait head of a young man, whose aquiline nose and thick lips are Berber characteristics—a remarkably expressive and realistic work. (*C. R. Acad. Insc.* 1922, pp. 28-31.)

## UNITED STATES

**ANN ARBOR.—An Overseer's Daybook from the Fayoum.**—A waxed diptych now in the library of the University of Michigan is published with photographs and transcription by A. E. R. ROAK in *J.H.S.* XLI, 1921, pp. 217-219 (2 pls.). It belongs apparently to the third century A.D. and contains lists of workmen with the work done day by day in the months of Pauni and Epeiph, in reaping and threshing grain on two estates, one called the Island ( $\eta$  Νήσος) and one in a village of Bachias or Bacchias. The two leaves were tied together by cords through holes near one edge and folded back-to-back for writing, with the binding at the left. When the first page was full, they were turned over vertically, or endwise, so that the binding remained on the left.

**CAMBRIDGE.—A Cambodian Head.**—A head from a statue of Buddha, a superb example of Cambodian art, now exhibited in the Fogg Art Museum in Cambridge, is described by DENMAN W. ROSS. It is a product of the civilization which is reflected in the monuments of Angkor. (*Fogg Art Museum Notes*, I, No. 2, June, 1922, pp. 3-13; 8 figs.)

**NEW YORK.—Some Egyptian Objects.**—In *Art in America*, X, 1922, pp. 173-178 (2 pls.), T. G. ALLEN publishes three interesting examples of Egyptian art in the collection of Mr. Walter A. Roselle. They include a wooden eleventh dynasty statuette of a Theban man, exceptional in the coloring—it is yellow instead of red; a carefully wrought ushebti (*ca.* Dynasties XXVI-XXX); and a sculptor's study of the head of King Ikhnaton.

**Cretan Seal Stones.**—The Metropolitan Museum exhibits as an anonymous loan a collection of seal stones and other prehistoric objects from Crete, including (1) primitive pictographic seals of the Early Minoan period; (2) primitive hieroglyphic seals, Early and Middle Minoan; (3) developed hieroglyphic seals, Middle Minoan III; (4) naturalistic seals, Late Minoan; (5) votive objects from the Dictaeon Cave; (6) bronze tools and weapons; (7) two fine examples of the type of stone vases found at Mochlos; (8) several pieces of gold jewelry. (G. M. A. RICHTER, *B. Metr. Mus.* XVII, 1922, pp. 88–91, 4 figs.)

**An Addition to the Archaic Greek Stele.**—The Metropolitan Museum reports that it has acquired another fragment of the great archaic Attic grave stele (see *B. Metr. Mus.* 1913, pp. 94–99). It comprises the shoulder and upper arm of the youth, a good example of archaic modelling, and well preserved. (*B. Metr. Mus.* XVII, 1922, p. 68; fig.)

**Greek Terra-cottas.**—In a series of Greek terra-cottas recently acquired by the Metropolitan Museum the most interesting is a fragmentary figure of an enthroned goddess, said to have been found at Tarentum. On the front of the chiton is a Nike in low relief, probably representing an embroidery on the dress. The statuette is to be dated in the sixth century B.C. (M. E. C., *B. Metr. Mus.* XVII, 1922, pp. 113–115; 3 figs.)

**Roman Marbles.**—The Metropolitan Museum has lately added to its collection of ancient marbles some interesting architectural and sculptural fragments of Roman workmanship: (1) a part of a sarcophagus of the Antonine period, with a relief showing the dying Meleager carried by his slaves and attended by his friends; (2) two pilasters with exquisitely decorative ornament representing ivy vines growing from amphorae, with birds and insects among the leaves and berries, dated about 100 A.D.; (3) a column with a composite capital, probably of Hadrianic date. (M. E. C., *B. Metr. Mus.* XVII, 1922, pp. 33–36; 4 figs.)

**Copies of the Poros Sculptures in Athens.**—G. M. A. RICHTER reports that the Metropolitan Museum has acquired water-color copies by Gilliéron of the principal poros sculptures in the Acropolis Museum in Athens. (*B. Metr. Mus.* XVII, 1922, pp. 28–29.)

**Bronzes from the Caucasus.**—A group of bronze belt-clasps and pendants from the Northern Caucasus has been acquired by the Metropolitan Museum, and has been discussed by M. ROSTOVITZEFF (*B. Metr. Mus.* XVII, 1922, pp. 36–40; 2 figs.). There are four belt-clasps in cast bronze. Within the square frame of each is represented an animal in open work—a stag or a horse. The frame is adorned with geometric patterns. A circular plaque shows a mountain goat in the centre; around the edge four dogs pursue one another. Another of the bronzes is an open-work pendant of geometric design. These objects “belong . . . to the class of late Caucasian bronzes, which are characteristic of the cemeteries of the mixed Sarmato-Caucasian population of the Caucasus in the late Hellenistic and the Roman period.”

**The Converse Collection.**—S. C. B. R. describes briefly a series of porcelains, jades, hard stones, and snuff bottles recently added to the oriental collections of the Metropolitan Museum by the bequest of the late Edmund C. Converse. (*B. Metr. Mus.* XVII, 1922, pp. 27–28; fig.)

**A Gold Cup of the T'ang Period.**—S. C. B. R. describes (*B. Metr. Mus.* XVII, 1922, p. 9; 2 figs.) a gold cup of the T'ang period, said to have been found



in the province of Honan, and recently acquired by the Metropolitan Museum. Just below the heavy projecting rim is a scroll design. Only one of the two handles is preserved. It is in the form of a crouching lion, biting the rim of the cup. No other gold cup of this period is known.

**NORTHAMPTON.**—*Antiquities in the Hillyer Art Gallery.*—W. D. GRAY reports that the Hillyer Art Gallery of Smith College has acquired (1) a child's head in marble, of Roman date, (2) a marble statuette of a sleeping Eros, also Roman, (3) an Attic black-figured amphora of the "panel" type, on both sides of which a quadriga is represented. (*Bulletin of Smith College, Hillyer Art Gallery*, March, 1922, pp. 2-7; 3 figs.)

## EARLY CHRISTIAN, BYZANTINE, MEDIAEVAL, AND RENAISSANCE

### GENERAL AND MISCELLANEOUS

**BYZANTINE BULLAE.**—B. PACE has published a few Byzantine lead seals or bullae recently acquired by the Italian Mission in Asia Minor. (*Ann. Scuol. It. At. III*, 1916-1920, pp. 181-183; 7 figs.)

**ADALIA.**—*Europeans in Adalia in the Middle Ages.*—B. PACE has sketched the history of Latin enterprise at Adalia in the time of the Crusades and of the Venetian supremacy. (*Ann. Scuol. It. At. III*, 1916-1920, pp. 184-191; 3 figs.)

**BAALBEK.**—*Byzantine Inscriptions.*—B. PACE has published two fragmentary Christian inscriptions which were found near the fountain of Ras-el-Ajn at Baalbek. A ruined mosque on this site is said to have been built on the foundations of a church. The discovery of these dedicatory inscriptions seems to confirm the tradition. (*Ann. Scuol. It. At. III*, 1916-1920, pp. 251-252.)

**CHALCIS.**—*The Venetian Walls.*—B. PACE reports that the Venetian fortifications of Chalcis (Negroponte) have been completely destroyed in recent years, without any advantage to the development or traffic of the modern city. Some decorative marbles and inscriptions from these walls have been preserved in the local museum. The fine bridge over the Euripus has also been demolished. (*Ann. Scuol. It. At. III*, 1916-1920, pp. 284-286; 3 figs.)

**SERIPHOS.**—*Mediaeval Monuments.*—The mediaeval remains of Seriphos are the subject of a detailed report by G. GEROLA (*Ann. Scuol. It. At. III*, 1916-1920, pp. 203-241; 24 figs.). He outlines the history of Latin domination in Seriphos and gives genealogical tables of the three chief Italian families which governed the island in the Middle Ages. He describes its villages and mediaeval fortifications; its churches and monasteries and campanili; its ecclesiastical vestments and other objects of religious use; its mediaeval sculptures and coats of arms; and publishes some of its mediaeval and later inscriptions.

### ITALY

**FAENZA.**—*Francesco da Faenza.*—C. GRIGIONI publishes some documents found in the archives at Faenza concerning the Francesco who collaborated with Andrea del Castagno in painting the frescoes of the chapel of S. Tarasio in the church of S. Zaccaria, Venice. (*L'Arte*, XXV, 1922, pp. 7-9.)

**FLORENCE.**—*A Madonna by Michelozzo.*—A. LENSÌ publishes a marble relief of the Madonna which he discovered recently during restoration work on



FIGURE 10.—MADONNA BY MICHELOZZO: FLORENCE.

the convent of the Annunziata at Florence (Fig. 10). The technical deficiencies of the work, combined with sincerity of expression, are such as are found in the art of Michelozzo and Lensi is inclined to identify the relief with the one mentioned by Vasari as "above the counter where the monks sell candles." (*Dedalo*, II, 1921, pp. 358-362; pl.)

**A Painting by Signorelli.**—Signorelli's tondo of the Holy Family, published a year ago in *Burl. Mag.* is republished by R. FRY. The cleaning which the picture has undergone in the meantime has changed it from a second-rate picture to one of the most splendid works of the artist. (*Burl. Mag.* XL, 1922, p. 134; fig.)

**A Lunette by Benedetto da Majano.**—A. MARQUAND publishes a recently discovered document which proves that Benedetto da Majano was the author of the terra-cotta lunette of San Lorenzo adored by two angels, over the *porta dei Monaci* in the Certosa near Florence. Done in 1496, this is the last documented and dated work by Benedetto; he died the following year. (*Burl. Mag.* XL, 1922, pp. 128-131; fig.)

**GENOA.**—**A Madonna by Nicolò da Voltri.**—On the basis of L. Venturi's study of the fourteenth century painter, Nicolò da Voltri, C. ARU attributes to that artist a painting of the Madonna in the Church of S. Siro, Genoa. (*L'Arte*, XXIV, 1921, p. 208; fig.)

**PADUA.**—**A Rediscovered Polyptych.**—A polyptych signed with the names of Antonio Vivarini and Giovanni d'Alemagna and dated 1447 was mentioned in literature as late as 1795. After that date we hear no more of it. Apparently, it was carried off from the church of S. Francesco, Padua, at the time of the suppression of the convent in 1810. L. PLANISCIG has lately discovered the polyptych in the chapel of the castle of Konopischt in Czecho-Slovakia. The polyptych is important in distinguishing the characteristics of the two collaborators. By comparing it with the Parenzo polyptych by Antonio it is concluded that the four saints are by Antonio, and that the central panel, of the Madonna adoring the Child, is by Giovanni. The latter shows strong influence of Gentile da Fabriano. (*Boll. Arte*, I, 1922, pp. 427-433; 7 figs.)

**A Madonna by Morto da Feltre.**—Owing to the scarcity of works by Lorenzo Luzzo, called Morto da Feltre, the Madonna published by A. MOSCHETTI is of no slight importance. It is a fresco from a house in the Via Mazzaterra, Feltre, and is now owned by Carlo Bizzarrini, Padua. The painting sustains L. Venturi's description of Morto as an eclectic, but it proves that Jacopo and Giovanni Bellini, rather than Giorgione, Palma, and Raphael, were his most important sources. (*Dedalo*, II, 1922, pp. 599-603; 3 figs.)

**VERONA.**—**The Robes of Cangrande I.**—An important contribution to the history of textile art is made by the discovery in the tomb of Cangrande della Scala of fragments of clothes of silk and gold. The textiles are of what is known as Lucchese manufacture, though the same types were made in Pisa, Bologna, and Venice. Their importance lies not only in their beauty and unusual preservation, but also in the fact that they can be definitely dated; Cangrande I died in 1329. (A. AVENA, *Dedalo*, II, 1922, pp. 499-506; pl.; 3 figs.)

## SPAIN AND PORTUGAL

**LISBON.**—**Pieter de Hooch.**—C. MISME publishes a painting by Pieter de Hooch in the Museum at Lisbon which has been unknown up to the present time. The attribution is made entirely on stylistic reasons, but they are perfectly clear and leave no chance for doubt. The date of the work must be about 1670, and its closest parallel is found in the picture of The Card Players in the Louvre. The subject is a conversation, with a group of men and women in a room, where the greatest charm is, as usual in the artist's paintings, afforded by the lighting. (*Gaz. B.-A.* IV, 1921, pp. 340-344; pl.)

**PATERNA.**—**Spanish Ceramics.**—G. BALLARDINI describes some of the results of excavations carried out from 1908 to 1911 at Paterna, Spain. The pieces decorated in green and manganese are most interesting. They may be divided into three types: those with floral and geometrical patterns, those with figures of animals, and those with human figures. Byzantine and Arabic influences may be traced in them and they may be paralleled with examples found elsewhere which are datable from the tenth to the fourteenth century. (*Faenza*, IX, 1921, pp. 73-83; 2 pls.)

## FRANCE

**DIJON.**—**Ambrosius Benson.**—E. MICHEL publishes a panel in the museum at Dijon which he attributes to the sixteenth century Flemish artist, Ambrosius Benson. On one side of the panel is painted the donor with St. John the Baptist; on the reverse is the angel of the Annunciation. All the characteristics of Benson are clearly represented in this work, his dependence upon the traditions of Gerard David combined with an individual freshness in portrait painting. (*Gaz. B.-A.* IV, 1922, pp. 364-366; 2 figs.)

**PARIS.**—**Unpublished Drawings by Michelangelo.**—A VENTURI publishes two sheets of drawings by Michelangelo. One of these, in the Bonnat collection, has on one side a study for the Deposition, on the other a study for the Sistine Chapel picture of The Flood. The second sheet, in the École des Beaux-Arts, has on one side a study for a slave for the monument of Julius II, and on the other, besides a drawing of a leg, three sketches of Jacob wrestling with the Angel. (*L'Arte*, XXIV, 1921, pp. 224-227; 4 figs.)

**The Delphic Sibyl by Tom Ring.**—In publishing the painting of the Delphic Sibyl by Tom Ring, recently acquired by the Louvre, L. DEMONTS helps in distinguishing the styles of the members of the Tom Ring family, Ludger the elder and his two sons, Ludger the younger and Hermann. The Louvre picture is shown to be by Ludger the elder. Hermann has made a copy of it in the Delphic sibyl in his series of sibyls at Augsburg. A comparison of the two paintings reveals the superiority of the father's work. (*Gaz. B.-A.* V, 1922, pp. 69-76; pl.; 2 figs.)

**RHEIMS.**—**Three Fragments from Rheims.**—M. AUBERT publishes three heads, clearly of Rheims origin, that have recently been brought back to Rheims. Two of them, a tragic mask and the head of a prophet, can be fitted back into the places from which they came on the Cathedral. The third, which seems to be the head of an angel, is not so easy to locate. But whether it came from the Cathedral or from one of the neighboring houses, it was certainly sculptured by artists of Rheims. (*Gaz. B.-A.* V, 1922, pp. 234-236; pl.; 2 figs.)

## SWITZERLAND

**ZURICH.**—**Swiss Masters.**—An account of a recent notable exposition in Zurich of Swiss painters of the fifteenth and sixteenth centuries is given by D. BAUD-BOVY (*Gaz. B.-A.*, IV, 1921, pp. 367-374; 6 figs.). Contributions to the exposition came from many parts of Europe.

## GERMANY AND AUSTRIA

**BERLIN.**—**A Drawing by Dürer.**—E. WEIL writes on a drawing of a fifteen- or sixteen-year-old boy in the Berlin cabinet of engravings, which has formerly been variously ascribed, to Holbein, and to the upper German school. It is here shown to bear close relationships with certain of Dürer's works, particularly with the self-portrait in the Albertina. Its date would seem to fall between 1486 and 1489, a period that has up till now been a gap in Dürer's known activity. Possibly the portrait represents a fellow student of Dürer's or a younger brother, the brother Sebald, born in 1472. (*Mh. F. Kunstw.* XV, 1921, pp. 220-222; pl.)

**A Relief by Bertoldo.**—W. VON BODE publishes a stucco relief in the Kaiser Friedrich Museum, Berlin, representing the Journey to Calvary. Comparison of the relief with the various medals by Bertoldo di Giovanni gives indisputable evidence of his authorship. As usual in his work, the figures are small but very animated in movement and grouping. That the work in question is an early one in Bertoldo's career is indicated by the strong influence upon it of a relief of the same subject (of which there is a fragment in the Bargello) by Bertoldo's master, Donatello. (*Boll. Arte*, I, 1922, pp. 347-351; 6 figs.)

**PYRMONT.**—**A Painting by Dürer?**—With the primary purpose of provoking an expression of the opinion of other critics V. C. HABICHT publishes a Madonna in a private collection in Pyrmont (Fig. 11.). The Virgin and the landscape exhibit the characteristics of late mediaeval art; the Child is of the Italian Renaissance. Close parallels to the picture may be found among the works of Dürer, particularly in his woodcut of the Adoration of the Magi. The Madonna and Child in the latter picture appear to be a rearrangement of the Pyrmont composition. The painting must, therefore, belong to a little earlier date than the woodcut, to about 1497, just after Dürer's first trip to Italy. Parallels may be found for the various details of the picture among Dürer's paintings, also. (*Mh. F. Kunstw.* XV, 1921, pp. 262-265; pl.)

**VIENNA.**—**A Renaissance Statuette.**—An unusually significant clay statuette, representing a Woodcutter, which has recently been presented to the Staatsmuseum, is published by J. SCHLOSSER. The work is a companion piece to the statuette of a Woodcutter's Boy in the Kaiser Friedrich Museum, Berlin. Both show a far more sincere, sympathetic conception of the laboring class than was usual at the time of their production. The attempt is made to identify as the author of these and similar pieces the early sixteenth century artist Andrea Riccio. (*Burl. Mag.* XL, 1922, pp. 9-11; pl.; fig.)

**Drawings by Raphael.**—A. VENTURI publishes two drawings in the Albertina, one formerly attributed to Polidoro da Caravaggio and to Domenichino, the other to the Roman school, which he attributes to Raphael. It is suggested that the study of a nude youth belongs to Raphael's most dramatic work and was perhaps made as a study for the Attila fresco. The other drawing is a decorative piece. (*L'Arte*, XXIV, 1921, pp. 205-207; 2 figs.)



FIGURE 11.—MADONNA ATTRIBUTED TO DÜRER: PYRMONT.

## SWEDEN

**STOCKHOLM.**—**St. George of Stockholm.**—J. ROOSVAL publishes a provisional reconstruction of a late fifteenth century sculptured wooden group of St. George and the Dragon in the church of St. Nicholas in Stockholm. The principal work on the group was done by Bernt Notke, while the reliefs on the base may be attributed to Hindrick Wylsvynck. Both artists were of Lübeck. The monumentality of the work and the traces of Venetian influence in the polychrome decoration mark Notke as an early pioneer of the Italian Renaissance, a counterpart of Dürer, though a generation earlier. (*Burl. Mag.* XL, 1922, pp. 111–120; 4 figs.)

## GREAT BRITAIN

**HERTFORDSHIRE.**—**An Ivory of the Twelfth Century.**—A beautiful carved ivory discovered in 1920 on the conjectured site of the Infirmary of the Abbey of St. Alban's has been deposited in the British Museum. It is of a "favorite mediaeval design in which men, animals, and monsters are involved in symmetrical foliate scrolls." Some details suggest that it is of French origin, but it may be English. It was evidently applied to a flat surface, perhaps a book-cover. (H. H. KING and O. M. DALTON, *Ant. J.* II, 1922, pp. 1–5; pl.)

**LONDON.**—**Early Works by Velasquez.**—To the early works of Velasquez, done before 1617, A. L. MAYER (*Burl. Mag.* XL, 1922, pp. 3–9; 2 pls.) adds a painting of the Dying Seneca owned by Mr. A. L. Nicholson. It shows the influence of Caravaggio and Ribera and, in fact, was formerly ascribed to the latter. A painting of St. John in the Wilderness, in the possession of Mr. Hugh Blaker belongs to a slightly later date and shows a remarkable development in the artist's style.

**A Dancing Girl in Byzantine Enamel.**—H. P. MITCHELL publishes a Byzantine enamel plaque lately acquired by the Victoria and Albert Museum. The interest attached to the plaque because of the unusual subject represented upon it, that of a dancing girl, is still further enhanced by the discovery that it fits into a series of plaques in the Hungarian National Museum at Budapest. All together seem originally to have formed a crown. (*Burl. Mag.* XL, 1922, pp. 64–69; 2 pls.; fig.)

**The Compagno d'Agnolo.**—T. BORENIUS reproduces for the first time a painting of the Madonna in the collection of Mr. J. Kerr-Lawson, which he identifies as the work of the so-called Compagno d'Agnolo. (*Burl. Mag.* XL, 1922, p. 233; pl.)

**Albert van Ouwater.**—M. CONWAY publishes a painting of the Madonna in the collection of Mr. Grosvenor Thomas which may be attributed to Albert van Ouwater. The attribution is made largely on the basis of the close similarity of the Madonna head to the head of Christ in the Raising of Lazarus, in the Berlin museum, the only picture by which, up to the present time, Ouwater has been represented. (*Burl. Mag.* XL, 1922, p. 120; 2 pls.)

**Lucas van Leyden.**—R. GLEADOWE publishes a portrait of an unknown man recently given to the National Gallery, the first work by Lucas van Leyden in the national collections. This is one of the artist's masterpieces and belongs, apparently, to about 1521. (*Burl. Mag.* XL, 1922, pp. 179–180; pl.)

**Cassone Panels.**—T. BORENIUS publishes two cassone panels in the collection of Mr. W. H. Woodward, which he identifies as the side panels of the cas-

sons to which belonged the front panels in the Hermitage representing scenes from the life of Scipio Africanus, published by Dr. Schubring. (*Burl. Mag.* XL, 1922, pp. 189-190; pl.)

**A Portrait by Rubens.**—M. W. BROCKWELL recognizes in the bust portrait of a man in the collection of Mr. Leonard Gow the portrayal of Francesco IV, fifth duke of Mantua, by Rubens. It was probably painted about 1607, while Rubens was in Italy. (*Burl. Mag.* XXXIX, 1921, p. 285; pl.)

**NEWCASTLE-ON-TYNE.**—**A New Van Eyck.**—What appears to be the original painting by Jan van Eyck of a full-face head of Christ, of which several early copies exist (notably, the one in Berlin), has recently been acquired by Messrs. Browne and Browne and is published by M. CONWAY (*Burl. Mag.* XXXIX, 1921, pp. 253-254; 3 pls.). An eighteenth century inscription on the back states that the original frame bore Jan van Eyck's signature and the date, 1440.

**OXFORD.**—**Trecento Pictures.**—T. BORENIUS publishes two Italian primitives recently acquired by the Ashmolean Museum. One is a triptych of a half length Madonna and saints echoing the style of Duccio. The other is a small panel of the Crucified Christ between the Virgin and St. John; it belongs to the school of Lorenzo Monaco. (*Burl. Mag.* XL, 1922, pp. 134-139; pl.)

## UNITED STATES

**BOSTON.**—**A Roundel of Painted Glass.**—The Museum of Fine Arts has received as a gift a roundel of painted glass attributed to Lucas van Leyden, illustrating the legend of Lucretia. The figure is copied from an engraving of the subject by Raimondi after a drawing by Raphael. (D. C. S., *B. Mus. F. A.* XX, 1922, p. 40; fig.)

**A Painting by Luini.**—By the gift of Mrs. W. Scott Fitz, the Museum of Fine Arts in Boston has received a painting by Luini of Salome with the Head of John the Baptist. It is a characteristic treatment of a subject which the artist depicted several times. (*B. Mus. F. A.* XIX, 1921, p. 72; fig.)

**A Portrait by Velasquez.**—The Museum of Fine Arts in Boston has acquired by the gift of Mrs. Edwin F. Greene, a portrait of the Infanta Maria Theresa painted by Velasquez in 1653, and acquired by the Duke Leopold for his collection in Vienna in 1658. It is a fine example of the artist's third period. (C. H. HAWES, *B. Mus. F. A.* XX, 1922, pp. 1-3; 2 figs.)

**CAMBRIDGE.**—**A Painting by Ribera.**—A masterly picture of St. Jerome by Ribera, which has been acquired by the Fogg Art Museum of Harvard University, has been described by CHANDLER R. POST (*Fogg Art Museum Notes*, I, No. 2, June, 1922, pp. 14-21; 2 figs.). It is an excellent illustration of the too easily neglected merits of baroque art, and also of the distinctly Spanish characteristics of Ribera's work.

**NEW YORK.**—**An Anonymous Gift.**—The Metropolitan Museum announces the anonymous gift of a collection of tapestries, sculptures, and paintings. The most important piece of sculpture is a stucco variant of the Pazzi Madonna of Donatello. The paintings include a full-length figure of Christ by Andrea Solario, formerly in the Crespi collection at Milan. (J. B. and B. B., *B. Metr. Mus.* XVII, 1922, pp. 51-58; 6 figs.)

**Columns from La Daurode.**—J. B(RECK) describes (*B. Metr. Mus.* XVII, 1922, pp. 41-43; fig.) two marble columns of the fifth or sixth century from the



sanctuary of the church of Notre-Dame la Daurode at Toulouse, one of the earliest churches of Gaul. The shafts are covered with a formal grape vine design; the capitals are of a degenerate Corinthian type. They have been acquired by the Metropolitan Museum.

**A Gothic Statue.**—The Metropolitan Museum has acquired a Gothic statue of a seated king, which illustrates the advance of Gothic over Romanesque sculpture. It is to be dated in the first half of the thirteenth century, and may be a work of the Provençal school. (*J. B., B. Metr. Mus. XVII, 1922, pp. 73-76; 2 figs.*)

**Three Gothic Tapestries.**—J. B(Reck) reports the anonymous loan to the Metropolitan Museum of three late Gothic tapestries. Two are French, from cartoons of the early sixteenth century, and represent respectively Moses and Aaron before Pharaoh, and the Miracle of the Rods turned into Serpents. The third, a Flemish work, belongs to the early part of the sixteenth century. The principal scene is the Coronation of the Virgin. At the left three subordinate scenes are preserved: (1) Four women (Temperance, Prudence, Charity, and Modesty) building a house (*Proverbs ix, 1*); (2) the Tiburtine Sibyl revealing to the Emperor Octavian a vision of the Virgin and Child; (3) Solomon's Choice of Wisdom. (*B. Metr. Mus. XVII, 1922, pp. 58-59.*)

**The Jesse Window.**—A distinguished addition to the collection of stained glass in the Metropolitan Museum is a Gothic window of the Lower Rhenish school (about 1300) representing the Tree of Jesse. It was the most important object in the Costessey collection at Costessey Hall at Norfolk. (*H. S., B. Metr. Mus. XVII, 1922, pp. 76-79; 2 figs.*)

**A Statue of the School of Claus Sluter.**—J. B(Reck) would attribute to Claus de Werve, an assistant of Claus Sluter, a stone statue of St. Paul recently acquired by the Metropolitan Museum. (*B. Metr. Mus. XVII, 1922, pp. 79-83; 2 figs.*)

**Sano di Pietro.**—E. GAILLARD, who is soon to bring out a monograph on Sano di Pietro, publishes a painting of interesting subject by that artist in the Lehman collection in New York. The picture was formerly catalogued as the Death of the Virgin; but it is here shown that the artist has closely followed the account in the Golden Legend of the death of St. Martha. (*Burl. Mag. XL, 1922, pp. 237-238; pl.*)

**A Madonna by Agostino di Duccio.**—The relief of a Madonna in the collection of Mr. J. Pierpont Morgan, New York, is attributed by S. RUBINSTEIN (*Art in America, X, 1922, pp. 181-182; pl.*) to Agostino di Duccio. The works most similar to the one here published are Duccio's Madonnas in the Louvre and in the Opera dell' Duomo, Florence. Its date is, therefore, probably about 1470.

**Early Works by Allegretto Nuzi.**—Until recently only late works by the fourteenth century artist, Nuzi, have been known. His reputation is greatly enhanced by the four paintings of an earlier period, 1453-4, which B. BERENSON has published (*Boll. Arte, I, 1922, pp. 297-309; pl.; 10 figs.*). The four are a triptych, with the Madonna as central figure, in the collection of Carl Hamilton, New York, a Madonna and a Nativity in the Lehman collection, New York, and a panel representing St. Anthony Abbot, in Fabriano. A fairly close replica of the Hamilton triptych, but painted fifteen years later, is at Macerata.

**An Artist in Holbein's Atelier.**—Help toward the sifting of the numerous portraits assigned to Holbein is given by P. GANZ (*Art in America*, X, 1922, pp. 153-158; 3 figs.). The portrait of Erasmus in the Metropolitan Museum, New York, is taken as the starting point for the study of an English portrait painter who must have worked in Holbein's atelier and have been very familiar with all his technical secrets. This co-worker was not a copyist, but an artist with much originality. The quality of his work, however, is not equal to that of Holbein's. Another painting that may be attributed to the unknown English artist is the portrait of Cromwell in a private collection in France.

**A Portrait of Philip the Good.**—An unusually interesting example of Burgundian Gothic sculpture, in the collection of Mr. Clarence H. Mackay, New York, is discussed by E. GOVETT (*Art in America*, X, 1922, pp. 103-108; pl.). The sculptured group represents a kneeling knight, with John the Baptist standing behind as protector. Its technical character dates it in the first quarter of the fifteenth century and assigns it to the late school of Claus Sluter. With the aid of the heraldic shield on the base of the sculpture the knight is recognized as Philip the Good, and it seems certain that the group was originally designed for the Chartreuse at Dijon, from which it was removed during the French Revolution.

**WORCESTER.**—A *Madonna* by Masolino.—R. R. TATLOCK publishes a painting in the Worcester Art Museum which has recently been cleaned and may now be attributed to Masolino. (*Burl. Mag.* XL, 1922, p. 140; fig.)

## AUSTRALIA

**MELBOURNE.**—M. CONWAY publishes an unusually interesting Flemish triptych recently purchased for the Melbourne Gallery. (*Burl. Mag.* XL, 1922, pp. 163-164; 3 pls.) The work shows a variety of influences, indicating that several hands must have been employed. It is, apparently, an extreme example of the eclecticism which preceded the fresh impetus given to Flemish art by Antwerp. A most curious characteristic of the picture is that although it was clearly painted near the end of the fifteenth century, costumes figured in it go back as far as the beginning of the century. S. DE RICCI (*ibid.*, pp. 164-171) accounts for this by showing that the donor was an official of the Burgundian court and had as many members of the ducal Burgundian family as possible represented. A large number of these are here identified.

## AMERICAN ARCHAEOLOGY

### GENERAL AND MISCELLANEOUS

**ATHENS, PENNSYLVANIA.**—Discoveries at Teauga.—LOUISE W. MURRAY describes discoveries on aboriginal sites in or near "Teauga," now Athens, Pennsylvania. "While there are indications of occupation even earlier than the archaic Algonkian, evidences of early and late Algonkian and Andaste or archaic Iroquois predominate in this locality." [*The American Anthropologist*, XXIII, 1921, pp. 183-214; 15 figs.]

**NEWFOUNDLAND.**—The Berthuk or Red Indians.—FRANK G. SPECK is the author of a study of the Berthuk or Red Indians of Newfoundland who were exterminated in the early part of the last century. The conclusion is offered that the Red Indians, of uncertain linguistic identity, were probably a

branch of the Algonkian stock which migrated early to the east. The second part of this report gives a survey of the hunting territories which are characteristic of the Micmac social organization in the Maritime Provinces and Newfoundland. [*Berthuk and Micmac, Ind. Not.* By FRANK G. SPECK. New York, 1921, Museum of the American Indian. 187 pp.; 42 pls.; 3 figs.; 2 maps.]

**NORTH DAKOTA.**—Mounds at Streeter.—G. F. WILL reports the discovery of a group of Indian mounds about twelve miles south and east of Streeter, North Dakota. (*The American Anthropologist*, XXIII, 1921, pp. 175-179; 6 figs.)

**SAN MIGUEL ISLAND.**—Indian Artifacts.—GEORGE G. HEYE has published a study of Indian artifacts from the island of San Miguel off the coast of California. The author notes the unusual attention to the burial of children and the numerous and varied shell objects characteristic of this area. The population was a branch of the Chumash Indians. [*Certain Artifacts from San Miguel Island, California, Ind. Not.* New York, 1921, Museum of the American Indian. 211 pp.; 124 pls.; 33 figs.]

**SANTIAGO AHUITZOTLE.**—The Excavation of a Mound.—ALFRED M. TOZZER has published a report on the excavation of a mound at Santiago Ahuitzotle, the first mound in the vicinity of the city of Mexico to be thoroughly investigated. It is a study of method quite as much as of results. [*Excavation of a Site at Santiago Ahuitzotle D. F. Mexico*, Bureau of American Ethnology. Bulletin 74. Washington, 1921. 55 pp.; 19 pls.; 9 figs.]



VASE FROM SARDES: ACTUAL SIZE.

SIXTH PRELIMINARY REPORT ON THE AMERICAN  
EXCAVATIONS AT SARDES IN ASIA MINOR

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[PLATE VI]

OWING to the untimely death of Professor Howard Crosby Butler, who initiated the project of American archaeological work at Sardes, and conducted successful excavations there for five years, it has fallen to the lot of the present writer to make a report of the results accomplished during the sixth season of excavations in 1922. Professor Butler was detained by his duties at Princeton and reached Sardes only about the middle of May. There, while pursuing investigations in the neighborhood of the site, he contracted malarial fever which ravaged his system and led indirectly to his death a few weeks later, while he was on his way home. Thus the name of another martyr to archaeological science is inscribed on the rolls of the great men who have gone before. An abiding memorial to his fame will be the magnificent results of his work at Sardes. Fortunately the account of his campaigns there for five seasons, in the years 1910 to 1914, was completed by his own hand, and has just been published as Vol. I, *Sardis, The Excavations. Publications of the American Society for the Excavation of Sardis* (E. J. Brill, Ltd. Leyden). He had also practically completed his architectural study of the temple of Artemis and the book on this subject will be published in the near future as Vol. II of the Publications. Too warm a tribute cannot be paid to Professor Butler's talent for organization, and to his perfect understanding of native psychology, by which he not only surrounded himself by a loyal and enthusiastic group of associates and employees, but became as much an object of devotion to the Turkish workmen as he was to his students at home.

In the years succeeding 1914 when work at Sardes itself was necessarily suspended because of the Great War, intensive study of the material previously discovered has resulted in the publication, or preparation for publication, of several volumes in the

Sardes series, in addition to those by Professor Butler that have been already mentioned. In 1916 there were published Vol. VI, *Lydian Inscriptions*, by Enno Littmann, and Vol. XI, *Coins*, by H. W. Bell. Other volumes on inscriptions, pottery, terracottas, sculpture and jewelry are in preparation and will soon be issued. The uncertain political situation in Asia Minor postponed from year to year the resumption of actual excavations at Sardes, and when in 1921 it became possible for a member of the Expedition to visit the site the house belonging to the Expedition was found in ruins, and but few shattered remnants of the antiquities that had been left there were still seen in the debris.

In the spring of 1922 the district in which Sardes is located was in control of Greek military forces and conditions seemed sufficiently stable to warrant the undertaking of a limited archaeological campaign. The Expedition was conducted in the name of the American Society for the Excavation of Sardis, and the staff, in addition to Professor Butler and the writer, included two veterans of Sardes campaigns, William R. Berry and Edward R. Stoeber, and two architects who came to Sardes for the first time, Gordon McCormick and Lansing C. Holden, Jr. It is a pleasure to record that in the face of many difficulties and much hardship the members of the staff worked together with the utmost enthusiasm and with the greatest degree of coöperation. Many facilities were afforded the Expedition by the Greek civil and military authorities, and nothing could exceed the loyalty and devotion to the Expedition on the part of the Turkish foreman and laborers.

The immediate aims of the campaign, which began about March first and continued a little over three months, were the clearance of the ruins of the house, the removal of any remaining antiquities to a place of safety, and especially the determination by trial trenches and sub-surface prospecting of promising sections of the site for future exploitation. In the process of clearing up the house it became apparent that many objects had been stolen, in addition to the antiquities that had been injured and broken, of which pieces were still scattered about. The entire collection of complete Lydian vases was missing, as well as the large series of Greek and Roman lamps. These had evidently been carefully packed and removed by the plunderers, as no sherds or broken pieces were scattered on the ground. Many other objects also were missing, including several marble pieces of

Lydian architecture of unusual archaeological interest, a marble head of the Scopas type, and, special cause for regret! the beautifully-executed marble horse's head, found at the very end of the season of 1914, and here shown in Fig. 1. It seems probable that these objects were carried far afield for, although over two thou-



FIGURE 1.—LIFE-SIZE MARBLE HORSE'S HEAD FOUND AT SARDES IN 1914.

sand pieces were missing, persistent inquiry failed to reveal any evidence that a single one had reached the hands of collectors or dealers in Smyrna. Fortunately the scientific record of these objects is in most cases complete, and all, with the exception of the lamps, are now in process of publication. The attention of archaeologists is directed to this theft and an earnest request is made on the part of the Sardes Expedition that any knowledge of

the whereabouts of these antiquities be kindly communicated to some member of the organization.

The campaign of 1922, though of brief duration, was productive of important archaeological results. As in previous years the objects unearthed belong to various periods of occupation, ranging from the Lydian through Greek and Roman to the Byzantine age. Conspicuous among the distinctively Lydian products are numerous terra-cotta architectural tiles with moulded reliefs of geometrical designs, of floral patterns and of animals. These designs are painted in bright red and deep black colors on a creamy white background, and in almost all cases the colors are



FIGURE 2.—PAINTED TERRA-COTTA TILE FROM SARDES: LENGTH, 0.42 M.

well preserved. In the process of excavating the tiles some comparative material important for their dating was secured. As reported in the *AMERICAN JOURNAL OF ARCHAEOLOGY*, XV, 1911, p. 457, in the campaign of 1911 at Sardes excavation of the area on top of a bluff, at the foot of a hill of tombs west of the Pactolus, had brought to light numerous plain and painted roof tiles. Professor Butler regarded these as an earnest of interesting results to be secured from further excavation at this point. This prediction was fulfilled during the present season when the restricted area in question was completely cleared. As in the earlier excavation very many of the roof tiles that were discovered were either undecorated or ornamented simply by a broad sweep of the brush dipped in red paint. By far the greater number were of the wide flat or of the peaked cover variety, but among the pieces were also several complete tiles and numerous fragments, with moulded and painted designs, that had formed parts of decorative friezes, or of highly ornate sima bands with spouts attached. The two most common patterns are shown in Figs. 2 and 3. The design



illustrated in Fig. 2 consists of alternative scroll and star motives set in metopes, framed by moulded bands painted in bright red color. The designs are moulded in fairly high relief and all are painted in red and black on a creamy white ground. In the central metope the scrolls are painted black while their four terminal knobs and all the drops and other decorations are red. In the case of the other metopes the round central disc and the rays alone are black, the quadruple palmette ornament being red. But this scheme of color distribution as applied to this type of tile is by no means constant, for in another specimen the scrolls are red and the knobs and drops black, while in still another there is a



FIGURE 3.—PAINTED TERRA-COTTA TILE FROM SARDES: LENGTH, 0.49 M.

bold intermixture of colors which has resulted in the central part of the scroll being painted red, the upper and lower parts black, with the drops alternately red and black. The patterns are executed by a mould but are finished by hand, and some specimens are finished much more elegantly than others. But in all cases the sweeping curves and the brilliant colors make a pleasing and effective design.

The type of tile shown in Fig. 3 is represented by two examples that are practically complete, in addition to numerous fragments. Like the tiles of the preceding type these were decorated *sim*a bands with orifice and spout for draining water, the spout fitting one specimen being found beside it. The length of the complete tile here illustrated is 49 centimeters and the height is 19.7 centimeters. The scheme of decoration consists of three bands of which the upper, with a raised border painted red, shows a series of palmettes and lotus blossoms in red and black. At each end of the series is a half lotus to which seven units succeed, arranged alternately. The colors are effectively intermingled to secure a

striking decorative pattern, the plumes of the palmette being painted alternately red and black, the upper half of the lotus red, the lower half black and the stamen black. From each palmette and lotus hang down red dart-shaped drops. Below the palmette and lotus band, separated by a moulded ridge that is painted red, is a plain band in white and below this a band of primitive egg and dart design, the swelling of the egg being white, the rims black and the darts red. Between two sets of eggs, three on each side, is placed the spout, which is red on top but underneath is decorated with a black lozenge on a white ground within a red border. This is aesthetically one of the most satisfying designs on the tiles. It is executed with life and vigor, and the skilful hand of the artist is revealed in the sweep of the brush and in the finish of the curves. The colors, while brilliant, are harmoniously blended.

Numerous other tiles were found decorated with various patterns, some apparently of a more archaic, others of a more developed style, but in all cases the colors, which were unusually well preserved, were limited to the three stated in the previous description, red, black and white. Among the many examples with geometrical and floral designs two were discovered which had representations of animals in relief. These are by far the most beautiful and interesting found this year. They are both pieces from the same *sima*, and unfortunately neither is complete. One fragment shows a pair of horses galloping to the right, executed in high rounded relief on the field of the tile, between a broad raised border above and a narrow border below. The tile is broken just back of the middle of the horses but enough is preserved to show that one horse is painted red, while the other, of which only the front of the head is visible, is black. Below the horses is a dog, also running to the right, which is painted with black spots on a white body. The composition which is carefully finished in all details is full of spirit and would seem to belong to a highly developed period of art. The second piece of this *sima* is a tile with a spout, and as the spout would obviously interfere with the group as represented on the other tile the artist was obliged to alter his design. He solved his problem in a clever manner by representing only the forepart of a horse which is rearing over the edge of the spout. It is probable that some design was introduced in the field between the rearing horses, but the present example is not preserved sufficiently to give

any indication as to what the subject of this may have been. These tiles are of such beauty and archaeological interest that it is hoped to publish a more detailed study of them in a later number of this JOURNAL.

In the course of excavation of these tiles two discoveries were made that should prove of considerable importance in helping to determine the approximate chronology of the entire class of this type of product. In the midst of the tiles and at a depth of 1.35 meters below the surface of the ground was found a skeleton lying



FIGURE 4.—SHERDS OF "MELIAN" TYPE: SARDES.

in a kind of "sarcophagus" that was made of roof tiles. Most of these tiles were undecorated, but among them and forming part of one side of the sarcophagus were two moulded tiles, of which one is shown in Fig. 2. As the decorated side of the tile was turned toward the interior of the grave the brilliant colors are extremely well preserved. Nothing was found in the grave with the skeleton except sherds of Lydian pottery of a kind that from previous finds at Sardes has been dated in the sixth century before Christ. The significance of this discovery lies in the fact that a grave on hard pan, containing only Lydian pottery, and with Lydian ware all about it, was constructed of terra-cotta tiles from a building that must obviously have been erected at a far earlier period.

The second circumstance of chronological importance in connection with the tiles was the presence among them of fragments

of two huge thick-walled amphorae. One of these vessels is covered with a creamy white slip on which concentric circles and other geometrical ornaments are painted in red. Two large pieces of this vase show the horn, neck and forepart of a grazing deer, beneath which is a water-fowl as well as several geometrical designs all painted in the same tone of red. Fig. 4 gives an illustration of these fragments reproduced from a photograph. Of the second vessel only one large piece was recovered, but the thickness of the clay marks it also as belonging to a very large vase. The decoration consists of a conventionalized pig, painted



FIGURE 5.—VASE FROM SARDEES:  
HEIGHT, 24.9 CM.

in black on the white ground, with concentric circles in the field. This ware resembles strongly the Melian amphorae which are dated in the seventh century before Christ. The fragments are very archaic in appearance and furnish valuable evidence for an early date for the tiles. Furthermore the determination of an approximate date in this connection is important also in its application to the Lydian pot-

tery, of which quantities of sherds were found in the same area. In one case, where almost all the pieces were preserved, it was possible to reconstitute the stately and graceful crater which is illustrated in Fig. 5. The ware represented by this vase is characteristically Lydian and is found commonly in many parts of the site. If, as has just been suggested, the tiles can be proved to date from the end of the seventh or the beginning of the sixth century before Christ the pottery found associated with them will, in general, be from the same period.

A lucky find, made by Mr. Stoeber, in a field in the third ravine north of the temple of Artemis, of an archaic tile with the hind-quarters of a bull in black on a white ground, led indirectly to the most important discovery of the season. Because of the presence of the early tile and the statement of the natives that similar tiles had been seen by them in the neighborhood some years ago, it seemed desirable to make trial excavations in the hillock on the north side of this wady. Everywhere these trials were produc-

tive of interesting results, but the great discovery was made at the east end of the hill on April thirteenth. Here just 60 centimeters below the surface of the ground was uncovered a small pot, without handles, 11.8 centimeters high, made of coarse gray clay. The exact spot where the vase was lying is marked by the workman's pick in Fig. 6; the vase itself is reproduced in Fig. 7. The pot appeared to be packed full of damp earth but when this was removed was found to contain thirty gold staters of Croesus,



FIGURE 6.—SPOT WHERE GOLD STATERS OF CROESUS WERE FOUND: SARDES.

of which a selected number are illustrated in Fig. 8. These coins are of uniform type but vary slightly in shape, size and weight. They are made from irregularly shaped lumps of gold which have been stamped on the obverse with representations of the foreparts of a lion and of a bull facing each other. On the reverse are two incuse squares of different sizes of which the larger is always back of the lion. Though the coins are of varying weights the total difference between the extremes is small, the lightest weight being just 8 grammes and the heaviest 8.094 grammes. There is also similar variation in length ranging from 15 to 18.25 millimeters.

Since the researches of Lenormant, Six, Head and others it

has been generally agreed that a series of electrum coins, with a representation of a lion's head on the obverse and on the reverse an incuse square, are issues of the kings of Lydia, continuing through the reign of Alyattes. But as the Lydian Empire developed in commercial as well as in political power it appeared that the use of electrum for coinage, because of uncertainty of exact value, was a handicap to trade. Croesus, therefore, when he succeeded to the throne in 561 B.C. apparently reformed the currency by putting it on a gold basis. He issued a gold stater



FIGURE 7.—VASE WHICH CONTAINED GOLD STATERS: SARDES: HEIGHT, 0.118 M.

of 10.89 grammes that was equivalent in value to the electrum stater of 14.52 grammes at the normal ratio of 3 to 4. The design on the obverse of the new gold coins portrayed the foreparts of the facing lion and bull in clear distinction to the lion's head of the earlier series. This coin, however, did not prove satisfactory as a medium of exchange, perhaps because of its fractional relationship to

the stater of the Phocaeans, the common unit of the Ionians. Therefore Croesus further improved his financial system by adopting a gold coin that was one-half the weight of the Phocaean stater and ten times the value of the Babylonian silver unit. If the view thus briefly stated is correct, as far as the main outlines of the financial reforms of Croesus are concerned, it is possible to fix an approximate date for the coins under discussion. After Croesus succeeded his father in 561 B.C. some time must have elapsed before the completion of his fiscal reforms with their radical changes from the long established system which he inherited from his ancestors. Time must also be allowed for his experimentation with a unit which he subsequently abandoned

for a more convenient medium. From these various considerations it cannot be far from the truth to select as a round date for the coins the year 550 B.C.

The determination of this date is of special importance when applied to the pottery that was found in the immediate neighbor-



FIGURE 8.—SIX GOLD STATERS OF CROESUS FROM SARDES: OBTVERSE AND REVERSE.

hood of the gold. One small vase of characteristic Lydian shape is illustrated in *PLATE VI*. Several other vases in pieces and many baskets of sherds were uncovered here. Among them were also a few small fragments of human bones. This fact, when taken in connection with the discovery of parts of benches, cut in the clay for holding the dead in the usual Lydian fashion, indicates

that at this place we have to do with a burial chamber, of which the front and the roof have been washed away. Many of the coins are as fresh as if newly minted, but some are rubbed as from handling in circulation. It is quite possible that they were placed in a pot of cheap appearance and hidden in the tomb at the time of the siege and capture of the city by Cyrus in 546 B.C.

Fragments of Lydian pottery were found in all trials made on this hillside. Frequently, however, they were lying near the surface whereas behind them and at a greater depth would be uncovered a Roman tomb. Such a phenomenon obviously indicates that Lydian tombs were cleared of their contents and reused in later times. A particularly disappointing case of this sort occurred on the same hill, about 100 meters west of where the gold was found. Here at a depth of two meters was lying a nest of Lydian pottery. A large vessel, of a shape between an amphora and a crater, was intact before the process of clearance began, but the black ware had been so cracked and rotted by the burial in the damp clay that it fell apart into many pieces at the slightest movement. Inside this vase were several sherds of pottery and one complete vessel of the cylix type of varnished red ware. On top of the large vase was a smaller vessel of similar shape, made of the same rude burned-black clay, against the side of which were fragments of characteristic Lydian red-brown ware. While clearing the earth about these pots an opening was disclosed leading down about two meters into a large vaulted chamber, which seemed quite of the Lydian type, but upon excavation proved to contain only Roman objects of the second century after Christ, being chiefly rude red plates, and terra-cotta lamps of which sixty complete specimens and many fragments were obtained.

Objects of the Lydian period were also discovered in excavations in the first ravine to the north of the temple, where work was suspended in 1914. As Professor Butler pointed out in his Report for the season of 1914 in this JOURNAL, Vol. XVIII, p. 428, successive layers of stratification are here discernible and the limitations of the Greek and Roman levels are clearly marked. This season at a depth of 1.40 meters below the Graeco-Roman deposit Lydian ware of very early appearance was brought to light, the best preserved piece being a polished gray-black vase of the cylix shape with an incised wave line about the circumference of the bowl. In this ravine it is necessary to move a



large amount of earth and consequently this spring, owing to restricted resources, little could be accomplished in the way of satisfactorily exploring this promising site.

It has always been a question open to discussion whether the Acropolis of Sardes, as it appears today, has any ground surface that antedates the period of the great earthquake, 17 A.D. Some trials made during the present campaign yielded interesting information on this subject, for at the southeastern end, near where the present ascent to the Acropolis leads through a breach in the walls, several large pits that were sunk passed through Byzantine and Roman remains to reach finally abundant deposits of Lydian pottery, in one case at a depth of 3.55 meters below the



FIGURE 9.—CONTENTS OF HELLENISTIC TOMB: DATE, CA. 190 B.C.: SARDES.

present ground surface. This investigation was not pursued further after the achievement of its purpose, which was to determine the desirability of making extensive excavations at this point, in the hope of recovering remains of the earliest settlement which by tradition and practice should have been on the Acropolis. Other Lydian evidences, including some painted architectural tiles, were also found on a lower slope at the northwestern end of the Acropolis, and here too further excavation should be profitable.

Occasional objects of the Greek period, such as lamps and fragments of pottery, appeared sporadically during the season, but one discovery of this age was of more than common importance. This was a Hellenistic tomb of which the contents were intact and apparently *in situ*. It was of the couch tomb variety that is usual at Sardes, consisting of a corridor, flanked on each side by

a bench or couch, cut out of the hard clay, and with a similar couch at the back. In this case the vaulted roof of the chamber had collapsed and the front had been washed away, but as Lydian sherds were found near the surface at the entrance it was clear that the tomb had originally been Lydian and, like so many others, had been used again in Hellenistic times. Two skeletons lay on each side couch, those on the right having their heads

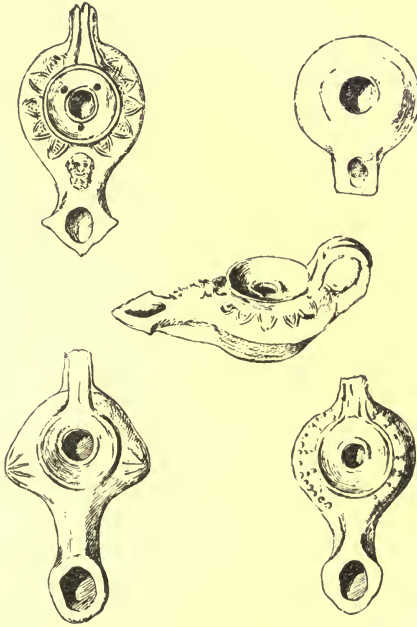


FIGURE 10.—LAMPS FROM HELLENISTIC TOMB: SARDES.

toward the entrance, those on the left with the skulls toward the back of the tomb. No bones were on the rear couch, but there most of the offerings were placed. In all twenty-two objects were recovered from this burial, and all are shown, grouped together, in Fig. 9. A large terra-cotta mask, though irreparably injured by the wet clay, shows unmistakable evidence of its original beauty. A graceful figurine of Persephone type is inscribed with the name of "Nicanor" on its back; another terra-cotta is a delicately-wrought female figure, nude except for a cloak

which is thrown about the neck and hangs over the left arm. These figurines resemble, in their several types, the terra-cottas found at Myrina. Among the pieces of pottery from the tomb is a large undecorated pitcher, height 295 millimeters, which was lying in the corridor, and within which was a black lamp, with stamped leaf decoration about the body, and a mask on the front, just behind the triangular nozzle. There were also bowls in thick black clay, and bowls with handles in the thinnest red clay. In addition to the lamp in the big pitcher four other lamps were found, three similar in type to the first, the fourth a short thick lamp of red clay. These lamps, which are particularly good exam-

ples of their kind, are illustrated in Fig. 10 from a pen and ink drawing by Mrs. Shear. It is always interesting to find an inviolate tomb containing numerous complete objects, even if the burial is only of the Hellenistic age, but in this instance added importance is given the discovery through the presence among the finds of a bronze coin that can be quite exactly dated. On the obverse of this coin is represented the head of the youthful Heracles, wearing the lion's skin, surrounded by a dotted circle. On the reverse is an amphora, on the right of which are the letters  $\Sigma\text{AP}\Delta\text{I}$ , and on the left the letters  $\text{AN}\Omega\text{N}$ , reading in each case from the top downwards. On either side also appears a monogram. This coin is thus similar to No. 260 in Bell's catalogue of the Sardes coins found in the years 1910-1914, and to the British Museum Catalogue, *Lydia*, Sardes, Nos. 45 and 46, Plate XXIV, 13. In both these publications the coin is listed simply as be-

fore 133 B.C. Mr. Edward T. Newell of the American Numismatic Society has called my attention to the similarity of the head on the new coin to that on the silver tetradrachm from Sardes published by Imhoof-Blumer, *Monnaies Grecques*, Plate G, No. 23. As this tetradrachm can be dated to 189 B.C., or the following year or two, the copper coin can be safely assigned to the same date, that is, immediately after the resumption of autonomous coinage by the cities of Asia, which resulted as a consequence of the Roman victory at the battle of Magnesia in 189 B.C.

Numerous Roman tombs of sarcophagus type were excavated in various parts of the site. In one case the cover and sides of the sarcophagus consisted of huge slabs of terra-cotta, 68 centimeters square and 7 centimeters thick. In this grave, which was



FIGURE 11.—ROMAN SARCOPHAGUS TOMB: FIRST CENTURY, A.D.: SARDES.

on the hillock south of the second ravine to the north of the temple, was found a small skeleton, apparently of a woman. With the bones were a lamp of red clay adorned with three masks, a small glass bottle, a plain bronze mirror, and a copper coin, quite illegible, which was still attached to the teeth of the upper jaw. The lamp is similar to No. 1104 of the British Museum *Catalogue*, which is dated in the second century after Christ.

Another Roman sarcophagus of similar type was uncovered on the western slope of the hill that lies on the northern side of the third ravine north of the temple. A view of this tomb in



FIGURE 12.—CONTENTS OF ROMAN SARCOPHAGUS: SARDES.

process of excavation is shown in Fig. 11, while Fig. 12 reproduces some of the unbroken objects found in it. This sarcophagus was made of terra-cotta slabs which had collapsed from the weight of earth above, crushing most of the things beneath. At the western end of the grave fragments of bone showed that a child was buried, and here were lying the glass beads and amulets forming a necklace, and the miniature oenochoe. Further east and deeper in the hillside were the remains of the bones of an adult with which the other objects were associated. As some of the articles were characteristically feminine and included a terra-cotta statuette of Aphrodite it is clear that this was a double burial of mother and child. The contents of the tomb included a small rude amphora and shallow plate at the west end, in addition to the necklace and small oenochoe shown in the illustration.

By the bones of the adult were the two small ivory boxes and ivory pins that appear in the picture. There were many other ivory pins beside these, but they were mostly broken. These were lying close to the remains of a wooden chest in which they had originally been deposited. Of the chest were left the bronze lock plate and bolts, round handles decorated with heads in relief, protective bronze corners and other accessory parts. Four rude lamps were in the grave in addition to the well-executed specimen with the representation of a griffin leaping to the right. This lamp falls under the classification of the British Museum *Catalogue*: "Lamps with rounded nozzles with volutes." It is evidently similar, with the addition of a handle, to the lamp listed there as No. 748, and would, therefore, be dated in the first century after Christ.

Artistically the most interesting of the discoveries dating from the Roman age is a large vaulted chamber tomb that was uncovered on the southern slope of the hillock, on the northern side of the first wady to the north of the temple, and close to the dwelling house of the Expedition. Entrance to this tomb was through a rectangular opening in the roof at the eastern end, which, when discovered, was closed by a single marble slab. Through this hole one descended by three corbel steps to the floor. The chamber was 2.68 meters long and 2.43 wide. The walls were covered with a thick plaster on which frescoes were painted in brilliant colors. On each side wall is a stately peacock, with a greenish-blue body, red wing, red legs and long sweeping tail, in which the "eyes" are distinctly marked. The peacock on the south wall is facing to the east, but on the north wall he faces west, with his head turned backward. In the background is a smaller bird of the same kind, perhaps made small for reasons of perspective. The wall is covered with scattered flowers, like the tulip, and with conventional garlands, painted red, in the midst of which are two baskets containing fruit. Fig. 13 gives a view of the south wall made from a water-color by Mrs. Shear. On the rear, *i.e.* west wall, is painted a bird sitting on a vine, with bunches of grapes hanging from it, while the entrance wall with the steps is decorated with garlands and fruit baskets. This tomb is somewhat similar in its decoration to one excavated in the plain to the north of Sardes during the season of 1913, mentioned in Professor Butler's Report, *AMERICAN JOURNAL OF*

ARCHAEOLOGY, XVII, 1913, p. 478, and published by Professor Morey as an appendix to *Sardis*, Vol. I, *The Excavations*, pp. 181-183. The painting on the present tomb, however, is executed with greater freedom and freshness, giving the impression of belonging to an earlier period than does the tomb previously discovered. This impression is confirmed by the absence of the fourth century Constantinian monogram, which occurs in the other example, and by evidence afforded by the lamps found in the tomb. The chamber, when opened, was rather more than



FIGURE 13.—FRESCO FROM ROMAN TOMB: SARDES: LENGTH, 2.68 M.

half full of earth, all of which was sifted through a sieve. The results were meager, consisting of numerous sherds, some even of the Lydian period which must have been accidentally washed in, small bones of birds and rodents, fragments of clay lamps, and the eleven complete lamps illustrated in Fig. 14. It should be noted that one of these is decorated in the bowl with a peacock, which has its tail spread and is standing on a column. This lamp is somewhat similar to No. 1331 in the British Museum *Catalogue* which is included among the "late or quasi-Christian types." Like No. 1339 of the *Catalogue* and numerous other examples found at Sardes this year and previously it has a stamp in the form of a foot underneath the body. The other lamps,

although not so characteristically marked, would fit agreeably to a dating in the third post-Christian century and thus indicate within reasonable limits the age of the tomb.

In addition to the Roman tombs a large building of the Roman period was partially excavated. This building lay on the southern side of the second wady north of the temple. Fig. 15 shows a view of it taken from the north. A broad entrance passage, flanked by two Ionic columns, leads through an arched portal. On either side of the passage are spacious rooms or areas, and the

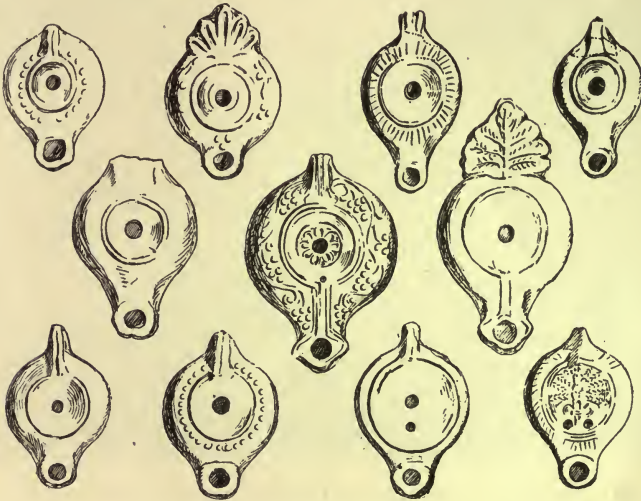


FIGURE 14.—LAMPS FROM ROMAN TOMB WITH PEACOCK FREScoes: SARDES.

presence of a large oval lime-kiln in the area on the right sufficiently accounts for the scantiness of remains about the building. Foundations and walls are substantially built, and in some cases are partially covered by cross-walls and other constructions of the Byzantine period, when the building was re-used. Little more than the façade of this building was excavated as the walls led into a hillside where the deposit of earth was so deep that the work could not be continued with the limited resources available during the present season.

In the search for traces of the agora, mentioned by Herodotus in his account of the burning of the city by the Ionians, excavation was conducted along the eastern bank of the Pactolus, north of the outlet of the second wady north of the temple. An

elaborate drainage system was here uncovered, with large terracotta pipes leading to the river from many directions. As many as four parallel lines of these pipes, laid almost contiguously, came down from the southeast. Many scattered Greek and Roman remains of minor interest were brought to light, including a vaulted chamber tomb of the Roman period, similar to the tomb with the peacock frescoes, but in this case undecorated.



FIGURE 15.—FACADE OF ROMAN BUILDING: SARDES.

The great amount of earth that required removal limited the extension of work also in this vicinity.

For the sake of the completeness of this report mention must be made of an investigation made by Professor Butler of a site near the Gygaean lake, where it was hoped that evidence might be secured for the identification of the sanctuary of Artemis Coloene. Some foundations were uncovered, and two late inscriptions were found but nothing came to light that could be certainly connected with Coloe.

Apart from the two inscriptions, to which reference has just been made, only seven were found in the course of the season's work, and most of these are quite fragmentary. One fragment, however, found near the Roman building in the second ravine, has on it the name "Sardes." Another late Greek inscription,



which is completely preserved, is inscribed with well-cut letters and is of considerable interest, as it refers to the construction of buildings of single and double-story for a specific phyle. These inscriptions, like those found in previous years, will be subsequently published by W. H. Buckler and D. M. Robinson.

THEODORE LESLIE SHEAR.

PRINCETON UNIVERSITY,  
October, 1922.

DOMESTIC COSTUMES OF THE ATHENIAN WOMAN  
IN THE FIFTH AND FOURTH CENTURIES B.C.

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[PLATE VII]

It is a noteworthy fact that the simple Doric chiton with overfold, which is so common in the feminine dress of Greek temple-sculptures of the fifth and fourth centuries B.C., is hardly to be found represented on the grave-reliefs of the same period. On the other hand, on the grave-reliefs, more than half of the costumes worn by women are composed of two chitons, or perhaps rather of chitonion and chiton, with or without an added himation, while such combinations are rare in the temple-sculpture. The matter is further complicated by the fact that while the Ionic chiton is common in temple-sculpture and on the grave-reliefs, it is rarer than the Doric in the former and rarer than the composite in the latter. Yet on the vases it outnumbers all the rest. In a word, the simple Doric chitons are predominant in temple-sculpture, the Ionic in vase-paintings and the composite costumes in the grave-reliefs.

Such discrepancies cannot be without significance, and one obvious suggestion would be to attribute them to stylistic and technical requirements. The simple Doric chiton in particular has a largeness of scale and a simplicity of form comparable to the scale and forms of the architectural members with which it was to be associated. This alone might make it a favorite with the sculptors. In contrast, the more complex costumes of the grave-reliefs are quite in keeping with the genre spirit and smaller scale of their setting. With equal force it might be urged that the strict limitations of style in the red-figured vases have developed a system of representation and a series of line-patterns for which the Ionic chitons with their clinging forms and their many small folds give purpose. It must always be remembered that the Greek rarely fell to the level of mere representation; his art was always design and even pattern-making in his most literal moments. This affects the value of all the evidence as literal

WOLFFENBÜTTEL



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PLATE IV



statement, but especially is this transformation of fact into design-motives apparent in the vase-paintings. The sculptured costumes are rarely difficult to decipher; those of the vase-paintings are often baffling. In addition their style is often so terse or sketchy that its incompleteness makes it hard to read.

Another explanation would be that the prohibition of the Doric chiton, mentioned by Herodotus, remained effective, so that the Doric chiton became the mark of the goddesses and of the heroines of a bygone time. When worn alone it has indeed this connotation and gives the flavor of antique tradition, but this explanation does not account for the fact that the Doric chiton in one of its most characteristic forms, the peplos of Athena, is the most conspicuous component in a costume that frequently occurs on the grave-reliefs. Further, it would not explain the composite dresses at all. These composite dresses have, so far as I know, received scant attention.<sup>1</sup> Yet if it can be shown that dress lost its primitive simplicity *pari passu* with the development of the other arts and the sciences, we have under observation an interesting and wholly comprehensible social phenomenon. It might, perhaps, be suggested that the Doric chiton went out of fashion for some reason and that the story related by Herodotus arose in explanation of the change of style. Later, when it came back into favor again, the ideals of dress had changed so that it came back as an over-garment. In the meantime, both as a traditional costume and for its sculptural character it kept its predominant place with the sculptors, as the Ionic did with the vase-painters. From every point of view, however, the evidence of the vases requires careful scrutiny. The evidence of the

<sup>1</sup> Guhl and Koner, *Das Leben der Griechen und Römer*, 5th, ed. 1882, p. 205, state that a second garment like a shirt seems not to have been usual. Becker, *Charicles*, 1st ed. p. 330, in the still valuable excursus on costume, while stating that he knew no monument showing one chiton over another, holds that the chitonia, known from literary sources, can be nothing else than under-garments, and that their use by the women of Athens must have been pretty general. Becker's acuteness is noteworthy, as usual. Amelung (in Pauly-Wissowa, *Real. Encycl.* p. 2316, s.v. χιτών) says that there are not a few examples of the peplos worn over an under-garment, and in the same article on p. 2322 he mentions the frequent examples of a short Ionic chiton worn over a long one. Conze, in the text-notes in his great work on the grave-reliefs mentions the composite dresses as a matter of fact and without comment; the notes on Nos. 805, 815 and 832 are typical. But neither here nor elsewhere, so far as I know has their frequency and their significance been adequately stated.

temple-sculpture is serious and fairly homogeneous, that of the grave-reliefs is wholly so, and the meaning of these two groups is comparatively obvious. But the vases represent everything, from the highest images of myth and religion, through scenes of simple and decent private life to pictures of unbridled license and buffoonery, while their style shows an equal range, so that it is necessary to guard against taking burlesque or exaggerated fancy for fact.

In order to discuss the relative frequency of the different types of chiton in the three groups of source-material that I have mentioned, I have elsewhere <sup>1</sup> proposed a classification of the chitons worn by Greek women in the fifth and fourth centuries. This is based on independent examination of the available sources. With it are given percentage tables derived from certain large and representative groups of each kind of source material. The proposed classification is illustrated in PLATE VII, and a table showing the frequency of occurrence of each type in each source is here reproduced.

#### AN ARTIFICIAL KEY TO THE TYPES OF GREEK COSTUME

(In this key no account is taken of the himation)

	Percentage of occurrence			
	Sculp- ture	Vases, Boston	Vases, N. Y.	Grave- reliefs
I. Ionic chiton alone present.				
a. No sleeves,	4.3	8.0	10.0	0.0
b. True sleeves,	3.1	0.0	0.6	8.0
c. Pseudo-sleeves,	22.1	65.6	65.4	26.1
II. Doric chiton alone present.				
<i>a. True Doric chitons with one         clasp on each shoulder.</i>				
a. Overfold wanting,	13.5	2.6	0.6	1.1
b. Overfold short,	27.6	6.7	8.0	3.4
c. Overfold relatively long.				
1. Not overgirt,	4.9	1.8	3.1	1.1
2. Overgirt,	13.5	10.4	7.4	1.1
<i>β. Doric chitons with two or         more clasps on each side;         the clasps sometimes re-         placed by a seam; over-         fold present.</i>				
d. Overfold to end of pseudo-sleeves,	0.6	1.8	1.8	2.3

<sup>1</sup> *Proceedings of the Delaware County Institute of Science*, Vol. IX, No. 3, pp. 105 ff

	Sculp- ture	Vases, Boston	Vases, N. Y.	Grave- reliefs
e. Overfold not extended to sleeves, <i>γ. Doric chitons with short seam at shoulder; overfold present.</i>	0.6	0.0	0.6	0.0
f. Overfold notably short,	0.6	0.0	1.2	0.0
III. Ionic chiton or chitonion with over-dress.				
a. Over-dress Ionic chiton without sleeves.				
1. Over-dress to knees,	1.2	2.6	1.2	2.3
2. Over-dress to feet,	0.0	0.0	0.0	0.0
b. Over-dress Doric chiton without overfold,	3.1	0.0	0.0	39.8
c. Over-dress Doric chiton with short overfold,	2.5	0.6	0.0	2.3
d. Over-dress Doric chiton with long overfold.				
1. Girdle wanting,	0.6	0.0	0.0	0.0
2. Girdle simple,	1.8	0.0	0.0	6.8
3. Cross-girdle,	0.0	0.0	0.0	5.7
	100.0	100.1	99.9	100.0

Because an exhaustive examination of all existing monuments was impracticable, collections sufficiently large and generally available have been employed in the determination of these figures. For the grave-reliefs, Conze's work has formed the basis and every costume of the period published in that work which can be made out has been recorded. The only further editing has been to distinguish and to draw the line between the woman and the child in regard to a few figures. This would affect type III d only. The vase lists have been derived from the collections of red-figured vases in the Metropolitan Museum of Art in New York and in the Boston Museum of Fine Arts respectively. The similarity of the results affords some measure of the general reliability of the method.

The sculpture-list is derived from the Brunn-Bruckmann collection of photographs and includes all the costumes shown on Greek sculpture later than the Persian wars and not of the latest period under strongly Roman influence. To avoid criticism for too much editing of my source-material, I have included even the grave-reliefs published in that collection. To have excluded them would have made the contrast between the

lists somewhat greater, but it is sufficiently great as it is, and I have the security of using a collection not of my own making.<sup>1</sup>

It will be noticed that one type (IIIa<sup>2</sup>) does not appear on any one of the four lists; a wide range of published material was examined in the search for types and this type has been described from other material. This warns me that still other types may have escaped my attention, but examples of such must be too rare to affect seriously the reliability of the table. The scheme of classification will admit of any needed extension, but for the sake of clearness I have avoided unnecessary expansion, even where, within the limits of certain types as defined, there are minor differences that invite further subdivision into varieties. Examples of this may be found under types Ia, IIe and IIIb.

The commoner forms of the chiton are generally known and may be passed over with mere mention; a few call for special description. The distinction between the two great families of chitons has historic sanction and separates the Ionic chitons, in every sense true dresses, enclosing the body, originally of thin linen or, perhaps, cotton material, from the Doric chitons, modified cloaks of wool fastened with a large brooch or pin at each shoulder. The Doric chiton never lost the essential character of a blanket folded to make two panels, front and back. In the course of time, certain hybrids resulted from the use of a variety of materials and from some modifications of form. In dealing with these I have felt that they should be classified by structure or by their relation to other forms, and I have described them as Doric if they showed the two-panel effect, the two brooches, or the essentially Doric overfold, even if they were of thin material or showed other results of Ionic influence.

Class I of the table includes the true Ionic chitons when worn alone, Ia being the sleeveless variety as shown in *Jb. Arch. I. I*, taf. 11, 2, or that form practically without sleeves, as in Furtwängler and Reichhold, *Griech. Vasenmalerei*, taf. 87, 2. These chitons are often richly ornamented. Of knee-length or less, also ornate and with a fringe, it is to be seen on a phiale (No. 97.371) in the Boston Museum of Fine Arts. A distinct variety, of thin plain material, exists.

Type Ib. The Ionic chiton with true sleeves; probably a barbarian costume originally. It is the dress of Medea in

<sup>1</sup> The full details, showing the classification of each monument, are published in my article mentioned above.



Furtwängler and Reichhold, *op. cit.* taf. 9 and 38-39. On the grave-reliefs it is regularly a costume of servants, but occurs also on a Niobid, or at least on a figure so identified.<sup>1</sup> Type Ic is the Ionic chiton with pseudo-sleeves. This is a most interesting garment, and one very common in all classes of representation. It is rectangular in form and is wide enough so that the upper edge affords length for the neck opening and the length of the "sleeve" on either side (Fig. 1). When worn a sort of sleeve is often defined by girdling it with a cord which I take to be the *ἀναμασχαλιστήρ*. This cord passes forward and downward from the top of the shoulder, then back under the arm-pit, diagonally across the back to the other shoulder, then forward and under that arm-pit and again diagonally across the back to the starting-point. This cord can be studied in many monuments, but nowhere better than on the Charioteer of Delphi. It is sometimes a heavy cord,<sup>2</sup> but is in other cases an exceedingly slender thread. A beautiful example of this may be seen on the central figure in the group of the so-called Fates



FIGURE 1.—IONIC CHITON WITH PSEUDO-SLEEVES.

from the East Pediment of the Parthenon. A cord so slender was of course often lost to sight in the folds that it produced. On the vases it appears rather frequently as a dark tape.<sup>3</sup> This cord was worn with other types of chiton, though less frequently.<sup>4</sup> The outer seam of the "sleeve" of this type of chiton is either sewn or is more characteristically formed by looping the edges

<sup>1</sup> Cf. Amelung in Pauly-Wissowa, *Real. Encycl.* p. 2210.

<sup>2</sup> Brunn-Bruckmann, *Denkmäler*, No. 577.

<sup>3</sup> Furtwängler and Reichhold, *op. cit.* taf. 30.

<sup>4</sup> Furtwängler, *Sabouloff Collection*, pls. XV, XVI, XVII.

together with a series of small brooches, as shown in Fig. 1. Further details will be found in my article previously mentioned.

Class II. The most characteristic form of the Doric chiton, that with the overfold falling to the waist, has been described so often that it will be sufficient to dismiss it with mere men-



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FIGURE 2.—AMPHORA IN MUSEUM OF FINE ARTS: BOSTON.

tion. That it is a derivative from a folded cloak is evident *e.g.* from the illustration (Fig. 2) from an amphora in Boston,<sup>1</sup> where nothing is wanting but a second brooch, on the left shoulder, to make the cloak a regular Doric chiton with overfold. This form of chiton serves as the starting-point in the evolution of the Doric chitons, though it is classified as type IIb. By omitting the

<sup>1</sup> Museum Fine Arts, No. 00.347.

overfold an equally "Doric" chiton results; it is still a modified cloak and it is still held in place by two large brooches (IIa). Another variant of the simple Doric chiton is formed by making the overfold long, so that it falls free to the hips or even to the knees or below (IIc<sup>1</sup>). Overgirt at the waist with a simple girdle this becomes the so-called "peplos of Athena," and in the religious iconography generally distinguishes the maiden goddess (Type IIc<sup>2</sup>).<sup>1</sup>

We now come to a group of Doric chitons which show a close kinship among themselves and an interesting development under Ionic influence. One of the later and more ample forms of the Doric chiton with short overfold is so wide that the arm-loops hang to the hips. This form may be seen on the Eirene of Cephisodotus. The excess of material here was probably a bit of ostentation in fashion; in practice it is highly inconvenient to the wearer and it was an easy remedy to make additional fastenings between the front panel and the back, producing pseudo-sleeves and reducing the arm-loops to moderate size (Fig. 3),<sup>2</sup> or even to run a seam from the neck-opening outward as in the Athena Giustiniani. Here we get a pseudo-sleeve, just as in type Ic (Ionic), but everything is still Doric, the overfold giving the predominating character to the garment (Type IIId). The sleeves of this chiton are inconveniently heavy and it was an obvious remedy to remove the overfold so far as it depended from the sleeves, leaving it in the middle, from shoulder



FIGURE 3.—STELE OF MELITE.

to moderate size (Fig. 3),<sup>2</sup> or even to run a seam from the neck-opening outward as in the Athena Giustiniani. Here we get a pseudo-sleeve, just as in type Ic (Ionic), but everything is still Doric, the overfold giving the predominating character to the garment (Type IIId). The sleeves of this chiton are inconveniently heavy and it was an obvious remedy to remove the overfold so far as it depended from the sleeves, leaving it in the middle, from shoulder

<sup>1</sup> An interesting discussion of this group of chitons is to be found in an article by Léon Heuzey, *Mon. Piot*, XXIV, pp. 5-46.

<sup>2</sup> Conze, *Grabreliefs*, No. 803; also, I believe, No. 321 in spite of his note.

to shoulder only (Type IIe). This chiton is far less Doric in appearance than the preceding, but it is plainly a derivative. The left-hand figure of the three "Fates" of the East Pediment of the Parthenon, the one sitting apart, wears this chiton,<sup>1</sup> and it is several times found as the costume of Maenads, etc., on vases.<sup>2</sup>

A still less Doric chiton of this series remains to be mentioned. It may be described either as a sleeveless Ionic chiton with a short



FIGURE 4.—ATTIC GRAVE-RELIEF.

Doric overfold, or equally well as a Doric chiton of normal type, made of gauzy material, with an abbreviated overfold and with the two brooches replaced by short seams at the shoulders. It is, however, so distinct in appearance as to deserve to be recorded as a special type (IIf) and its place is determined by its similarity to the Maenad costumes just mentioned.

Class III. We now come to the cases where two chitons are worn, either with or without an added himation. The under chiton is apparently always of the Ionic type, either with true sleeves or with pseudo-sleeves. It is likely that sleeveless chitons also were worn as undergarments, but as they would not

show the question remains unsettled. Becker<sup>3</sup> publishes a toilet-scene, taken from Tischbein, *Engravings*, 1, pl. 59, in which a woman is seen wearing a short sleeveless garment which looks like

<sup>1</sup> It is possible enough that in practice this chiton was sometimes made by adding "sleeves" to a chiton of type IIb (see Abrahams, *Greek Dress*, p. 64 ff.), or by adding an overfold of the requisite size to an Ionic chiton of type Ic with a seam along the arm instead of loops; of the two, the latter is perhaps the more likely.

<sup>2</sup> Baumeister, *Denkmäler*, I, p. 432, Abb. 479; Buschor, *Griech. Vasenm.* p. 177, Abb. 127.

<sup>3</sup> *Charicles*, Excursus I to Scene XI.

something of the sort, but the drawing is inadequate and I have not seen the original.

Since the under-chitons are all Ionic, the composite costumes have been classified according to the character of the outer chitons as already described.

Type IIIa consists of the long-sleeved Ionic chiton usually worn by servants, over which is shown another chiton, also Ionic, without sleeves. This latter is sometimes long enough to reach to the feet, so that only the sleeves of the under-garment show. Sometimes it falls but to the knees and so looks like a kind of apron or smock. These two costumes belong to servants. The first is beautifully shown on the servant adjusting the headdress of her mistress in the vase-painting in Furtwängler and Reichhold, *op. cit.* taf. 68. The outer chiton is richly decorated and the right sleeve of the under-chiton is distinctly shown coming through the arm-size of the outer chiton. The material of the outer chiton has an all-over pattern of embroidered crosses; the sleeve has no such pattern. The costume



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FIGURE 5.—CYBELE: MUSEUM OF FINE ARTS: BOSTON.

is richly decorated and the right sleeve of the under-chiton is distinctly shown coming through the arm-size of the outer chiton. The material of the outer chiton has an all-over pattern of embroidered crosses; the sleeve has no such pattern. The costume

with the outer chiton to the knees may be studied as it appears on the servant behind the chair in the grave-relief of Damasistrate.

Type IIIb. The grave-reliefs show numerous matronly figures wearing a costume which by its regular association with the other attributes of the mature woman of the upper classes and by its uniformity stands as a clearly marked costume of definite significance (Fig. 4). It consists of an Ionic under-chiton with pseudo-



FIGURE 6.—STANDING  
FIGURE: NATIONAL  
MUSEUM: ATHENS.

sleeves, usually of the button and loop sort (Type Ic), over which is worn a Doric chiton marked by the round brooches the customary kind. This Doric chiton appears to have no overfold. It is true that the himation, which is regularly a part of this costume, frequently covers the figure from the waist to the hips where the lower edge of the overfold would come if one were present, but the testimony against its existence is of various kinds and is in the sum conclusive. In the first place, the folds of material over the bosom are like those over the knees and lower legs and do not indicate an additional thickness of material, nor do we find any evidence of doubled edges at the sides below the shoulders in the examples that have been assigned to this type. Next, we have cases where the himation has fallen across the lap, showing the chiton to the hip or below, proving that here it has no overfold unless it is so long that the edge of the overfold falls below that point (Fig. 5).<sup>1</sup> Another example is found where the himation is so

worn as to show the chiton from above the hip down to the feet, and still no overfold appears (Fig. 6).<sup>2</sup> Further we have seen that Doric chitons were worn alone without overfold (Type IIa) and servants are shown wearing them over the true-sleeved Ionic chiton.<sup>3</sup> Here, of course, there is no himation to obscure the

<sup>1</sup> *E.g.* Conze, *op. cit.* Nos. 71 and 581 and the Cybele in the Boston Museum of Fine Arts here illustrated.

<sup>2</sup> Collignon, *Les Statuaires Funéraires dans l'Art Grec*, p. 159, fig. 91.

<sup>3</sup> Conze, *op. cit.* No. 289; see his text-note and sketch; also No. 462.

facts. Finally there is a figure from Priene in the British Museum which appears to wear the costume in question without an himation (Fig. 7).<sup>1</sup>

Type IIIc. Similar to the above except that the outer (Doric) chiton has a short overfold. This is not common (Fig. 8).

Type IIIId. As above except that the outer chiton has the long overfold. The subdivisions of this type are based on differences of girdling; in the first variety the peplos is ungirt, in the second there is a simple girdle at the waist; in the third there is the girdle at the waist and a cross-girdling diagonally from waist to shoulder. A brooch or amulet generally appears at the crossing on the bosom. These are the costumes of girls and young maidens and would have contributed in larger measure to the table of percentages had not that

<sup>1</sup> My special thanks are due A. H. Smith, Esq., of the Department of Greek and Roman Antiquities in the British Museum for his kindness in verifying for me certain details of the costume of this figure.



(From photograph by W. A. Mansell and Co.)

FIGURE 7.—STANDING FIGURE FROM PRIENE:  
LONDON.

table been based on representations of those who had crossed the threshold from childhood into womanhood. They are regularly worn without a cloak, the doubled outer chiton affording all necessary protection. It may be questioned whether this garment, so closely akin to the peplos of the maiden goddess Athena was worn by the young maidens of Athens on that account, or whether it logically belonged to both as to free and



(From photograph by W. A. Mansell and Co.)

FIGURE 8.—FIGURE ON COLUMN BASE OF TEMPLE OF ARTEMIS AT EPHEBUS: LONDON.

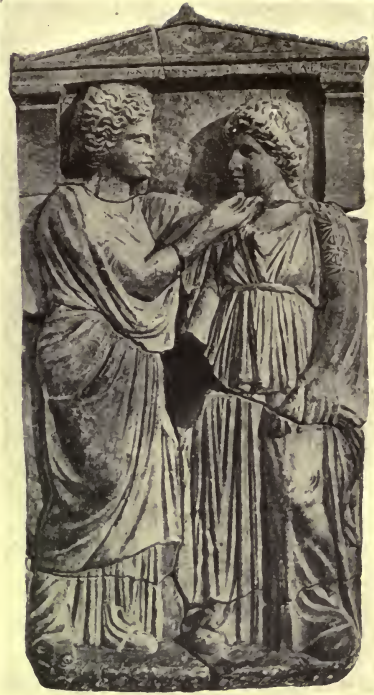


FIGURE 9.—GRAVE-RELIEF OF A YOUNG GIRL.

active youth which would naturally be intolerant of the restraints imposed by a cloak (Fig. 9).

If the grave-reliefs can be accepted as homogeneous evidence, both as to period and locality, and this they certainly are in higher degree than any other material before us, and if we regard the serious and literal character of their workmanship, we cannot doubt that they give us a true and definite picture of the domestic costumes of the fifth and fourth centuries in and around Athens. If they depart from fact, it is no doubt in emphasizing the formal costume at the expense of the informal, and that they do this is likely enough.



Leaving out of consideration for this occasion type Ib, which is, in the reliefs, wholly a costume of servants, and the types under III d, which are primarily children's costumes, but two costumes show an appearance-percentage of over 4 per cent. These are type Ic with 26.1 per cent and type III b (which is the same type Ic with type II a worn over it) showing 39.8 per cent. Perhaps the wearing of the outer chiton completes the formal dress, the Ionic chiton alone being the regular informal dress, over which for more formal or public occasions the outer chiton would be drawn. It may be fortuitous, but it is at least interesting, that on the vases where domestic scenes are generally of the less formal sort the composite dresses are practically non-present, but that the percentage of type Ic (65.6 and 65.4 in the two lists respectively) is as near as may be to the total for types Ic and III b taken together on the reliefs (65.9).

A list of easily available examples of each type of costume is subjoined.

## LIST OF EXAMPLES

- Ia. *Jb. Arch. I. XIX, 1904, taf. I, No. 4.* Richly ornamented.  
*R. Arch. 1845, taf. XL*=Gulick, *Life of the Ancient Greeks*, p. 253, fig. 226.  
 Furtw. u. Reichhold, *Griech. Vasenm.* taf. 87.2=Buschor, *Gr. Vas. Abb.* 161.  
*Jb. Arch. I. I. 1886, p. 232, taf. 11.*  
 "The Maiden of Antium," Bulle, *Schöne Mensch*, taf. 136=Brunn-Bruckmann, *Denkmäler*, No. 583.  
 Red-figured phiale in Boston Mus. No. 97.371. Knee-length.  
*Jb. Arch. I. XI, 1896, taf. 2.* Rich bodice, thin skirt.  
 Furtw. u. Reichhold, *Gr. Vasenm.*, taf. 30, taf. 50. Simple, of thin goods.  
 Brunn-Bruckmann, *Denkmäler*, 311. (Niobe.)  
 " " " 439.
- Ib. Furtwängler, *Saboureff Collection*, taf. XV, XVI, XVII. Figures from Attic tomb; in the round.  
 Conze, *Grabreliefs*, Nos. 68, 71, 294, 880, 881, 882, 901.  
 Brunn-Bruckmann, *Denkmäler*, No. 312.  
 " " " No. 598.  
 Red-figured vase, N. Y. Metro. Mus. of Art, No. 06.1021.181.  
 Furtw. u. Reichhold, *Gr. Vasenm.* taf. 9 and 38-39. (Medea.)
- Ic. Daremberg et Saglio, *Dictionnaire des Antiquités*, v. 5, p. 537, fig. 7164=  
*Jb. Arch. I. XI, 1896, p. 21, Abb. 2*=*Élite Céramographique*, 2, 49.  
 Shows girl putting on chiton of this type. (Here as Fig. 2.)  
 Cartault, *Terres Cuites Grecques*, pl. II, Jeune Femme se regardant dans un miroir; the ἀναμασχαλιστήρ is clearly shown.

- Furtwängler, *Sabouroff Collection*, pl. XXXV. Jeune Fille au Canard.  
*J.H.S.* XXXII, 1912, pl. 7 and 8. } In all of these there  
 " XXXIII, 1913, pl. 10 and 11. } is no evidence of the  
 " XXXIV, 1914, pl. 14. } ἀναμασχαλιστήρ; hence  
*Jb. Arch. I.* XXIX, 1914, p. 144, Abb. 18, } "sleeves" are defined  
 Red-figured vase, N. Y. Metro. Mus. G. R. } only by the girdle or  
 609. } by the himation.
- Furtw. u. Reichhold, *Gr. Vasenm.* taf. 33. Arm-sizes in upper line of  
 the chiton. (Twice.)
- Brunn-Bruckmann, *Denkmäler*, No. 14. Aphrodite of Epidauros.  
 " " " " 35. Sandal Victory.  
 " " " " 175. Penelope of the Vatican, 11  
 brooches on left arm.
- Brunn-Bruckmann, *Denkmäler*, No. 189. "Fates," E. Pediment of  
 Parthenon. The figure reclining has no ἀναμασχαλιστήρ. The figure  
 against whom she leans wears a similar chiton with the cord, which  
 is here exceedingly slender.
- Brunn-Bruckmann, *Denkmäler*, No. 212. Nereid from Tomb at  
 Xanthos; eight brooches on a short sleeve.
- Brunn-Bruckmann, *Denkmäler*, No. 577. Ἀναμασχαλιστήρ is here a  
 heavy cord.
- IIa. Brunn-Bruckmann, *Denkmäler*, Nos. 252 (Maenad), 260, 299, 359, 360,  
 473, 474 (Maiden of the Palatine = Bulle, *Schöne Mensch*, taf. 125),  
 664-5.  
 Conze, *Grabreliefs*, No. 320.  
 Bulle, *Schöne Mensch*, taf. 124 (Venus Genetrix); 125 (see above), 128,  
 135.
- IIb. The Caryatids of the Erechtheum, the Eirene of Cephisodotus; the  
 type is too common to require examples except to illustrate special  
 facts.  
 Furtw. u. Reichhold, *Griech. Vasenm.* taf. 66b and 79 (the figure  
 holding the fan) show the type with the open side.  
 Conze, *Grabreliefs*, No. 280. Here worn by a servant. This chiton is  
 rare on the grave-reliefs.  
 Brunn-Bruckmann, *Denkmäler*, No. 58 = Baumeister, *Denkmäler*, p.  
 343, Abb. 361. Front panel of chiton is here carried up over back  
 panel, contrary to usual rule.
- IIc<sup>1</sup>. Rayet et Collignon, *Histoire de la Céramique Grecque*, p. 255, fig. 96.  
*Encyclop. Britannica*, 9th ed. XIX, pl. V; red-figured amphora from  
 Rhodes. The figure at the extreme left.  
*Jb. Arch. I.* XXVIII, 1913, p. 322 = Collignon, *Les Statuaires Funé-  
 raires dans l'Art Grec*, p. 132, fig. 71. Stela of Polyxena; here the  
 overfold has the appearance of being cut to a point in front; in reality  
 the width to the right of the neck opening is sufficient to force, by its  
 weight, the right lower angle of the overfold to a nearly central posi-  
 tion. (See Heuzey, *Mon. Piot.* XXIV, p. 28.)  
*Jb. Arch. I.* XXIX, 1914, p. 30 of *Arch. Anzeiger*. Dresden Artemis.  
*Jb. Arch. I.* XXVI, 1911, p. 55. Artemis Colonna.  
 Furtw. u. Reichhold, *Griech. Vasenm.* taf. 40.

- IIc<sup>2</sup>. Athena of Myron, the Mourning Athena, the Lemnia, etc.
- II d. Conze, *Grabreliefs*, Nos. 321, 803.  
 Brunn-Bruckmann, *Denkmäler*, No. 200. (Athena Giustiniani.)  
 N. Y. Metro. Mus. G. R. 577. (Cylix.)  
 J. Harrison, *Prolegomena to Gr. Religion*, fig. 76 after Milliet et Giraudon, pl. 104.  
*Jb. Arch. I. IX*, 1896, p. 188, Abb. 30 D.  
 Klein, *Vasen Liebl. Inscr.* p. 94, Abb. 24.  
 Savignoni, *La Collezione di Vasi Dipinti nel Museo Giulia*, fig. 8.
- II e. Buschor, *Griech. Vasenm.* Abb. 127.  
 Abrahams, *Greek Dress*, fig. 29.  
 Conze, *Grabreliefs*, No. 471a, probably; cf. the "Fate" from the East Pediment of the Parthenon, the one sitting apart and erect, this latter being a notable example of this chiton in monumental sculpture. A red-figured cylix in the N. Y. Metropolitan Museum (No. 12.231) seems to represent a similar chiton.
- II f. Furtw. u. Reichhold, *Griech. Vasenm.* taf. 8. (Three examples.)  
 Brunn-Bruckmann, *Denkmäler*, No. 19. Nereid from Epidaurus.
- III a<sup>1</sup>. *Jb. Arch. I. I*, 1886, taf. 10, 2a.  
 Brunn-Bruckmann, *Denkmäler*, No. 534. Mourning Slave.  
 " " " " No. 646. Amazon.  
 Boston Museum of Fine Arts, red-figured cylix, No. 91.223; cf. also Nos. 76.44, 03.104, and 90.157.  
 Dumont et Chaplain, *Céramique de la Grèce Propre*, pl. 8, red-figured Attic vase = Gulick, *Life of the Ancient Greeks*, fig. 146 = N. Y. Metro. Mus. G. R. 1243.  
 Conze, *Grabreliefs*, No. 410. Servant.
- III a<sup>2</sup>. Furtw. u. Reichhold, *Griech. Vasenm.* taf. 20.  
 " " " " " " " 68.  
 " " " " " " " 87.2 = Buschor, *Griech. Vasenm.* Abb. 161.
- III b. Conze, *Grabreliefs*, Nos. 67, 71, 448, 581, 805. (Here as Fig. 4; see also Figs. 5, 6, and 7.)
- III c. Conze, *Grabreliefs*, Nos. 74 and 1088.  
 Brunn-Bruckmann, *Denkmäler*, No. 502, an Athena in Madrid.  
 Red-figured vase, Boston Mus. of Fine Arts, No. 96.719. (Note also figure from column-base of the Temple of Artemis at Ephesus, now in the British Museum, here as Fig. 8.)
- III d<sup>1</sup>. Brunn-Bruckmann, *Denkmäler*, No. 123. (Artemis.)
- III d<sup>2</sup>. Brunn-Bruckmann, *Denkmäler*, No. 171. (Athena Medici.)  
 " " " " 308.  
 Conze, *Grabreliefs*, Nos. 335, 876, 896. (Here as Fig. 9.)
- III d<sup>3</sup>. Conze, *Grabreliefs*, Nos. 332, 832, 875, 877, 881, 1131.

ALBERT W. BARKER.

MOYLAN, PA.

A TERRA-COTTA HEAD IN THE LOEB COLLECTION

RECENTLY my friend Dr. A. W. Barker, now of Wilmington, Delaware, has called to my attention a small terra-cotta head in the James Loeb Collection in Munich,<sup>1</sup> which bears a striking resemblance to the well-known Fentelic marble head of an athlete found at Olympia and now in the museum there.<sup>2</sup> This marble head I have elsewhere<sup>3</sup> ascribed to Lysippus, having connected it with the statue of an Acarnanian pancratiast—whose name I have restored as Philandridas—which Pausanias mentions in his *periegesis* of the Altis as the work of that sculptor. The Loeb head is almost perfectly preserved, only the tip of the nose being broken off, and merits the praise of Sieveking as being *ein ganz ausgezeichnetes Werk hellenistischer Porträtkunst*. He dates it in the third, or at latest in the second century B.C., a date with which I quite agree.

A brief comparison of the two heads, as reproduced in the accompanying illustration (Fig. 1), will show wherein the resemblance between them consists. Although this resemblance is very striking, we shall see that the Loeb head is in no sense an exact copy of the one from Olympia. In both heads we see the same graceful and challenging pose, each being inclined a little to the left and upwards, a movement corresponding with an energetic raising of the left shoulder, as the muscles of the neck disclose. The general proportions and the cranial outlines of the two are almost identical, both being round as in Attic works, as opposed to the square

<sup>1</sup> J. Sieveking, *Die Terrakotten der Sammlung Loeb*, II, 1916, pl. 77, 2 (profile and front views); text, p. 14. The height of the head is there given as 0.083 meter and its provenience Greece. It is of a reddish tint, the face a deeper rose color, and the hair brown-red.

<sup>2</sup> *Olympia, Die Ergebnisse*, III, *Die Bildwerke von Olympia in Stein und Thon*, 1897, Tafelbd., pl. LIV, 3-4; Textbd. p. 209 and fig. 237; *Ausgrabungen von Olympia*, V, 1881, pl. XX and pp. 13-14 (Treu).

<sup>3</sup> First in my *de olympionicarum Statuis*, Halle, 1902 (enlarged, 1903), pp. 27f.; later in *A.J.A.*, XI, 1907, pp. 396-416, and figs. 1-6; and recently in *Olympic Victor Monuments and Greek Athletic Art*, 1921, pp. 293f., Frontispiece and fig. 69.

type of heads found in the works of Peloponnesian sculptors, which are flatter on top and longer from front to back. In each head we see the same low forehead with a deep crease across the middle, below which the superciliary arcade prominently projects. We see in both the same high cheek-bones and small mouth with parted lips showing the teeth, and a similar oval contour of the lower face ending in a strong chin. The hair of



FIGURE 1.—A: HEAD OF TERRA-COTTA FIGURINE: MUNICH; B: MARBLE HEAD OF ATHLETE: OLYMPIA.

each is closely cropped, as we should expect in athlete heads, and is composed of short and tense ringlets which are ruffled straight up from the forehead in flat relief, bounding the forehead with a symmetrically curved line. Especially in the modeling of the eyes in both heads do we see great resemblance. They are wide-open, deeply set, and powerfully framed, being thrown into shadow by the prominent brows. The balls are slightly arched and raised as if they were looking into the distance, and this look increases the air of pensiveness which the artist of each head evidently intended to express. The upper lids are formed of

narrow and sharply defined borders and are not covered with folds of skin at their outer corners. The ears are in each case small, though prominent, and are battered and swollen as in heads of boxers and pancratiasts.

But, despite these general resemblances, a closer examination will also disclose differences in the details of the two heads. The terra-cotta head is fleshier and less bony in its structure, and this gives to it a softer appearance. Its lower face is more oval in contour, and the upper face is certainly broader than in the head from Olympia. Its chin, therefore, is not so strong or energetic. The elegant contour of the lips of the Loeb head cannot be seen in the one from Olympia, since they are there broken away. The eyes of the Munich head are irregularly placed, as Sieveking has noted, but not for the reason which he gives, namely, the result of the lively turn of the head, for they are horizontally placed in the Olympia marble where the turn of the head is identical. More probably this irregularity is merely due to faulty modeling, as it is not uncommonly found in Hellenistic works. For example, we see an irregular treatment of the eye in the marble head from Sparta now in private possession in Philadelphia.<sup>1</sup> The muscles of the neck also appear more accentuated in the Munich head.

But the chief difference in the two heads is found in their expression. The head from Olympia is in no sense a portrait, nor even individualized, but an ideal head of a victor *κατ'ἔξοχήν* in the pancratium.<sup>2</sup> But the modeler of the Loeb head has consciously endeavored to convert his model into a portrait. The energetic expression of the Olympia head, whose defiant and even fierce expression is a bit dramatic in intensity, and has led many archaeologists to interpret it as the representation of a youthful Heracles,<sup>3</sup> is softened in the Loeb head. In fact the fierceness and brutality of the Acarnanian boxer have disappeared, though the pensiveness, which also characterizes the Olympia head, is here, perhaps, even more compelling. The resultant expression

<sup>1</sup> See *Olympic Victor Monuments and Greek Athletic Art*, pp. 305f., and fig. 72. On p. 316, note 3, I have pointed out the droop in the axis of the right eye which causes the ball to turn in, and gives to the face a look of greater intensity.

<sup>2</sup> Philandridas won the pancratium at Olympia in Ol. 102 or Ol. 103 (372 or 368 B.C.); see *Olympic Victor Monuments and Greek Athletic Art*, p. 300. This statue, then, was probably one of the earliest works of Lysippus.

<sup>3</sup> E.g., Treu, in *Bildwerke von Olympia*, Textbd., p. 208; E. Reisch, *Griechische Weihgeschenke*, 1890, p. 43, note 1; Flasch, in Baumeister's *Denkmäler*, p. 1104 00; Furtwängler, in Roscher's *Lexikon*, s.v. Herakles, I, 2, p. 2166; etc.

of the face of the terra-cotta head is, then, more boyish and far more attractive.

We conclude, then, that the artist of this beautiful little terra-cotta head freely used the marble statue of the Acarnanian athlete for his model, but did not slavishly copy it in detail. That an inferior artist of the century after Lysippus should have done this for his less pretentious effort is certainly evidence of the fame of the athlete statue from which the Olympia head has come. It strengthens indirectly, therefore, the proofs which I have elsewhere adduced that that statue was the work of Lysippus himself, the great fourth century bronze founder and worker in marble.

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A SARCOPHAGUS AT CORINTH

[PLATES VIII-IX]

IN 1906 Stavros Nikolaou found a large marble sarcophagus in his vineyard which lies in the plain to the north of Old Corinth in the Θέσις Κρητικᾶ. The discovery was made at a point just east of the road from the "Baths of Aphrodite" to the sea and about one kilometer from the "Baths." The sarcophagus was bought by the Greek Government<sup>1</sup> and is now in the Corinth Museum.

The entire left end<sup>2</sup> and most of the back of the sarcophagus are missing. The front and right end (Plates VIII and IX) are fairly well preserved and three large pieces of the lid are extant. The height, as measured at the right end (Fig. 1), is 1.535 m. including the lid, which is 0.32 m. thick. The width is 1.175 m. and the preserved length 2.505 m. Despite the break at the left end, the original length can be determined within one or two centimeters by measuring the oak leaf band on the lower part of the front (Plate VIII). This band was divided into four sections by simple fillets, a double one at each end, and three single ones between. At the corner is a slightly projecting base, 0.21 m. long, and the distance from this to the central fillet is 1.10 m. Half the length, therefore, is 1.31 m., and consequently the total length must have been 2.62 m.<sup>3</sup> Moreover, about the middle of the left end, a fragment

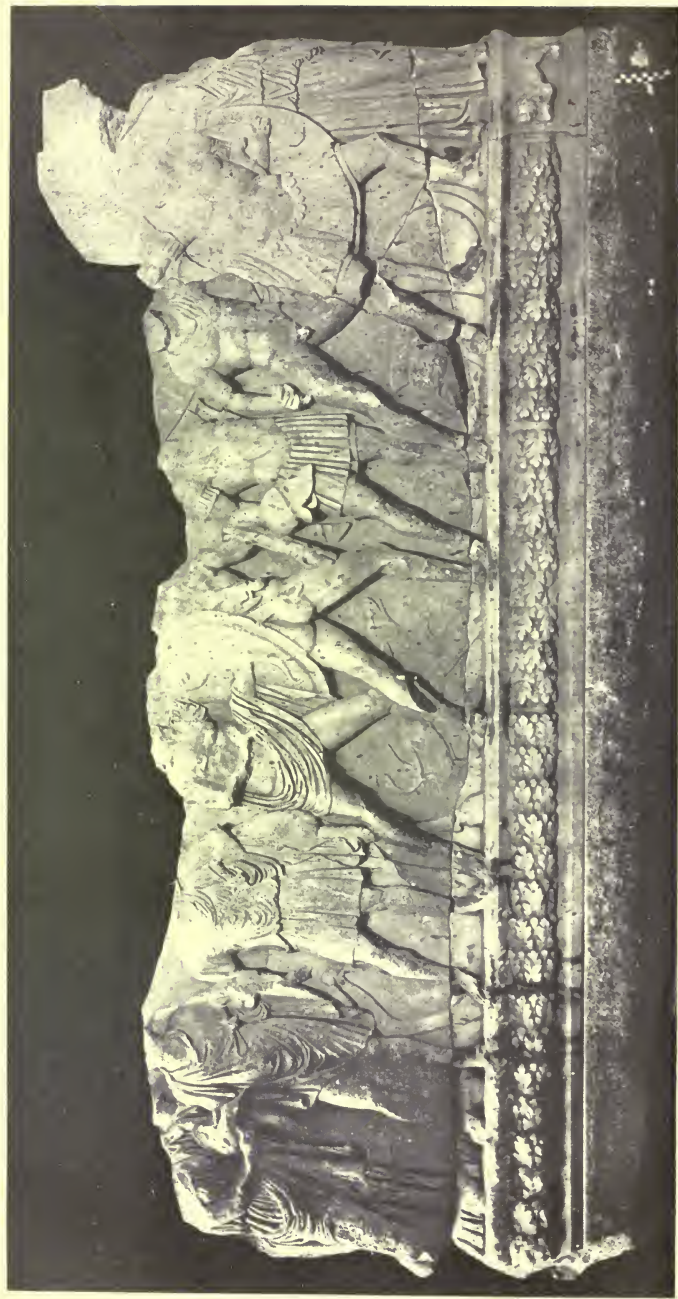
<sup>1</sup> I wish to make acknowledgment to the Greek Government, Department of Antiquities, and especially to the ephor, Mr. Keramopoulos, for their kindness in granting me permission to publish the sarcophagus. To Mr. B. H. Hill, Director of the American School at Athens, I am indebted for information concerning the discovery of the sarcophagus and for assistance in photographing it. To Professor C. H. Young of Columbia University I owe valuable criticism and suggestions.

<sup>2</sup> The ends will be designated left and right from the point of view of a person facing the front, even when mentioned in connection with the back.

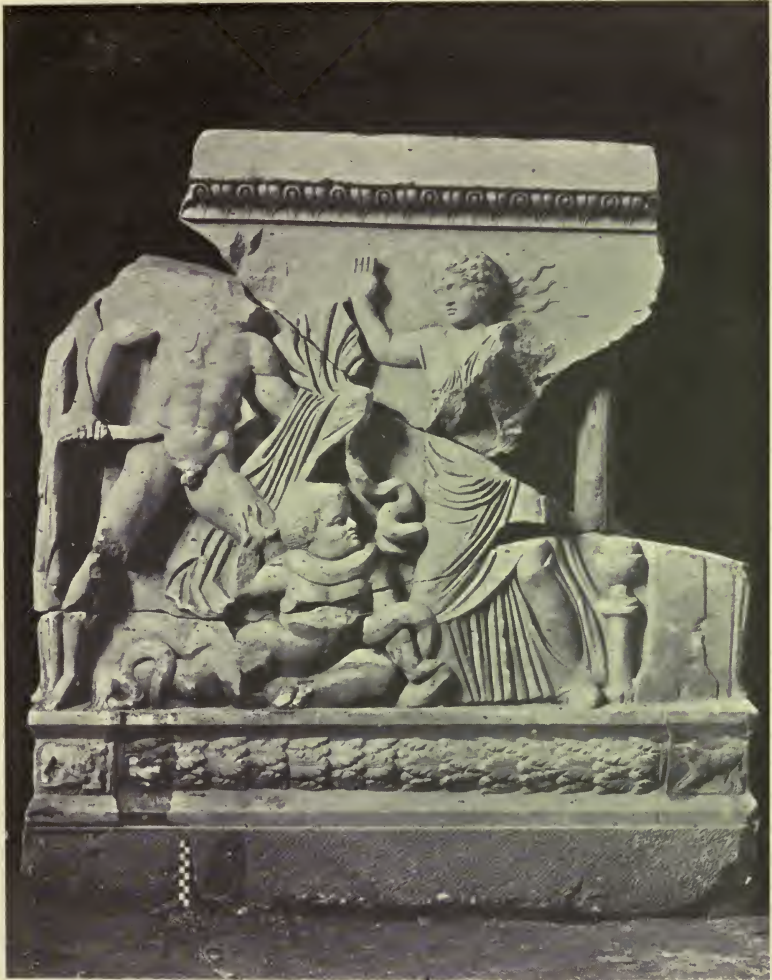
<sup>3</sup> Proof of the accuracy of this calculation is found in a study of the corresponding parts of the oak leaf band. From the centre to the first fillet on the right is 0.55 m., to that on the left 0.54 m. From the first fillet on the right to the corner base is 0.55 m., but at the left the corner base and double fillet have







THE SEVEN AGAINST THEBES: SARCOPHAGUS AT CORINTH.



THE DEATH OF ARCHEMORUS: SARCOPHAGUS AT CORINTH.



of the inside of the end wall of the sarcophagus is preserved, rising one or two centimeters above the floor. This fixes the interior length as 2.20 m. The right end wall is 0.15 m. thick (Fig. 1) and the mouldings project 0.06 m. beyond it. If we assume the left end wall and mouldings to have had the same thickness, the total length is again found to be 2.62 m.<sup>1</sup>

At the bottom of the sarcophagus is a roughly picked surface, 0.14 m. high, which was intended, presumably, to be set in the ground. Above this is an ornamental band, 0.185 m. in height, accentuated at the corners by the slightly projecting bases already mentioned. On the front and right end these bases are adorned with animals, but at the back they are plain. The single base preserved in front (Plate VIII) shows a lion charging to the left, while the base adjoining it on the front corner of the right end (Plate IX) has a lion pulling down a bull. The other base on this end bears the figure of a wild boar. On the front and right end between the corner bases are bands of oak leaves which lie in opposite directions, right and left of the centre. Though somewhat heavy, these are cut with considerable care and, while the veining is shown by incised lines, there is no deep undercutting or drill work. At the back the oak leaves are omitted and this space,

as well as the corner bases and simple mouldings, is finished with a tooth chisel. Above this ornamental band is the main field of decoration, crowned by mouldings 0.135 m. high, which are preserved at the right end. They consist of a leaf and tongue, rather been broken away. The distance from the first fillet on the left to this break is 0.54 m. Allowing 0.02 m. for the missing double fillet, *i.e.* the width of the preserved one, and 0.21 m. for the missing corner base, *i.e.* the length of the preserved bases on the front and back, we find a close balance between the two halves of the ornament. Adding to the preserved length of 2.39 m. the missing length of 0.23 m. we obtain a total length of 2.62 m.

<sup>1</sup> 0.06 + 0.15 + 2.20 + 0.15 + 0.06 = 2.62.

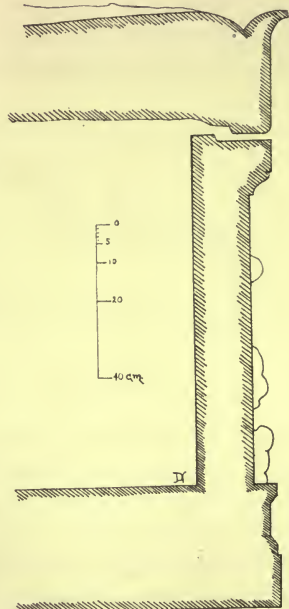


FIGURE 1.—RIGHT END OF SARCOPHAGUS AT CORINTH: SECTION.

deeply cut, and a broad platband, above which is the rebate that held the lid (Fig. 1 and Plate IX).

The three fragments of the lid, though much damaged, indicate its original form quite clearly. Two pieces, which preserve the full width of the cover, join together, while a third, which comes from the right end, belongs very near, if not actually adjoining them. The lid was of the *κλινη*, or couch, type<sup>1</sup> with a single reclining figure. On the under side are rebates corresponding to those on top of the sarcophagus (Figs. 1 and 2). The right end, or head of the couch (Fig. 1) was rounded up to form a rest for the elbow and was finished by a projecting moulding which was car-

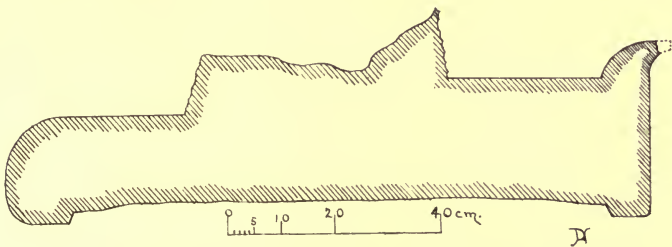


FIGURE 2.—LID OF SARCOPHAGUS AT CORINTH: SECTION.

ried across the back and probably returned across the foot.<sup>2</sup> The front presents the rounded edge of the mattress, banded by a group of fillets, in the manner of a sarcophagus of Parian marble from Kertsch, which when last heard of was in the Hermitage at Petrograd.<sup>3</sup> The reclining figure has been destroyed, but portions of the drapery, and the left knee and heel are preserved. These suffice to show that the figure, probably male, reclined with the left leg crossed beneath the right. It is certain, by comparison with similar figures, that this figure rested on the left elbow.<sup>4</sup> The remains of drapery and the left knee and heel show a summary treatment with no attention to modelling. It is crude, careless work which contrasts strongly with the reliefs on the body of the sarcophagus.

The back of the sarcophagus is preserved to a length of 1.80 m.,

<sup>1</sup> W. Altmann, *Arch. u. Orn. d. ant. Sark.* pp. 41 ff.

<sup>2</sup> As in the Louvre example, Robert, *Die antiken Sarkophag-reliefs*, II, 69.

<sup>3</sup> Robert, *op. cit.* II, 21. The Corinth example differs from this in having five fillets in each group. Moreover, the spaces between the fillets are slightly reeded and are not decorated with carved ornament.

<sup>4</sup> Cf. for similar figures, Robert, *op. cit.* II, 21, 25, 69, III<sup>2</sup>, 160, etc.

but the upper part has been destroyed, except at the right end, where it stands to a height of 0.62 m. (Fig. 3). At this corner is the lower part of a draped female figure, broken at the knees. The weight rested on her right leg and her left knee was slightly bent. The drapery falls in simple, straight folds, and is caught over the left foot so as to reveal the toe of her shoe. To the right of this figure the smooth background of the relief is not so highly polished as on the front and right end. On it is the end of an oddly shaped fillet and the lower part of a heavy garland of fruit. A close parallel to this is found in the sarcophagus from Kertsch already mentioned. It has the same ornamental band with the



FIGURE 3.—BACK OF SARCOPHAGUS AT CORINTH.

corner bases and oak leaves, though the latter are, in this case, on the back instead of the front, and female figures at the corners. Fruit garlands and fillets of the same peculiar shape as at Corinth also appear on it. Another sarcophagus, from Salonica, now in the Louvre,<sup>1</sup> has similar garlands and fillets, though hermae replace the female figures at the corners. These two examples show in a general way the original design of the back of the Corinth sarcophagus, though it undoubtedly differed in detail. On the Kertsch example the two swags are held in the middle by a child, in the Louvre by an eagle. Though the breakage of the Corinth sarcophagus has left no trace of such central support, it is clear that it originally had two swags. Something has been broken away, however, at the bottom of the relief about 0.90 m. from the corner. This seems too far from the centre to be part of such a supporting figure, but nearer the middle, between 1.37 m. and 1.43 m. from the right end, there is a break in the background. It is possible that there was a point of attachment here, though I, personally, doubt this. The female figure was in all

<sup>1</sup>Robert, *op. cit.* II, 69.

probability a sort of caryatid used to enclose the scene<sup>1</sup> and there must have been a similar figure at the other corner.

The front is fairly well preserved (Plate VIII), though some twenty centimeters are missing at the left end, and the top mouldings, as well as the heads of the figures, have been destroyed. There are at present two female figures at the left end, then seven armed male figures, and finally a single female figure at the right corner. Originally there was a similar figure at the left end. There are at least 0.20 m. missing at this corner and it is inconceivable that this space was left vacant, when the two figures adjoining it are so crowded as to overlap. Moreover, there is a fragment of drapery at the extreme left edge, which can only be explained as part of the garment of the missing figure.<sup>2</sup> The chiton of the extant corner figure has a bib and is girt to form a deep *κόλπος*, or fold. The straight lines of her garment break above her feet, revealing the fact that she wears shoes. This figure is undoubtedly a caryatid, or enclosing figure, like the one on the back of the sarcophagus, but her drapery is handled with greater care, as is fitting in view of her more important position. In both cases the treatment is derived from Greek models of the good classical period.

Between the enclosing caryatids the figures may be divided into three groups which maintain a certain balance. At the left two women and the first two warriors<sup>3</sup> form a group which is linked with the central figures by the forward movement of the second warrior's horse. This central group consists of two men, slightly larger than the rest, who stride forward, carrying out the general theme of the composition—an increasing forward movement to the right. The unity of the group, however, is maintained by the balance of the two figures, one in front view, the other presenting his back, the one looking ahead, the other behind. The forward movement is arrested by the fifth warrior, who, however, maintains his position in the final group by the direction of his gaze. The sixth warrior resumes the impetuous advance, which is continued by the seventh. At the same time this last figure preserves

<sup>1</sup> This was a common motive in sarcophagi of this type. Cf. Robert, *op. cit.* II, 21, 23, 69, 74, III<sup>2</sup>, 144.

<sup>2</sup> At the level of the knees the corner figure in front is 0.18 m. broad, that on the back 0.17 m. At the same level at the left end of the front there is space for a figure 0.20–0.22 m. broad, so that the existence of such a figure is physically possible.

<sup>3</sup> For convenience I have numbered the warriors from one to seven, beginning at the left



the unity of the group and keeps the whole composition together by his fine gesture and backward look.

The group at the left is clearly a scene of parting. The first woman, clad in a long chiton, girt at the waist, over which she wears the himation, is handing the first warrior his helmet. The lower part of her right leg has been destroyed, but the toes of her left foot appear beneath the chiton. She wears sandals. Her head, which is missing, was turned toward the first warrior. He stands in front view, with his weight on his left leg and his right arm hanging by his side.<sup>1</sup> On his left arm is a round shield and at his side is girt a sword. He wears high boots and a short cloak—the *chlamys*, fastened by a large, round brooch. The head seems to have been *en face*, to judge from the remains of neck and chin. Between these two, in low relief, is the second woman, who wears a long chiton. Her head is broken at the upper lip and the chin is chipped. With her right hand she is adjusting a fold of her garment at the shoulder. The second warrior wears a short chiton and a cloak which was probably caught on his broken right shoulder. A sword is slung at his left side and in his right hand he held a short spear,<sup>2</sup> a piece of which is still attached to the arm. He bends slightly back to brace against the horse which he held with his left hand. The horse appears in low relief behind the warriors. The curve of its neck and the position of the warrior's arm indicate that the head was held up against the rein.<sup>3</sup> Man and horse, in their restrained forward movement, form the transition to the next figures, but are kept within the first group by the warrior's head, which, as far as one can judge by the cords of the neck and the line of the chin, seems to have been turned back.

The central group consists of the third and fourth warriors. The former is nude except for an awkwardly draped mantle, while the latter is clad only in a boar's skin, flung across his left shoul-

<sup>1</sup> There is a small, round lump at the inside of his left wrist, which seems to have belonged to some object held in the hand, though this may be an accidental effect caused by the undercutting of his thumb, which is lacking.

<sup>2</sup> The spear must have been short as its head cannot have extended above the upper mouldings and its haft must have ended just below his hand. Had it been extended, it would have struck his leg and there is no trace of a point of attachment.

<sup>3</sup> The horse's position was similar to that of a horse in the Parthenon frieze (A. H. Smith, *Sculptures of the Parthenon*, pl. 62). The man can be paralleled in the same monument (*op. cit.* pl. 64). A slight projection to the left of the third warrior's shoulder probably marks the attachment of the horse's lower jaw and the second warrior's hand.

der with the hind legs hanging stiffly across his right arm. His right hand is concealed behind the next figure. On his left arm is a round shield, which has been skilfully utilized as a background for the bow carried by the third warrior. This is held in his left hand and, at first sight, he appears to have been drawing an arrow to the head. If so, the arrow must have been of metal, but his hands are so mutilated as to have destroyed any evidence of its attachment. Moreover, there is no other place in the sarcophagus where metal was used, but there is evidence of painting. It is obvious that neither the arrow nor the bowstring<sup>1</sup> could have been painted across the warrior's mantle, but the string could have stretched from end to end of the bow, passing behind his arm. This leaves unexplained the action of his right hand. Possibly he grasped the hilt of his sword, the strap of which crosses his right shoulder and disappears at his right hand. Behind the legs of these figures is a dog in low relief. He bounds forward with his tail waving, his tongue out, and his deep-set eye gazing up and forward. His existence is due to the artist's desire to fill vacant space.

The fifth warrior, with whom the third group commences, has an erect bearing which serves to check the forward impetus given by the preceding figures. He is barefoot, but wears greaves and a corselet with short sleeves and skirt of some heavy material, below which appears his short chiton. At his left side is hung a sword, in his right hand he carries a helmet,<sup>2</sup> and on his left shoulder rests a ladder. Filling the space between his legs is a quiver in low relief with a cover and short cord.<sup>3</sup> The next warrior is nude with the exception of a cloak, which is fastened on his right shoulder and thrown across his left arm. He strides forward determinedly with his shield on his arm and a sword<sup>4</sup> firmly grasped in

<sup>1</sup> A similar bow is seen on a sarcophagus of the same type at Athens and here the bowstring is shown plastically. This was not the case at Corinth, nor was it of metal. Cf. 'Αρχ. Έφ. 1890, πιν. 9.

<sup>2</sup> The helmet is of the Corinthian type, as is that held by the woman, though the lower part of the latter is mutilated. Below the eyehole is a rosette in relief and on the crown of the helmet a much battered figure resembling an eagle, or possibly a harpy. The relief is awkward at this point, as the warrior's arm appears to pass through the top of the helmet.

<sup>3</sup> Cf. for quivers of this type 'Αρχ. Έφ. 1890, πιν. 9; Robert, *op. cit.* III<sup>2</sup>, 231. The first of these is dated in the early Antonine period, the other in the first half of the second century.

<sup>4</sup> Only the hilt is preserved, but a point of attachment for the blade is still visible on the upper arm.

his right hand. A large Corinthian helmet in low relief is seen between his legs. It is crested and below the large eyehole there seem to be slight remains of a rosette. On the crown is a griffon with upraised paw. The seventh warrior is the most elaborately dressed. He wears greaves and a corselet with an ornamental edging at the neck and armholes and a scalloped border at the bottom. The cloth sleeves and skirt of the fifth warrior are replaced here by leather lappets, each fringed by three beaded strings. Below these appears the edge of his chiton. He carries a shield and has a sword at his side, the hilt of which is adorned with an animal's head. He is further distinguished by his thick-soled sandals,<sup>1</sup> and his helmet.<sup>2</sup> A shield in low relief, bearing a sphinx with upraised right paw, fills the opening between his legs.

The subject of this relief is, so far as I know, unique in classical art. It represents the Seven against Thebes setting out from Argos. The certain identification of the seven warriors with the Seven against Thebes is made possible by the fifth warrior, the one who carries a ladder. From literature<sup>3</sup> we learn that Capaneus was struck by lightning while scaling the walls of Thebes with a ladder, and this scene is fairly common in art.<sup>4</sup> As no other hero of antiquity is associated with a ladder, its presence here is sufficient to identify the fifth warrior with Capaneus. The scene of parting at the left and the beckoning seventh warrior fix the moment as that of the departure of the Seven, presumably from Argos.

The exact identification of the other six warriors is impossible, though plausible attributions may be made for most of them. In fact, I doubt whether the artist had definite heroes in mind when he carved the individual figures, with the exception of the fifth and, possibly, the fourth. The following discussion, therefore, gives the most plausible attributions without attempting to dogmatize.

The fourth warrior is distinguished by the boar's hide. Euripi-

<sup>1</sup> As only the soles are represented, the straps must have been painted.

<sup>2</sup> All that remains of the helmet is the end of its crest, which can be seen in several incised lines coming to a point above the figure's left shoulder.

<sup>3</sup> Eurip. *Phoen.* 1172 ff.; *Suppl.* 496 ff.; Diodorus IV, 65, 8; Apollod. *Bib.* III, 6, 7.

<sup>4</sup> Benndorf, *Das Heroon von Gjölbaschi-Trysa*, pl. XXIV, A4; Robert, *op. cit.* II, 184; Brunn-Körte, *I Rilievi delle Urne Etrusche*, II, pls. XXII-XXIV; 'Αρχ. Έφ. 1889, pl. II, 15, pp. 101 ff. (Coin of Septimius Severus from Βεζύβης in Thrace).

des<sup>1</sup> mentions the oracle of Loxias commanding Adrastus to wed his daughters to a lion and a boar. This refers to a story, variously told, that Tydeus and Polynices, having sought shelter for the night in the palace of Adrastus, fell to fighting. Adrastus, thereupon, recognized in them the lion and the boar of the oracle, for, according to Hyginus,<sup>2</sup> Polynices was clad in the lion's skin and Tydeus in the boar's hide. The fourth warrior, therefore, may be identified with Tydeus.

Amphiaraus, the seer who prophesied the defeat of the expedition, plays an important part in the story, but unfortunately he has no distinctive attributes, though in art he is generally represented in his chariot. The story, however, is told that, when he opposed the expedition against Thebes, Adrastus bribed his sister, Eriphyle, wife of Amphiaraus, to persuade him to accompany the expedition, by offering her the golden necklace said to have been given to Harmonia by Aphrodite.<sup>3</sup> Since the only scene in art drawn from the departure of the Seven from Argos, of which I know, is the parting of Amphiaraus and Eriphyle,<sup>4</sup> and since the first warrior is obviously taking leave of a woman, it is possible that these are Amphiaraus and Eriphyle.

The seventh warrior is clearly the leader of the expedition, as is shown by his commanding position and gesture, and his elaborate armor. His identification, however, is uncertain. Adrastus is included in all but two of the lists of the Seven found in literature. In four of these<sup>5</sup> he is named first, and in another<sup>6</sup> last. Moreover, in the two exceptions<sup>7</sup> he is considered as a member of the expedition. Polynices, however, is included in all the lists and is the instigator and cause of the expedition. Furthermore, if we identify the seventh warrior with Adrastus, the three unnamed warriors have no attributes to connect them with Polynices, whereas, if the leader is Polynices, the second warrior may be taken for Adrastus. The deciding feature is the horse, for we know from literary sources<sup>8</sup> that Adrastus possessed a famous

<sup>1</sup> *Phoen.* 409 ff.

<sup>2</sup> *Fab.* 69; cf. also Apollod. *Bib.* III, 6, 1.

<sup>3</sup> Apollod. *Bib.* III, 6, 2; Diodorus, IV, 65, 5-6; Hygin. *Fab.* 73.

<sup>4</sup> *Mon. del. Inst.* 1843, Vol. III, pl. LIV; *Ann. del. Inst.* 1843, Vol. XV, pp. 206 ff.

<sup>5</sup> Apollod. *Bib.* III, 6, 3; Diodorus, IV, 65, 7; Hygin. *Fab.* 70; Paus. X, 10, 2.

<sup>6</sup> Eurip. *Phoen.* 1134 ff.

<sup>7</sup> Aesch. *Sept.* 50; Eurip. *Suppl.* 860 ff.

<sup>8</sup> Homer, *Il.* Ψ, 346 ff.; Apollod. *Bib.* III, 6, 7; Hygin. *Fab.* 70, 71a.

horse, Arion, by which he was saved after the attack on Thebes. As a horse is not closely connected with any other of the Seven, it seems plausible to identify the second warrior with Adrastus and the seventh with Polynices.

Of the remaining warriors, the third and sixth, one may be the burly Hippomedon,<sup>1</sup> who is included in most lists of the Seven, the other a vague seventh—the youthful Parthenopaeus,<sup>2</sup> or Eteoclus,<sup>3</sup> or even Mecisteus.<sup>4</sup> As the third warrior is clearly the older and more massive of the two, he should be identified with Hippomedon, leaving the more youthful sixth as a possible Parthenopaeus.

The group on the right end of the sarcophagus (Plate IX) consists of three figures. In the centre is a child, seated on the ground and involved in the coils of a serpent, the raised head of which is missing. At the left a nude male figure rushes forward, a drawn sword in his right hand and his mantle thrown across his left forearm to serve as a shield.<sup>5</sup> His head has been destroyed. To balance him a female figure advances hurriedly from the right, hair flying and right hand upraised in a gesture of dismay. She wears shoes, a long chiton, and an himation, which she seems to have gathered up in her left hand, though this arm and shoulder have been broken away. Behind her appear two objects, the upper parts of which have been destroyed. At the right edge, however, of the fragment on which is the woman's head there is preserved the profile and upraised left paw of a sphinx.<sup>6</sup> This is in line with a continuation of the left vertical edge of the right hand object, which seems to have been a stele surmounted by the sphinx. The spindle-like object between this stele and the woman cannot be identified with certainty.<sup>7</sup>

These figures are not so well executed as those on the front.

<sup>1</sup> Aesch. *Sept.* 475.

<sup>2</sup> Aesch. *Sept.* 520.

<sup>3</sup> Aesch. *Sept.* 445.

<sup>4</sup> Apollod. *Bib.* III, 6, 3.

<sup>5</sup> A close parallel for the pose of this figure is found in a fragment of a sarcophagus, likewise found at Corinth (cf. Robert, *op. cit.* II, 116a).

<sup>6</sup> Unfortunately, this can only be seen with difficulty in my photograph. The paw is unbroken, as is also the lower portion of the face. The eye, forehead, and hair are so badly chipped that the bare outlines remain. Between chin and paw appears the curve of the breast. The head is only 0.045 m. in height. The appearance of the sphinx here and on the shield in front is perfectly natural, in view of its prominent part in the Theban legend.

<sup>7</sup> See p. 440, note 2.

The nude portions of the man are treated in the same manner, but the modelling is more sketchy, especially in the right arm. The woman's upraised arm is very wooden in appearance and her drapery harsh and stiff, as compared with the other female figures. The same may be said of the man's cloak, with its impossible fold, flying up above his arm. The child's figure is entirely too large and very crude in execution. The legs are poorly articulated, the feet impossible. The gesture is stiff and the modelling cursory and incorrect. The heads of the child and woman are the only ones on the whole sarcophagus that are preserved. Both have heavy chins and sulky mouths with thick lips. The child's head is poorly proportioned, with the ear too far back and the eye too large. The iris is indicated by a circular hollow. This is not true of the woman's eyes, where the eyeball is plain. Her head is better proportioned and the features are more regular and pleasing.

In order to identify this scene we must return to the story of the Seven. After leaving Argos the expedition came to Nemea where it met with a certain Hypsipyle, nurse to Opheltes, son of Lyncus, king of that land. The Seven asked her to guide them to water, and she, fearing to lay the child upon the ground, placed him on a lofty bank of parsley by the fountain. For there had been an oracle that, were he set upon the ground before he could walk, the boy would die. Then, while Hypsipyle was assisting the warriors, a serpent, guardian of the spring, killed Opheltes (or, as some call him, Archemorus). But Adrastus and the others killed the serpent and held funeral games in honor of the boy, thus establishing the Nemean games.<sup>1</sup>

The right end of the Corinth sarcophagus represents this incident. The moment chosen is that when, the serpent having coiled itself about the boy, one of the heroes rushes forward to kill it, while Hypsipyle hurries up in fear and dismay. The two objects at the right may well have represented the fountain beside which the action took place.<sup>2</sup> The scene is appropriately used in close connection with the departure from Argos, and may symbolize the disastrous ending of the expedition, since Apollo-

<sup>1</sup> Eurip. *Hypsip.*; Hygin. *Fab.* 74; Apollod. *Bib.* III, 6, 4; Paus. II, 15, 2.

<sup>2</sup> The spindle-like object would then have formed the supporting shaft of a basin into which the water might have flowed from a spout in the stele. A similar fountain is seen on a relief in the Vatican, cf. Schreiber, *Hellenistische Reliefbilder*, pl. LXXIV.

dorus tells us that Amphiarus held this to be an omen of their future misfortunes.

The death of Opheltes seems to have been a common coin type in Roman days both at Corinth and Argos<sup>1</sup> and to have been used also on Roman grave stelae.<sup>2</sup> It appears on a "wish-bone" cylix in the British Museum<sup>3</sup> and on an amphora from Ruvo, which is in the Hermitage at Petrograd.<sup>4</sup> On another vase from Ruvo<sup>5</sup> is seen the "laying out" of Archemorus. His death is found in relief on an Etruscan funerary urn,<sup>6</sup> and on a Hellenistic relief of the Palazzo Spada,<sup>7</sup> where two warriors attack the serpent. Another representation occurs in a fresco from Pompeii,<sup>8</sup> and here again there are two warriors, in addition to Hypsipyle, Opheltes, and the serpent. These examples are sufficient to show that in Roman times this was one of the favorite scenes drawn from Greek legend for artistic representation. It is not surprising then to find it on a sarcophagus which is clearly of Roman date.

The conclusion that the Corinth sarcophagus was made in the period of Roman domination is based on the style, the form, and in particular on the couch lid. These lids in the form of funerary couches, though found in Greek lands in isolated examples from the fourth century B.C. on, are, none the less, a conception primarily Etruscan. It is from Etruria that they entered Rome, and from Rome in the imperial period they penetrated Greek lands.<sup>9</sup> Therefore the fact that our sarcophagus had a lid of this type is sufficient in itself to suggest a Roman date. The execution of the reclining figure, moreover, in so far as one may judge in its mutilated state, is consistent with this.<sup>10</sup>

<sup>1</sup> Imhoof-Blumer and Gardner, *Num. Comm. on Paus.* p. 33, pl. I, 2-9. A Corinthian coin of the time of Caracalla (pl. I, 9) resembles the Corinth sarcophagus in its presentation of the subject.

<sup>2</sup> My authority for this statement is Baumeister (*Denkmäler, s.v. Archemorus*), but I have been unable to verify it.

<sup>3</sup> Murray-Smith, *White Athenian Vases*, pl. 18.

<sup>4</sup> Overbeck, *Heroische Gallerie*, IV, 2.

<sup>5</sup> Overbeck, *op. cit.* IV, 3.

<sup>6</sup> Brunn-Körte, *op. cit.* II, pl. VII, 2.

<sup>7</sup> Schreiber, *op. cit.* pl. VI.

<sup>8</sup> Naples Museum, No. 8987.

<sup>9</sup> Th. Reinach in *Mon. Piot*, IX, 1912, p. 225.

<sup>10</sup> The arrangement of the legs with the left one crossed beneath the right, the summary execution of the left foot, and the flat, lifeless folds of the lower portions of the drapery find parallels in a sarcophagus from Salonica (Robert, *op. cit.* II, 69) and in the Kertsch example (*op. cit.* II, 21), both of which belong in the Antonine period.

The treatment of the figures, though based on Greek models of the good classical period, is late. The dryness and hardness of the nudes, the stiff formality and deep channelling of the drapery, especially noticeable on the right end, and the incised iris of the eye of the child, all demonstrate this. Another late feature is the introduction of objects having no real connection with the scene merely to fill vacant space, such as the dog, quiver, helmet, and shield in low relief on the front. The style of the reliefs, however, seems to be the product of a Greek stone-cutter who had been influenced by the art of Rome but still retained the old Hellenic ideals. He keeps his figures large and in a single relief plane, showing the Greek interest in the figures of the composition for themselves, rather than for their value as pattern.

In the second century A.D. there developed in Greece a type of sarcophagus which is to be distinguished as Greek, rather than Roman or Graeco-Roman, by certain marked characteristics which have been recognized by several scholars. Altmann<sup>1</sup> has attempted to differentiate this type, Weigand<sup>2</sup> accepts such a group, and Matz<sup>3</sup> has stated its more distinctive features, but as yet there has been no complete discussion of it. The obvious characteristics of these Greek sarcophagi of the Roman imperial period are the marked architectonic form, the decoration on all four sides, the use of Greek marble, and the high, gabled lids<sup>4</sup> usually covered with imbrications. Most of the examples of this type, which is dated in the second century and early third, have angle bases, generally adorned with animals, as in our sarcophagus. The sarcophagus from Salonica, mentioned above, is typical of the fully developed form of this group.

The Corinth sarcophagus clearly belongs to this Greek type. It has the architectonic form with angle bases and caryatids, which are found on several examples.<sup>5</sup> The mouldings are simple and few in number. The Lesbian cyma closely resembles cymas

<sup>1</sup> *Arch. u. Orn. d. ant. Sark.* pp. 86 ff.

<sup>2</sup> *Jb. Arch. I.* 1914, p. 77.

<sup>3</sup> *Arch. Zeit.* 1873, pp. 11 ff.

<sup>4</sup> The pure Greek type followed the canon fixed in the fourth century B.C. by sarcophagi like the Alexander sarcophagus from Sidon, which is architectonic in form and has an imbricated, double-pitched lid. Couch lids, however, occur frequently on sarcophagi which in all other respects must be classed as Greek. They merely reflect the influences of Rome and of Roman burial customs on the Greeks.

<sup>5</sup> Cf. Robert, *op. cit.* II, 21, 23, 69, 129.



which according to Weigand are survivals of the form used in late Hellenistic and early imperial times and are found at this late date only in the conservative Greek class of sarcophagi.<sup>1</sup> The relief decoration was, presumably, used on all four sides, though only three are preserved. The mouldings on the front and right end are identical, while on the back they are simplified and are not so highly finished. This is also characteristic of the Greek sarcophagi, where the front and one end are usually similar in subject and mouldings, while the back and the other end generally have less carefully finished mouldings and subjects of minor importance. The marble of the Corinth sarcophagus is Greek, although I have been unable to identify it certainly as from any particular quarry. It is too closely grained and not luminous enough to be an island marble, but whatever the quarry it may have come from, it certainly is not Italian.<sup>2</sup> The lid of the Corinth sarcophagus is not of the imbricated form typical of the class, but, as we have seen above (p. 442, note 4) the couch lid, though not characteristic, is frequently found on these sarcophagi.

A consideration of this Greek type of sarcophagus gives a *terminus a quo* for the date of the Corinth sarcophagus. There is no example of the group definitely dated before the reign of Antoninus Pius, which began in the year 138 A.D. The Kertsch sarcophagus forms the closest parallel to the one at Corinth, particularly in the decoration of the back and right end. This is dated by Robert<sup>3</sup> in the Antonine period, and by comparing it with the rest of the group I have come to the conclusion that it belongs to the middle of that period, possibly in the reign of Lucius Verus (161-169 A.D.). The Corinth example, however, seems somewhat earlier than the one from Kertsch. It lacks the acanthus

<sup>1</sup> *Jb. Arch. I.* 1914, p. 77. In Asiatic and Syrian ornament at this time the Lesbian cyma had split up in a coloristic sense, cf. Weigand, *op. cit.*, Abb. 34 d, e, f, g (Beilage 5 zu Seite 72).

<sup>2</sup> In my opinion the marble resembles certain samples of marble from the Parthenon, and I am inclined to think it Pentelic. Mr. A. R. Priest of Harvard University kindly submitted fragments from the sarcophagus and from an architrave block of the Parthenon to Mr. E. S. C. Smith of the Department of Geology at Harvard. Mr. Smith says that the chemical composition and grain of the two samples is identical. Because of the slight suggestion of color in the sarcophagus fragment he doubts whether both are from the same quarry, although he says that it would be quite possible to find marbles of such slight divergence in the same quarry, as parts of a quarry may be stained while others are pure.

<sup>3</sup> *Op. cit.* II, 26 ff.

*rinceau* and the complicated series of lower mouldings found on the latter; the drapery of the caryatids is more simply treated and is closer to good Greek models; and the figures, themselves, are less confused, having greater value as individual units. In size it is slightly lower and shorter than the sarcophagus from Kertsch, though the width is almost exactly the same. A comparison of the measurements of the group shows that the Kertsch sarcophagus sets the standard for later examples, while earlier ones are smaller. These considerations all point to a date for the Corinth sarcophagus slightly earlier than the Kertsch example. Therefore, it is probably to be assigned to the latter part of the reign of Antoninus Pius—about 145–161 A.D.<sup>1</sup>

J. DONALD YOUNG.

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<sup>1</sup>As I said above, this type of Greek sarcophagus of the second and third centuries has never been completely discussed nor its examples arranged in chronological order. I expect in a later article to discuss the group and attempt to establish its chronology. For the purposes of this article, I have made a tentative chronological list, which is given below.

<i>Provenience</i>	<i>Present Location</i>	<i>Reference</i>	<i>Date</i>
Kephissia	Kephissia	Robert, <i>op. cit.</i> II, 9	Early Antonine
Patras	Athens	“ “ “ III <sup>2</sup> , 216	“ “
Kertsch	Petrograd	“ “ “ II, 21	Middle “
Hierapetra	London	“ “ “ II, 23	“ “
Unknown	Constantinople	“ “ “ II, 74	“ “
Salonike?	“	“ “ “ III <sup>2</sup> , 144	Late “
Salonike	Louvre	“ “ “ II, 69	“ “
Triest	Triest	“ “ “ II, 29	“ “
Atella	Barile	“ “ “ II, 22	ca. 200 A.D.
Greek Islands	Petrograd	“ “ “ II, 20	Early third cent.

STUDIES IN THE HISTORY AND TOPOGRAPHY OF  
LOCRIS III<sup>1</sup>

A NEW INSCRIPTION FROM PHYSCUS IN WEST LOCRI

THE inscription published below I found, August 1, 1914, on the occasion of a hurried trip on foot through West Locris after the outbreak of the Great War. My squeeze-paper had been lost out of the pack in the rough country, and I had no time for an elaborate reproduction of the precise shapes of the letters (which, however, as I noted at the time, showed no peculiar features), but in essentials I trust that my copy is fairly accurate.<sup>2</sup> The general style is that of the second century B.C. The lines are somewhat irregular in length, due in part no doubt to the fact that the inscription was cut in the right end of a *hemicyclium*, numerous pieces of which and of the accompanying statue-base or altar lay about on the ground near the north-west corner of the ancient wall of Physcus, immediately south of the modern village of Malandrino.

Θ Ε Ο Σ Α Γ Α Θ Α Ι Τ Υ Χ Α Ι

ΑΓΩΝΟΘΕΤΕΟΝΤΟΣΣΤΡΑΤΑΓΟΥΠΟΡΘΑΟ . . .

ΦΥΣΚΕΟΣΤΟΚΟΙΝΟΝΤΩΝΛΟΚΡΩΝΕΔΩΚΕΑΡΙΣΤΟΚΡΑ . . .

. ΩΙΕΥΑΓΟΡΑΑΧΑΙΩΙΕΞΑΙΓΙΟΥΤΠΡΟΞΕΝΙΑΝΚΑΙ

5 ΕΥΕΡΓΕΞΙΑΝΚΑΙΠΟΛΙΤΕΙΑΝΚΑΙΑΣΥΛΙΑΝΚΑΙ

ΠΡΟΔΙΚΙΑΝΚΑΙΑΤΕΛΕΙΑΝΠΡΟΕΔΡΙΑΝΚΑΙΓΑΣ

ΕΝΚΤΗΣΙΝΚΑΙΟΙΚΙΑΣΚΑΙΑΥΤΩΙΚΑΙΕΓΓΟΝΟΙΣ

ΚΑΙΠΟΛΕΜΟΥΚΑΙΕΙΡΑΝΑΣΚΑΙΚΑΤΑΓΑΝ

ΚΑΙΚΑΤΑΘΑΛΑΣΣΑΝΚΑΙΤΑΑΛΛΑΟΣΑΚΑΙ

10 ΤΟΙΣΑΛΛΟΙΣΠΡΟΞΕΝΟΙΣΚΑΙΕΥΕΡΓΕΤΑΙ

ΣΔΙΔΟΤΑΙΤΑΝΤΑ ΕΝΓΥΟΙΤΑΣΠΡΟΞΕ

ΝΙΑΣ . . . ΟΙΤΕΛΕΣΑΡΧΟΣΔΑΜΟΤΕΛΕΟΣ

MENANΔΡΟΣΔΥΜΑΝ

<sup>1</sup> See *A. J. A.* XX, 1916, pp. 32 ff.; 154 ff.; 346 ff.

<sup>2</sup> I should naturally have published this stone together with the inscriptions from East Locris (*A. J. A.* XIX, 1915, pp. 320 ff.), had not the card on which it was copied been misplaced, so that I did not find it again until July, 1921.

θεὸς ἀγαθὰί τύχαι.  
 ἀγωνοθετέοντος Στρατάγου Πορθάο[νος  
 Φυσκέος, τὸ κοινὸν τῶν Λοκρῶν ἔδωκε Ἄριστοκρά[ται  
 [τ]ῶι Εὐαγόρα Ἀχαιῶι ἐξ Αἰγίου προξενίαν καὶ  
 5 εὐεργεσίαν καὶ πολιτείαν καὶ ἀστυλίαν καὶ  
 προδικίαν καὶ ἀτελείαν, προεδρίαν καὶ γᾶς  
 ἔγκτησιν καὶ οἰκίας καὶ αὐτῶι καὶ ἐγγόνοις  
 καὶ πολέμου καὶ εἰράνας καὶ κατὰ γᾶν  
 καὶ κατὰ θάλασσαν καὶ τὰ ἄλλα ὅσα καὶ  
 10 τοῖς ἄλλοις προξένοις καὶ εὐεργέται-  
 σ διδοται πάντα. ἔνγυοι τᾶς προξε-  
 νίας [Λοκρ]οὶ Τελέσαρχος Δαμοτέλεος,  
 Μένανδρος Δυμάν.

The dating by the *agonothetes* indicates that West Locris is completely free from the Aetolian League; the inscription belongs, therefore, in the period after 166 B.C. (Salvetti, *Studi di Stor. Ant.*, II, 104; Dittenberger, *Hermes*, XXXII, 161 ff.; *Fouilles de Delphes*, III, 1, 218k; *Syll. Inscr. Graec.*<sup>3</sup>, 291; more exactly, after some date between June and November, 166, see H. Pomtow, *Neue Jahrb.* CLV, 798, 8), and certainly before 100 (since all known inscriptions recording the West Locrian *agonothetes*, now 17 in number, including the present one,<sup>1</sup> see my forthcoming article 'Lokris' in Pauly-Wiss. *Realencycl.*, belong to the second century; cf. A. Nikitsky, *Journ. of the Min. for Popular Educ.* [Russian], 1911, *section for Class. Philol.*, Feb., pp. 70 ff. (inaccessible) and A. Wilhelm, *Jb. Oest. Arch. I.* XIV, 225). The view, however, of E. Nachmanson, *op. cit.* pp. 58 ff., that the West Locrian *κοινόν* was among those which the Romans dissolved in 146 (Paus. VII, 16, 9 f.) and had not yet restored by 143, is certainly incorrect,<sup>2</sup> since *S.G.D.I.* 1937 dates from ca. 145/4 (Pomtow, Pauly-Wiss., *op. cit.* IV, p. 2641), three other inscriptions which also mention the *agonothetes* coming a few years later (*i.e.*, *S.G.D.I.* 2140 from ca. 142/1; 2097 from ca. 133/2; and *B.C.H.* XXII, 10, No. 2, from 130). It would seem, therefore, that Niese (*Gesch. der griech. und maked. Staaten*, III, 356 and note 3; compare also Hitzig-Blümner on Paus. *loc. cit.*, and Nachman-

<sup>1</sup> E. Nachmanson's list, *Ath. Mitt.* XXXII, 60, 1, includes falsely *S.G.D.I.* 2568, which, like 2962, refers to the celebration of games at Delphi.

<sup>2</sup> Compare also the criticism by H. Swoboda, *Staatsaltertümer* in Hermann's *Lehrbuch*, I, 3<sup>e</sup>, p. 368, 4.

son, *op. cit.* pp. 58 f.) was justified in restricting the statement of Pausanias regarding the dissolution of all the leagues in Greece, to those which actually took part in the war, since, although Pausanias also records the reëstablishment of the leagues "not many years later," the inscriptions of 145/4 and 142/1 follow quite too close upon the war to admit of this explanation. It follows that West Locris, no doubt under Aetolian influence, took no part in the war against Rome, and hence the Locrians who suffered so severely at this time (Polyb. XXXVIII, 3, 8) were those of East Locris exclusively.

The present inscription can be placed shortly after 166 B.C. by means of the number of persons who can be identified from Delphic inscriptions of fixed date. Thus, Stratagos the son of Porthaon appears as a manumitter in 170 B.C. (*S.G.D.I.* 1739), and in 166 (*S.G.D.I.* 1851) a certain Stratagos, very probably the same person, is associated with Polemarchos, Callicrates and Crinias, who appear together in *I.G.* IX, 1, 349 and 351, inscriptions which date from a period soon after 170 (see Dittenberger on No. 349), while about the same time a Stratagos serves as a witness at Physcus (A. Wilhelm, *Beitr. zur griech. Inschriftenkunde*, 129).<sup>1</sup> Porthaon, son of Stratagos (obviously the grandfather of the present Stratagos), is a witness in 170 (*S.G.D.I.* 1739), and again a Porthaon, no doubt the same person, is a witness shortly after 170 (*I.G.* IX, 1, 352). Telesarchos, son of Damoteles (probably the *Boularch* of 189/8, *S.G.D.I.* 2070. 2139), appears as *agonothetes* in 154 (*S.G.D.I.* 1908). A Damoteles, son of Callicrates, is a witness in 130 (*B.C.H.* XXII, 10, No. 2), and a mere Damoteles from Physcus (very likely the same man) is a witness in 133 (*S.G.D.I.* 2097); he is pretty clearly the grandson of the Damoteles, father of Telesarchos, of the present inscription. The elder Damoteles must then have had two sons, Telesarchos and Callicrates, the latter being mentioned also in *I.G.* IX, 1, 349 (soon after 170) and *S.G.D.I.* 1851 (166 B.C.). Probably also Menandros, a secretary at Dyme, certainly in the third century B.C., and very likely in 219 (*Syll.*

<sup>1</sup> Since Stratagos and Porthaon appear as witnesses on the inscription published by Wilhelm, as well as in the group *I.G.* IX, 1, 349-52, one can supplement from Wilhelm's inscription in *I.G.* IX, 1, 350, with a high degree of probability, the following incomplete names: l. 6 Κριτ[όλαος], already suggested by Dittenberger (his son and grandson are mentioned in a Delphic inscription of 152, *S.G.D.I.* 2019), l. 7 Ἀριστό[δαμος], l. 9 Ἀλέξα[νδρος].

*Inscr. Graec.*<sup>3</sup> 529 and Hiller von Gaertringen's note thereon), is the grandfather of the present guarantor.

l. 3. This is the only mention of the *κοινόν* of the West Locrians although the institution is presupposed by all the records which are dated by the *agonothetes*. Like other *κοινά* it bestowed proxeny (cf. Swoboda, *op. cit.* p. 473, *s.v.* Bundes-Proxenie), but the right of individual cities, members of the *κοινόν*, to do the same remained unimpaired (*e.g.* Chalaion from *ca.* 150 B.C., *I.G.* IX, 1, 330; cf. Swoboda, *op. cit.* p. 479, *s.v.* Städtische Proxenie in Bundesstädten).—That an inscription of the *κοινόν*, not referring directly to Physcus, is nevertheless recorded in that place, makes it very probable that this town was its official centre, and, since the eponymous magistrate was an *agonothetes*, that the *ἀγών* was held here, hence in honor of Ἀθηναῖα Ἰλιάς (mentioned in manumissions at Physcus, *I.G.* IX, 1, 349–52, Cohen, *B.C.H.* XXII, 354 ff., Wilhelm, *Beiträge*, p. 129. 132 ff.), no doubt the equivalent of ἁ Δοκρῖς Αἰαντία, the chief deity of Naryx (Wilhelm, *Jh. Oest. Arch. I.* XIV, 168 f.), in East Locris, the special home of the Locrian Ajax, who in turn, must have been identical with the Ἀθηναῖα Αἰαντίς of Megara, connected with the Telamonian Ajax (Paus. I, 42, 4). Accordingly Wilhelm's conjecture (*Beiträge*, p. 225 f.), that the festival at which the *agonothetes* presided was the Πτεία (*I.G.* IV, 428), or Πῖα (Plut. *Sep. Sap. Conv.* 19) at Antirrhion,<sup>1</sup> is almost certainly incorrect.

l. 4 ff. The formulae are unusually abundant but all are common enough.

l. 11. For the rare provision whereby a guarantor might be appointed, see the Aetolian decree of the year 182 B.C. (*Sylloge*,<sup>3</sup> 629, 31), ἔγγυος τῶν προξενίων ὁ γραμματεὺς.

l. 12 f. That [Δοκρ]οί is the word to be supplied here seems likely from the name of the first guarantor, who is a citizen of Physcus.<sup>2</sup> The plural, however, is a bit surprising. One might have expected Δοκρὸς T. Δ. Ἀχαιὸς M. Δ., but there is no indication that any letters have been lost at the beginning of the

<sup>1</sup> This was clearly in honor of Poseidon, see my article 'Antirrhion', in Pauly-Wiss. *op. cit. Supplbd.* III, 125 f.

<sup>2</sup> My colleague, Professor Arthur Stanly Pease, makes the interesting suggestion that the stonecutter carved ΕΝΓΥΟΙ twice by mistake, and then himself deleted, but not quite successfully, the repeated word. This may be the correct explanation, but the problem of the close political connection between Dyme and West Locris would still remain.

thirteenth line, and it is difficult to see how a citizen of an Achaean city, who was not at the same time also a Locrian, could function as a guarantor for a government to which he was not subject and by which normally he could not be called to account. [Λοκρ]οί is, accordingly, perhaps correct, and we are, therefore, probably to understand that the citizens of Dyme enjoyed complete isopolity with the West Locrians, precisely as the Ceans were one and all full citizens of the city of Naupactus, their *metropolis* (see *Sylloge*,<sup>3</sup> 522, III; Héraclides Pont., *F.H.G.* II, 214). That the Dymanes were otherwise closely connected with Physcus appears from the fact that two of them served as witnesses for the manumission of a slave at Physcus by citizens of the place (Wilhelm, *Beiträge*, p. 129). Even more striking is the Φιλόνικος Δυμάν (Δυμᾶν Wescher-Foucart and Baunack) who is actually *agonothetes* of West Locris between 170–157/6 B.C. (*S.G.D.I.* 1842) and appears again as βεβαιωτήρ in 166 for a Locrian manumission from Physcus (*S.G.D.I.* 1851).<sup>1</sup> For a citizen of Dyme to serve as *agonothetes* in a neighboring state is, indeed, singular, though undoubtedly quite legal (cf. E. Szanto, *Das griech. Bürgerrecht*, pp. 22 ff.), but, although the office in West Locris, because of its eponymous character, was no doubt technically an ἀρχή, and not as in Athens merely an ἐπιμέλεια (*I.G.* II, 307, and especially II, 379, 5 f.), still, in a loosely organized κοινόν like that of West Locris, there was doubtless very little business indeed for even the chief executive to perform, most of that probably coming at the festival season, so that the principal duty of this particular *agonothetes* was merely to defray the expenses of the celebration (cf. Reisch in Pauly-Wiss. *op. cit.* I, 873, 46 ff; 876, 42 ff.), a privilege which might, accordingly, among a notoriously poor people like the Western Locrians, be occasionally bestowed, without invidious discrimination, upon a friendly and wealthy foreigner, who was also technically a citizen of the country.

One might, indeed, regard Δυμάν as the *ethnikon* of an otherwise unknown community in West Locris, but its use in the present inscription is strongly against that explanation, besides we have already such a multitude of place-names from West Locris, that a locality of sufficient consequence to produce an *agonothetes* could hardly have escaped every other record but these. Another

<sup>1</sup> Δυμάν in these inscriptions is certainly not a phyle-name, as Baunack on *S. G. D. I.*, 1851, observes.

objection to the explanation proposed above, is that the ordinary *ethnikon* for Dyme is  $\Delta\nu\mu\alpha\acute{\iota}\omicron\varsigma$  (so regularly in literature, and also on inscriptions, *Sylloge*,<sup>3</sup> 531 and 684 from Dyme itself, 702 (note) an Achaean inscription from Delphi, *I.G.* IV, 727 from Hermione, 925, 4 from Epidaurus).  $\Delta\acute{\upsilon}\mu\eta$  is, however, a late name for the settlement, older designations being Paleia and Stratos (Philippson in Pauly-Wiss. *op. cit.* V, p. 1878), and is derived from the  $\Delta\nu\mu\hat{\alpha}\nu\epsilon\varsigma$  who inhabited the region (Szanto in Pauly-Wiss. *op. cit.* V, p. 1876), so that  $\Delta\nu\mu\alpha\acute{\iota}\omicron\varsigma$  was the local *ethnikon* probably employed in order to avoid confusion with the phyle-name  $\Delta\nu\mu\acute{\alpha}\nu$  (hence in literature, and in another Doric country where the  $\Delta\nu\mu\hat{\alpha}\nu\epsilon\varsigma$  appeared), while the West Locrians seem to have used (perhaps better, *retained* from earlier times) a form which properly designated the inhabitants of the *pagus* rather than strictly only the citizens of the later town.

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LATIN INSCRIPTIONS FROM CORINTH<sup>1</sup>

III

GAIUS IULIUS SEVERUS

17. (Fig. 1.) White marble block. Height 0.765 m.; width 0.45–0.43 m.; thickness 0.29 m.; letters 0.045–0.02 m. in height. Found in 1898. Place not known, now in Museum at Corinth.

Transcription:

- C (aium) Iulium Iuli(i) Quadrati [f(ilium)]*  
[*F*] *ab(ia tribu) Severum pr(aetorem) leg(atum)*  
*propr(aetore) prov(inciae) Asiae, leg(atum) leg(ionis)*  
*(quartae) Scythicae, proco(n)s(ulem) prov(inciae)*
- 5 *Ach(aiae), curionem, patronum,*  
*ob iustitiam et sanctitatem.*  
[*L?*] *Marius Piso q(uaestor) et praet(or)*  
[*hu?*] *ic sponte sua cum L(ucii)s*  
*Mariis Floro Stlacciano*
- 10 *et Pisoni Resiano libe—*  
*ris suis.*  
*Pro tribu Maneia*  
*d(edit) d(edicavit)*

The face of the stone is considerably worn and in some places broken away.

Line 1. Only the last five letters now exist on the stone. The remainder of the line has been lost since the inscription was found and is now known from a photograph of the American School.

Line 7. There seems to be room for L before M.

Line 8. H may have been the first letter.

The inscription was executed in honor of Gaius Iulius Severus, the son of Iulius Quadratus and a member of the tribe Fabia. Severus held during his lifetime the following offices: praetor, legatus propraetore of the province of Asia, legatus of *legio IIII*

<sup>1</sup> See *A.J.A.* XXII, 1918, pp. 189–197 and XXIII, 1919, pp. 163–174.

*Scythica*, and proconsul of the province of Achaia. To him are applied the words *curio* and *patronus*. The former word is not infrequent in the inscriptions (see *curio* in *Thesaurus Linguae Latinae* and Pauly-Wissowa, *Real-Encyclopaedie*) and seems to refer to priestly functions discharged, perhaps, in behalf of the

tribe Maneia. It is not improbable that the word *patronus* also concerns his relationship with this tribe. (See *A.J.A.* XXIII, 1919, p. 167.)

A man named C. Iulius Severus of the tribe Fabia who held some offices identical with those mentioned above is known from four inscriptions in Greek found at Ancyra. The earliest one of the group was cut after 114-115 A.D. (*Insc. Gr. ad Res Rom. Pert.* III, 173 = Dittenberger, *Orient. Gr. Insc.* No. 544). On this stone the name is incomplete and no offices are given. A second inscription (*I.G. a. R.R.* p. III, 174 = Dittenberger, *op. cit.* No. 543) preserves the name *Γ. Ι. Σεουήρος*

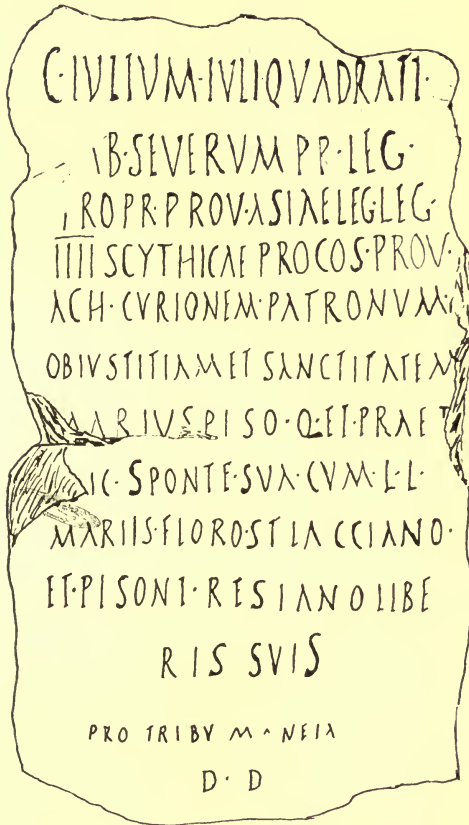


FIGURE 1.—LATIN INSCRIPTION FROM CORINTH, No. 17.

(corrected by Dittenberger from *Τι. Σεουήρος*). To the name are added offices held during the reign of Hadrian, *ἡγεμών* of *legio IIII Scythica* and *ἀνθύπατος* of Achaia. There follows the mention of other offices not recorded on the stone at Corinth.

A third inscription (*I.G. a. R.R.* p. III, 175 = *C.I.G.* 4034) contains the same name and offices with the addition of *ἀνθύπατος*

of Asia, an honor held in 153–4 A.D. in all probability. A fourth inscription (*I.G. a. R.R.* p. III, 172 = *C.I.G.* 4029) belongs to the year 155 A.D. Here the complete name is given, C. Iulius Severus, the son of Gaius, of the tribe Fabia. This man was *χλιάρχος* of the legion already mentioned and held other offices not recorded on the stone at Corinth.

In this group of inscriptions, then, there are striking similarities in names and offices to those of our inscription, but the evidence is not sufficient to prove the identity of the Severus mentioned in them with the Severus of Corinth. None of inscriptions from Ancyra records any mention of Iulius Quadratus or lists the propraetorship of Asia among the offices. It is possible that the Severus of Corinth was connected with the family honored at Ancyra, but the present evidence is scarcely strong enough to warrant any definite statement to that effect. It is not unlikely that our inscription was set up in the latter half of the second century after Christ. The style of the letters points in that direction.

The stone was erected by L. Marius Piso with his sons L. Marius Florus Stlaccianus and L. Marius Piso Resianus acting in behalf of the tribe Maneia. The cognomen Stlaccianus is formed from the nomen Stlaccius and the ending *-anus*. The nomen Stlaccius has been found on several stones at Rome (*C.I.L.* VI, 26863–26877). The cognomen Resianus is formed by adding the ending *-anus* to a Greek stem *Ρησι-*. Such combinations are not infrequent, *e.g.*, Eutyichianus. The tribe Maneia was one of the local tribal divisions at Corinth, formed after the reorganization of the city as a Roman *colonia* (*A.J.A.* XXII, 1918, pp. 195–6).

18. White marble block. Height 0.26 m.; width 0.25 m.; thickness 0.115 m. A portion of the left side original. Face worn. Letters 0.025 in height. Found, June, 1915, southeast of Pirene.

Transcription:

. . . . .  
 . . . p]r(aetorem), leg(atum) [propr(aetore)  
 prov(inciae) A]siae, le [g(atum) leg(ionis)  
 . . . p]roco(n)s(ulem)prov(inciae) [Achaiae  
 . . . . patr]onum

A comparison of this fragment with lines 2-5 of No. 17 above will show the same succession of offices, and there can be little doubt that this was another inscription dedicated to Iulius Severus. For this reason the transcription has preserved the accusative case in *praetorem*, etc.

TITUS MANLIUS IUVENCUS

19. Blue veined marble slab. Height 0.51 m.; width 0.365 m.; thickness 0.07 m. All original surfaces preserved. Letters 0.062-0.025 m. in height. Found June 27, 1907, place not known.

Transcription:

*T(ito) Manlio*  
*T(iti) f(ilio) Col(lina tribu) Iuvenco*  
*aed(ili) praef(ecto) i(iure) d(icundo)*  
*IIvir(o) pontif(ici)*  
*agonothet(ico) Isthm(ion)*  
*et Caesareon*  
*qui primus Caesa-*  
*rea egit ante Isthmia.*  
*Hieromnemon(es) f(ecerunt).*

Titus Manlius Iuventus was a son of Titus and belonged to the tribe Collina. He held the offices of aedile, *praefectus iure dicundo*, duumvir, and pontifex, doubtless at Corinth. He was *agonothete* of the Isthmian and Caesarean games. We learn from this stone that this was the original order and that Manlius was the first to hold the Caesarean before the Isthmian games. Since there is no mention of the Neronean games the inscription may have been cut before their institution.

The stone was erected by the *hieromnemes*. No other mention of these officials at Corinth during the Roman occupation has been found. Pauly-Wissowa, *s.v.* *Hieromnemes*. For instances of a *praefectus iure dicundo* in towns in the eastern portion of the Roman empire see *C.I.L.* III, Index p. 2552 *s.v.*

PUBLIUS MEMMIUS REGULUS

20. (Fig. 2.) White marble slab. Height 0.93 m.; width 0.40 m.; thickness 0.06 m. Right side broken away considerably and left side badly damaged. Found April 10, 1901. Much

worn, "used, face up, in repair of pavement of lower landing in Roman approach to Propylea." (R. B.) R. The photograph shows two more fragments of the lower portion of the stone which I have not seen. They would increase the height and width noted above. Letters 0.085-0.035 m. in height.

Transcription:

*P(ublio) Memm[io P(ublii) f(ilio)*  
*. . . Regulo . . .*  
*. . . epul(onum) sodali [August(ali)?*  
*. . . fratri Arvali [leg(ato)*  
*. . . Caesaris Augu[st]i i G[ermanici?*  
*pro[v(inciae) Achaiae*

Traces of letters, in two more lines, but too indistinct to be read.

The name Publius Memmius Regulus is known to us from references in literature and from inscriptions. (See *Prosopographia Imperii Romani*.) This inscription seems clearly to refer to the same man as the others. He was consul suffectus in the year 31 A.D. *ex Kal. Oct.*; succeeded Poppaeus Sabinus in the administration of Achaia, Macedonia, and Moesia as propraetor in 35; accompanied his wife to Rome under Gaius; returned to Achaia before the death of Gaius in 41 and was there under Claudius. Memmius was elected to the priesthood of the Arval brothers in 38 and member until 60. In the year 55 at Rome he was the *promagister fratrum Arvalium*. His death occurred in the year 61 A.D. Inscriptions in honor of Memmius Regulus were erected at Athens (*C.I.A.* III, 613, cf. 614-17), at Megara (*I.G.* VII, 87), at Olympia (*Arch. Zeit.* 1877, p. 191), and at Delos (*B.C.H.* 3, p. 158) in Greek. Latin inscriptions outside of Rome have been found at Salonae (*C.I.L.* III, 2028-8753) and Pergamum (*C.I.L.* III, 7090) dedicated to him!

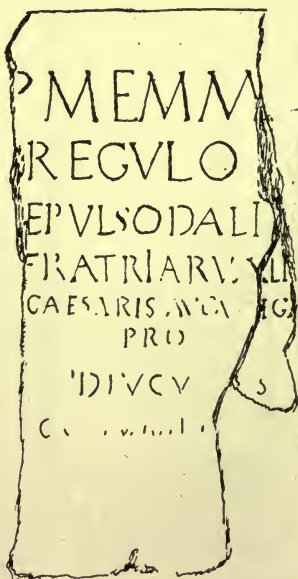


FIGURE 2.—LATIN INSCRIPTION FROM CORINTH, No. 20.

As to the date of this inscription, it seems certain that it belongs to the reign of Claudius from the form of the title in line 5, and it may have been set up before 47, because in that year Memmius became proconsul of Asia. This stone evidently contained a complete list of all his offices up to the time when it was made and if we possessed it in its original state the date could be determined with more accuracy.

LUCIUS PAPIUS LUPERCUS

21. (Fig. 3.) Bluish marble basis. Right side cut away. Height 0.93 m.; width 0.295 m.; thickness 0.625 m. Back rough. Found May 4, 1901, west end of third step of Byzantine approach to Propylea (R. B.) R. Letters 0.042–0.03 m. in height.

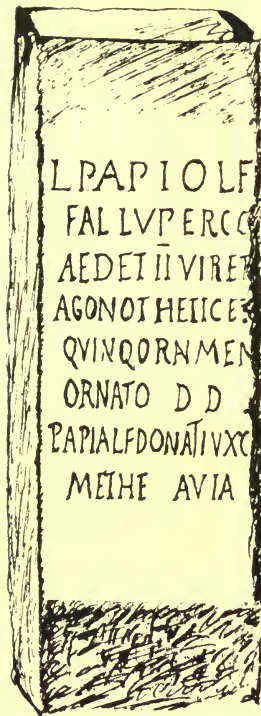


FIGURE 3.—LATIN INSCRIPTION FROM CORINTH, No. 21.

Transcription:

*L(ucio) Papio L(ucii) f(ilio)*

*Fal(erna tribu) Luperco*

*aed(ili) IIvir(o) et*

*agonothetic(o) et*

5 *quinq(uennaliciis) ornamen(tis)*

*ornato d(ecreto) d(ecurionum)*

*L(ucia) Papiæ L(ucii) f(ilia) Donati*

*Methe Avia. [uxor]*

L. Papius Luperceus, known only from this inscription, was a local official at Corinth. He was aedile, duumvir, giver of the games, and the *decuriones* bestowed upon him the *quinquennialicia ornamenta*. His daughter Papiæ, the wife of Donatus, set up the stone. The meaning of the last two words is rather obscure. *Methe* and *Avia* may possibly be the names of slaves or freed women of his household. The former is evidently a Greek word. For similar

names cf. *Canthara*, *Ampelisca*.

The date of the inscription is uncertain, but from the form of the letters it probably belongs to the first century after Christ.

## CALLICRATEA

22. (Fig. 4.) Basis of limestone from Aerocorinth. Height 0.715 m.; width 0.525 m.; thickness 0.42 m. Found May 8, 1901 "near St. John Theologos near βράχος" (R. B.) R. Letters 0.065–0.03 m. in height.

## Transcription:

*Callicrateae*  
*Philesi fil(iae)*  
*sacerdoti in perpet(uum)*  
*Providentiae Aug(usti)*  
*et Salutis Publicae*  
*Tribules tribus Agrippae*  
*bene meritae.*

This, with the following inscriptions, affords a little information about the presence

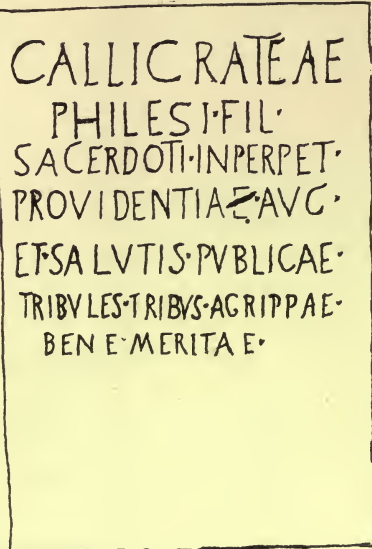


FIGURE 4.—LATIN INSCRIPTION FROM CORINTH, No. 22.

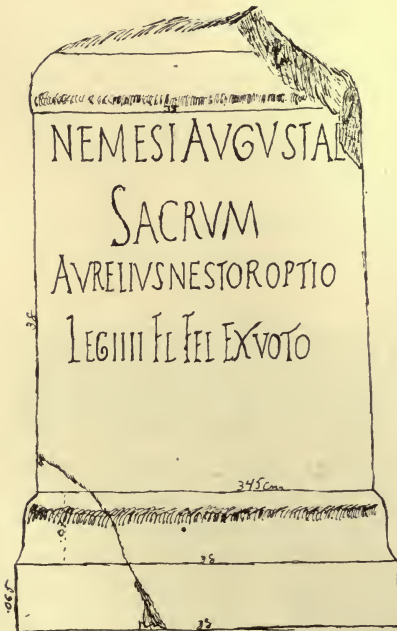


FIGURE 5.—LATIN INSCRIPTION FROM CORINTH, No. 23.

of certain Roman cults at Corinth. The worship of Providentia Augusti and Salus Publica were combined, and the Greek woman Callicratea was priestess for life. The tribe Agrippa (*A.J.A.* XXII, 1918, p. 196), evidently named from M. Vipsanius Agrippa, the son-in-law of Augustus, was one of the new divisions of the city after the reorganization under Augustus. For a dedication to Agrippa see *A.J.A.* XXIII, 1919, p. 167.

23. (Fig. 5.) White marble block. Height 0.62 m.;

width of inscribed face 0.33–0.345 m.; thickness 0.297 m. Surfaces roughly tooled. Found May, 1915, southeast of Pirene. Letters 0.06–0.037 m. in height and carelessly cut.

Transcription:

*Nemesi Augustae  
sacrum  
Aurelius Nestor optio  
leg(ionis) IIII Fl(aviae) fel(icis) ex voto.*

The inscription needs no extended comment. Nemesis is here, doubtless, to be identified with Fortuna, as is the case elsewhere in inscriptions. This form of dedication is not frequent. From the name of the legion we gain our only clue about the date of the stone. In all probability it was cut in the first half of the second century after Christ.

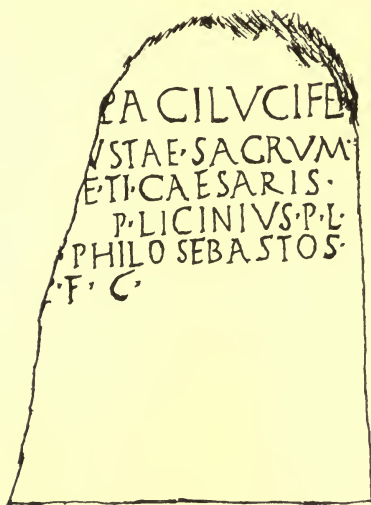


FIGURE 6.—LATIN INSCRIPTION FROM CORINTH, No. 25.

24. Block of limestone from Acrocorinth. Height 0.77 m.; width 0.53 m.; thickness 0.43 m. Found June 15, 1907, in the agora. Letters 0.08–0.05 in height. Dowel hole sunk in top surface of the block.

Transcription:

*Victoriae  
sacrum*

25. (Fig. 6.) Broken basis of limestone from Acrocorinth. Height 0.90 m.; width (maximum at bottom of stone) 0.47 m., at line 5, 0.35 m.; thickness 0.40 m. Found June 14, 1907, in an early Byzantine wall founded on a late Roman pavement east of St. John's. Letters 0.035–0.025 m. in height.

Transcription:

. . . *Paci lucife*  
*ri* . . . *Aug]ustae sacrum*  
. . . *e Ti(berii) Caesaris*



*P(ublius) Licinius P(ublii) l(ibertus)*  
 5 . . . *Philo Sebastos*  
*P? f(aciendum) c(uravit)*

Whether this inscription is a dedication to *Pax lucifer* or to some other divinity with the attribute of *pax lucifer* cannot now be determined. The interpretation of line 3 is likewise not solved. A Greek freedman erected the stone, perhaps in the reign of Tiberius.



FIGURE 7.—LATIN INSCRIPTION FROM CORINTH, No. 26.

26. (Fig. 7.) Nine fragments of marble revetment slab. Top and right side original surfaces. Length at top 0.92 m.; thickness 0.02 m.; letters 0.081 m., well cut. Under the letters GV the stone is blackened by fire. Top of separate fragment similarly discolored.

Transcription:  
 . . . ?La]ribus Augustis  
 . . . . . au .  
 . . . . . ?ns f . .

The cult of Lares Augusti is already well known from inscriptions (Wissowa, *Religionen und Kultus der Roemer*, 2 Aufl. p. 172) and this restoration here seems very probable. Compare No. 36.

27. (Fig. 8.) Section of a marble cornice now broken into five pieces. Height 0.12 m.; height of inscribed face 0.065 m.;



FIGURE 8.—LATIN INSCRIPTION FROM CORINTH, No. 27.

length, measured on inscribed face, 1.05 m. Found April 4, 1902, about seven metres west of the first column of the South Stoa. Letters 0.035 m. in height, not very well cut.

Transcription:  
*Liberti qui Corinthi habitant*[t . . . . .

For the form of the inscription see Pauly-Wissowa, *s.v. Conventus*, where epigraphical evidence is reproduced. In some instances on the stones *liberti* are recorded as members of these organizations. No *conventus* composed entirely of *liberti* is mentioned. Judging solely from the phrasing of the inscription, however, we may infer that there was in Corinth an organization of *liberti* similar to the *conventus* formed by Roman citizens in other parts of the Empire. As we are told that Corinth was reestablished partly by freedmen sent by Julius Caesar, it may

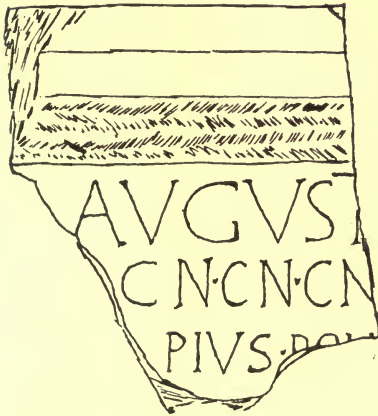


FIGURE 9.—LATIN INSCRIPTION FROM CORINTH, No. 28.

be that a *conventus* was formed at the time of their arrival. Since freedmen were usually made citizens in the new *colonia* where they were sent, we should be forced to suppose that in this instance they were not so honored. Of course, this stone has no indication of its date, and the inscription may belong to the first century of our era. The style of the letters would tend to place it in the first half of the century. The cutting of the letters resembles the work of a novice. Concerning the original purpose of the stone we can say that it formed a part of the building where the *conventus* (?) of *liberti* held its meeting or adorned some monument or altar, while the inscription recorded a common action of the *liberti* as a body.

28. (Fig. 9.) White marble block. Height 0.41 m.; width 0.30 m.; thickness, below moulding 0.17 m. Back side rough. Found May 19, 1915, east of Pirene. Letters 0.055–0.035 in height and very well cut. (See *A.J.A.* XXV, 1921, p. 254.)

Transcription:

. . . . August[o?] . . . . .  
 . . . . Cn. Cn. Cn . . . . .  
 . . . . Pius P(?)o/ . . . . .  
 . . . . . . . . . . .

The stone was evidently a dedication to an emperor, very likely to Augustus. No solution of the second line is forthcoming. It is impossible to estimate the original length of the inscription.

29. (Fig. 10.) White marble block. Height (broken at top) 0.61 m.; width at bottom 0.27 m.; thickness 0.255 m. Found May, 1915, east of Pirene. Letters 0.055-0.035 m., and well cut.

Transcription:

*L(ucius) Q.* . . . . .  
*Augus.* . . . . .  
*Caesaris* . . . . .  
*Ti(berio?) Caesari* . . . . .  
*ex d(ecreto) [d(ecurionum)]*

The stone when complete probably carried an inscription enumerating the offices held under the early emperors by some provincial official stationed at Corinth.

30. (Fig. 11.) White marble slab. Height 0.443 m.; length (top) 0.22 m., (bottom) 0.585 m.; thickness 0.065 m. Back smooth. Found May, 1915, east of Pirene. Letters 0.055-0.04 m. in height and well cut.

Transcription:

*Tiberio Ani(n?)* . . . . .  
*Caesari Augu[sto]* . . . . .  
*Genti Augustae* . . . . .

Were it not for the last letters of line 1 it would be tempting to restore this inscription as a dedication to the Emperor Tiberius. With the remainder of this important line unknown and the length of the lines uncertain the original reading remains in doubt. (See *A.J.A.* XXV, 1921, pp. 254-5.)

31. White marble slab, broken on all four sides, rear face roughly chiselled but original. Length 0.29 m.; width 0.235 m.;



FIGURE 10.—LATIN INSCRIPTION FROM CORINTH, No. 29.



FIGURE 11.—LATIN INSCRIPTION FROM CORINTH, No. 30.

thickness 0.062 m. Found May 4, 1914. Letters about 0.07 m., and deeply cut. Traces of two letters in second line.

Transcription:

. . . . . *Augus* . . . . .  
 . . . . . / / . . . . .  
 . . . . .

32. White marble slab. Height 0.18 m.; width 0.19 m.; thickness 0.072 m. Back smooth. Found April 17, 1902, opposite tenth Doric column of south stoa, 2.50 m. above stylobate. Only portions of letters preserved; their height would be about 0.09 m.

Transcription:

. . . . . *Aug* . . . . .  
 . . . . .

33. White marble slab. Height 0.21 m.; width 0.25 m.; thickness 0.06 m. Found 1905, early spring, in deep digging in North apse of Pirene. Letters 0.11 m. in height.

Transcription:

. . . . . *Aug]ust* . . . . .  
 . . . . .

34. White marble slab. Height 0.30 m.; width 0.25 m.; thickness 0.082 m. Found May 22, 1903, in theatre trench. Letters 0.12 m.

Transcription:

. . . . . *Au[gusto* . . . . .  
 . . . . .

35. White marble slab. Height 0.17 m.; width 0.20 m.; thickness 0.07 m. Date and place of finding not known. Only upper portions of letters preserved.

Transcription:

. . . . . *Au]gu]sto.* . . . . .  
 . . . . .

36. White marble slab. Height 0.195 m.; width 0.18 m.; thickness 0.03 m.; letters 0.08–0.06 m. in height.

Transcription:

. . . . Au]gu[sto . . . .  
 . . . . .Au[gusti . . . .  
 . . . . .ns f . . . .

Compare No. 26.

37. White marble slab. Height 0.20 m.; width 0.15 m.; thickness 0.04 m.; letters 0.075–0.06 m. in height and well cut.

Transcription:

. . . . . / / . . . .  
 . . . . . usta(e) . . . .  
 . . . . .

38. White marble slab. Height 0.29 m.; width 0.30 m.; thickness 0.07 m. Found March 22, 1902, place not known. Letters 0.075–0.065 in height.

Transcription:

. . . . . Ca]esari . . . . .  
 . . . . . /i Part[hici . . . . .  
 . . . . .

This is doubtless a fragment of a dedication to the Emperor Hadrian and should be restored, *Imp(eratori) Caesari*, etc.

*Divi Traiani Parthici f(ilio) etc.*

39. Fragment of white marble epistyle block. Length 0.60 m.; height 0.375 m.; thickness 0.125 m. Portion of bottom original. Letters 0.15 m. in height and well cut. Found June 2, 1903, in theatre trench.

Transcription:

. . . . . C]aesar[i . . . . .  
 . . . . .

40. White marble slab much weathered. Height 0.34 m.; width 0.40 m.; thickness 0.025 m.; letters 0.135–0.11 m., in height.

Transcription:

. . . . . Cae]sari . . . . .  
 . . . . . pon]tif(ici) m[aximo . . . . .

41. White marble slab. Height 0.095 m.; width 0.12 m.; thickness 0.02 m.; letters 0.04 m. in height.

Transcription:

.....Caesa[ri].....  
 .....

42. White marble fragment, top preserved with original surface. Height 0.07 m.; width 0.10 m.; thickness 0.08 m.; letters 0.047 m. in height.

Transcription:

.....Ca]esar[i].....  
 .....

43. White marble fragment. Height 0.07 m. width 0.14 m.; thickness 0.04 m.; letters 0.053 m. in height and poorly cut.

Transcription:

.....Ca]esa[ri].....  
 .....

44. White marble block. Height 0.21 m.; width 0.085 m.; thickness 0.17 m. Original left edge preserved. Letters 0.03 m. in height.

Transcription:

.....  
 /emia?.....  
 Caesa[ri].....  
 legio?.....

45. White marble slab. Height 0.14 m.; width 0.26 m.; thickness 0.09 m. Found in 1900, place not known. Letters 0.04–0.035 m. in height.

Transcription:

.....  
 .....Germanico  
 .....i filio  
 .....

The stone originally bore an inscription in honor of one of the emperors who had taken the agnomen Germanicus. Not enough of the inscription is given to permit its restoration.

46. Rectangular block of bluish marble used as step in Byzantine approach to Propylaea. Length 2.135 m.; height 0.515 m.;

width 0.448 m. Face very much worn. Found May 8, 1901. Letters 0.076 m. in height.

Transcription:

.....*trib(unicia) pote]st(ate) VIII imp(eratori) XIX*.....  
 .....-*ranu]s*.

The inscription in its original form contained a dedication to an emperor who had received the tribunician power for the ninth time and the title of imperator for the nineteenth time.

These conditions enable one to draw the conclusion that either Vespasian or Domitian was the emperor honored in the inscription. Vespasian held the tribunician power for the ninth year from July 1, 77 to July 1, 78. The title of imperator was bestowed upon him for the nineteenth time soon after April 15, 78 (Pauly-Wissowa, *op. cit.* vol. 6, p. 2671). These facts would place the inscription between April 15 and July 1, 78.

Domitian received tribunician power for the ninth time on September 14, 89. Between September 14, 89 and January 1, 90 he was hailed as imperator not only for the nineteenth time, but for the twentieth and twenty-first times. If Domitian be the emperor honored by the inscription it must have been cut soon after September 14, 89. The rapidity with which Domitian was given the title imperator in this short period would hardly make it possible for one stone to be erected before the title would be out of date. If a period of time of suitable length for the making and placing of an inscription as important as this one was (judging from the stone we have) be a determining factor in fixing the date, then the probabilities are in favor of regarding Vespasian as the emperor named in the lost portion.

The reading of the second line is not very clear. The letters seem to belong to the name of the dedicator.

47. (Fig. 12.) Limestone block. Height 0.415 m.; width 0.505 m.; thickness 0.36 m. Found December 18, 1914, west of schoolhouse.

Transcription:

*Faustinae*  
*Imp(eratoris) T(iti) Aeli Hadriani*  
*Antonini Caesaris*  
*Aug(usti)]Pii d(ecreto) d(ecurionum) pec(uniae) pub(licae)*

The inscription is a dedication to Faustina. Whether the Faustina named was the wife or the daughter of Antoninus Pius is not easy to determine. Faustina, known as the Elder, was married to Antoninus Pius between 110 and 115 A.D. He was adopted by Hadrian on February 25, 138. On July 10, 138 he succeeded his adoptive father. At this time Faustina received the title Augusta along with her husband. His official name appears on the stones thereafter with the title Augustus and the added cognomen Pius in the order given in the inscription at Corinth. After the death of Faustina between December 10,

140 and July 1, 141 A.D. she is referred to as *diva*.

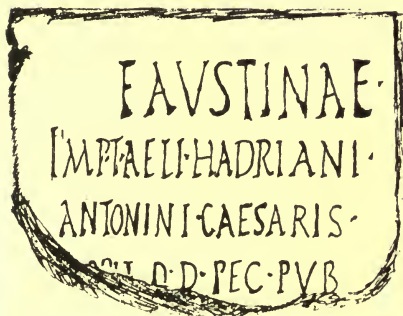


FIGURE 12.—LATIN INSCRIPTION FROM CORINTH, No. 47.

Inasmuch as the appellation *diva* is wanting in this inscription we are probably justified in assigning it to the period before 141 A.D. But what is to be said concerning the omission of the title Augusta? Since her husband is referred to as emperor the inscription could not have been cut before the year 138. (It is

not certain whether we should restore AVG as the first three letters of line 4. The tops of the letters PII seem very certain. At the left of P the top of some letter can be made out. I believe it to be G.) Inscriptions referring to Faustina without either Augusta or Diva when the name of Antoninus Pius is given are extremely rare, in fact, no parallel to the present form has been found in Latin.

Shall we then conclude that the stone does honor to Faustina the Younger, daughter of Antoninus and Faustina? The younger Faustina received the title Augusta in 147 A.D. All the inscriptions giving her name before this date are explicit in indicating her relationship as daughter, evidently to prevent any confusion because of the identity of names between mother and daughter. Apparently no such indication is to be found on this stone. We seem to have the inscription complete. It is not impossible, then, that this inscription refers to Faustina the Elder, and may have been set up during the first months of her husband's reign. One



Greek inscription may be presented to illustrate the omission of titles with the name Faustina.

Dittenberger and Purgold, *Inscripfen von Olympien*, 613–616, quoted in Dessau, *Inscriptiones Selectae*, 8803a: Φαυστεΐναν αὐτοκράτορος//Ἀνωγείνου Ἐδσεβοῦς γυναῖκα[α//Ἡρώδης]. The editor adds *Faustina maior, ei defunctae a. 140 vel 141. multo antequam hi tituli ponerentur divae vocabulum non addi sane mirum*. The stone was found in the exedra of Herodes Atticus at Olympia. It is, perhaps, worthy of note in passing that up to the time of the publication of the last fascicle of *C.I.L.* III (1903) no certain inscription mentioning Faustina the Elder had been found in the territory of which the inscriptions are included in that volume.

48. (Fig. 13.) Fourteen fragments of a white marble slab. Height 0.38 m.; width of original slab uncertain; thickness at top

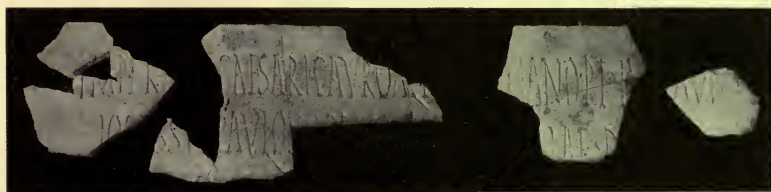


FIGURE 13.—LATIN INSCRIPTION FROM CORINTH, No. 48.

0.015, at bottom, 0.02. Moulding on back. Letters not very well cut. Date and place of finding not known.

Transcription:

*Imperā[tor]i Caesari C(aio) Aur(elio) Val(erio) ?D[iocle]tiano P(io)  
 F(elici) In(victo) Aug(usto)  
 ?l(ibens) v(otum) s(olvit) i[?]ssu L(ucius) Paulus o d // // . .  
 . . iae d . . . . .*

The stone has been broken so many times and so much is now lacking that a restoration of anything more than the first line is out of the question. There can be no reasonable doubt that we have a dedication to the Emperor Diocletian. To fix the date more closely or to learn the reason for the inscription is no longer possible.

49. (Fig. 14.) Nine fragments of a white marble slab very similar to No. 48 in appearance and style of letters. Because of the difficulty of taking satisfactory measurements none were

recorded. The approximate size of this inscription may be inferred by a comparison of Figures 13 and 14.

Transcription:

*Fo(r)tissimo a d o v e?*.....  
*Maximiano*.....  
 ...../ / / /.....  
*Gale(rio)*.....  
 / / / *CS Paulus*.....

The abbreviation of line 1 may perhaps stand for the words *Augusto domino orbis Valerio*, etc. When complete the inscription may have done



FIGURE 14.—LATIN INSCRIPTION FROM CORINTH,  
 No. 49.

honor to the four emperors Diocletian, Maximian, Flavius Constantius, and Galerius. The appearance of the name Paulus, doubtless that of the man who erected the stone, in this inscription and in the preceding and the similarity in appearance already referred to make plausible the supposition that both inscriptions were cut at about the same time.

50. White marble slab. Height 0.60 m.; width 0.69 m.; thickness 0.135 m. Original

surfaces preserved at top and left side. Found May 7, 1896, place not known. Letters 0.073–0.067 m. in height.

Transcription:

*Reparatori r[eligionis]  
 aeternae [et propagatori humani  
 generis d(omino) n(ostro) [Theodosio*

*felicissimo et* . . . . .  
*Arcadio et H[onorio]*  
 . . . . .-*tius Ac?* . . . . .

51. Fragment of a bluish marble block. Portion of original surface preserved at bottom with dowel hole in centre. Thickness 0.28 m. Found October, 1914, southeast of Pirene. Letters 0.03 m. in height, poorly cut.

Transcription:

.....  
 ..... a?n/ / .....  
 .....-ae in perpetu[um] .....  
 ....Caesareo]n Nervaneon Trai[aneon] .....  
 ....et Isthmio]n et Caesareon et Aescu[lapion  
 .....Co]rinth(i) patron(o)

Part of a late inscription honoring some Corinthian who had performed his duty as a generous giver of the games.

52. Block of bluish scaly marble. Height 0.57 m.; width 0.525 m.; thickness 0.35 m. Found 1896, place not known. Letters 0.38–0.03 m. in height except letter ‘b’, which has vertical line carried above the others, and measures 0.08 m.

The similarity of this inscription to the preceding is apparent. This stone was erected by the members of the tribe Aurelia. (See *A.J.A.* XXII, 1918, pp. 195 f.)

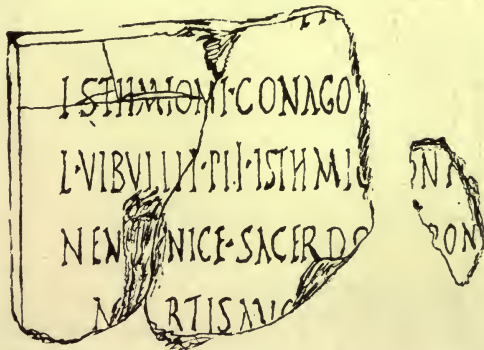


FIGURE 15.—LATIN INSCRIPTION FROM CORINTH, No. 53.

From the form of the letters (a ‘small’ *b* is used) the inscription is probably not earlier than the third century after Christ.

Transcription:

.....  
 ..... Isthmi]on et Caesareon  
 tribules tribus  
 Aureliae

53. (Fig. 15.) White marble slab in five pieces. Height 0.245 m.; width 0.27 m.; thickness 0.055 m. The small fragment seems to belong to this inscription but with a slight lacuna. Found April 17 and 22, 1902, on Temple hill northeast of Boudroumi, at a depth of one metre.

Transcription:

...../ /.....  
*Isthmionicon ago[no]thetae.....*  
*L(ucii) Vibullii Pii Isthmio...../n'.....*  
*nen.....nice sacerdo[tis]?.....ron.....*  
*n?.....rtismio.....*

For a Vibullius at Corinth see *C.I.L.* III, 5434. What connection he had with the present inscription is not certain from this fragment.

54. (Fig. 16.) White marble slab in five fragments. Original surfaces preserved at sides and top. Width 0.52 m.; thickness 0.225 m. Found June, 1910, in peribolos of Apollo. Letters 0.043 m. in height and very carefully cut.

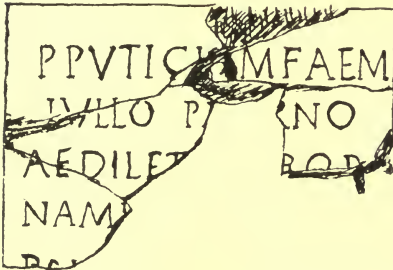


FIGURE 16.—LATIN INSCRIPTION FROM CORINTH, No. 54.

Transcription:

*P(ublio) Puticio M(arci)*  
*f(ilio) Aem(ilia tribu)*  
*Iullo Pa[te]rno*  
*aedil(i) et [IIvi]r(o) or-*  
*name(nte).....*  
*/ / /.....*

The name Puticius is already known from an inscription found on Acrocorinth, *C.I.L.* III, 542. There we find a P. Puticius Secundus and P. Puticius Ac——. That they belonged to the local nobility of Corinth in the first century is all that one can say concerning them.



FIGURE 17.—LATIN INSCRIPTION FROM CORINTH, No. 55.

55. (Fig. 17.) White marble slab. Height 0.32 m.; width 0.25 m.; thickness 0.115 m. Found October 30, 1914, southeast of Pirene.

Transcription:

*L(ucio) Ge]llio*  
*Mena]ndri*  
*L(ucio) Gellio] Iusto*  
 .....-ii agonoth-  
*etae*.....  
 .....

The transcription gives a restoration based on *C.I.L.* III, 501 = 7269. That inscription is a dedication at Corinth to Antoninus Pius erected in 139 A.D., by L. Gellius Menander and L.



FIGURE 18.—LATIN INSCRIPTION FROM CORINTH, No. 56, FRAGS. 1 AND 2.

Gellius Iustus. These names are also recorded in Greek inscriptions from Corinth (*A.J.A.* VII, 1903, pp. 51-52. = *I.G.* IV, 1601). In the name of Iustus the praenomen is given as A but the possibility of reading Λ is admitted. The evidence of the Latin inscription cited from the *Corpus* makes very probable the latter reading. The Greek inscriptions above mentioned are dedications to a Cn. Cornelius Pulcher. The inference that he received this honor about 139 A.D. seems justified. This evidence is useful also for dating *I.G.* IV, 795 and 1600 (found at Corinth and Troezen) which enumerate the offices held by Pulcher.



FIGURE 19.—LATIN INSCRIPTION FROM CORINTH, No. 56, FRAG. 3.

56. (Figs. 18 and 19.) Three fragments of a marble epistyle. Sections 1 and 2 join to make the original shape complete. Length 2.03 m.; height 0.52 m.; thickness (back cut away) 0.42 m. Mouldings at top and bottom of outer surface cut away. Section 1 found May, 1915, south of Pirene. Section 2 found May, 1896, place uncertain. Section 3 is a por-

tion of the same inscription with the mouldings preserved. Length 0.75 m. Found May, 1915, not far from section 1. Letters 0.10 m. in height and very well cut.

Transcription:

.....-ir pont(*ifex*)..... et porticum coloni.....

The inscription in its original form contained the name of the man who had caused to be erected some prominent buildings near the southeast entrance to the Agora. The name of this man is wholly gone, and we have only a mention of the offices which he held. The word *et* at the beginning of the next stone would lead us to suppose that mention had already been made of some other building for which this individual was responsible. The word *porticum* without much doubt refers to the structure of which this block formed a portion of the epistyle. A description of it will form a part of the report of the excavations of 1915.

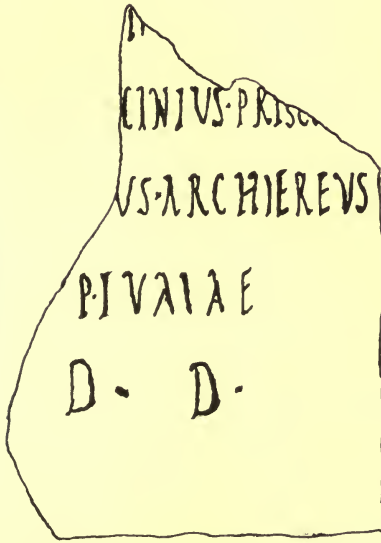


FIGURE 20.—LATIN INSCRIPTION FROM CORINTH, No. 58.

57. Eleven fragments of an inscription on the marble blocks which formed an Ionic architrave in the peribolos of Apollo. The letters are 0.11 m. in height. Only three of the fragments can be fitted together. The letters found are as follows:

IUS. TI. F. AEM, ALIS (wreath) ETM, I C V, E, B, O, C F, OS, X.

The portion given first above may be transcribed:

-ius *Ti(berii) f(ilius) Aem(ilia tribu)*

Nothing further can be made from these fragments. The inscription was evidently of considerable length.

58. (Fig. 20.) White marble block. Height 0.46 m.; width 0.32 m.; thickness 0.17 m. Date and place of finding not known. Letters 0.05–0.045 m. in height.

Transcription:

.....  
 ..... / / .....  
 ..... *P(ublius) Li]cinius Priscu(s)*  
 ..... *Iuventian?]us Archiereus*  
 ..... *P. Iuliae?*  
 ..... *d(edit) d(edicavit)*

The name has been restored from *I.G. IV, 202-203*, which was found on the Isthmus. Nothing further is known of the person named.

59. (Fig. 21.) White marble slab. Length 0.38 m.; height 0.15 m.; thickness 0.06 m. Found November 16, 1914, south-east of Pirene.

Transcription:

.....-*nique genio*.....  
 .... *Caesa]rum l(audis) I(uliae) C(orin-*  
*thi) sacrum a*.....  
 ..... *or]nament(a) decurion(alia)*....

The restoration of the first line is uncertain. The correct solution must not only discover the word which ended in the letters *-ni*, but supply another to justify the use of *-que*. The *Caesarum* of line two seems a reasonable conjecture.



FIGURE 21.—LATIN INSCRIPTION FROM CORINTH, No. 59.

60. (Fig. 22.) White marble slab. Height 0.53 m.; width (maximum) 0.14 m.; thickness 0.11 m. Found May, 1915, southeast of Pirene. Letters 0.055-0.035 m. in height.

Transcription:

..... *mi* / .....  
 ..... *I]sthmi* .....  
 ..... *IIvir* / .....  
 ..... *r dec* .....  
 ..... *gio ite* .....  
 ..... *bend* .....  
 ..... *m* .....  
 ..... *us* .....

None of the lines yields enough letters to make certain any satisfactory explanation of the words. When complete the inscription was a dedication in honor of some local magistrate.

61. (Fig. 23.) White marble slab. Length 0.315 m.; height 0.195 m.; thickness 0.035 m. Found May, 1915, southeast of Pirene. Letters 0.05–0.043 m. in height.

Transcription:

.....*Colon]iae Lau[d(is) Iuliae Corinth(i)...*  
 ...../t Stat.....  
 .....u/a/.....

In line 1 traces of the N of *Coloniae* and of the D of *Laudis* are visible. This fragment may belong to a very interesting inscription containing information regarding the government of Corinth by the Romans.



FIGURE 22.—LATIN INSCRIPTION FROM CORINTH, No. 60.

62. White marble slab. Height 0.25 m.; width 0.31 m.; thickness 0.085 m. Date and place of finding not known. Letters 0.045 m. in height.

Transcription:

*M(anius) Aciliu[s].....*  
*inea loc.....*

The name in line 1 has been restored as *Manius* because of the fact that the only *Acilius* known hitherto from Corinth bore that praenomen. (On a Corinthian coin, Cohen, Vol. I, page 273.) The *Manius Acilius* attested by the coin was *duumvir* about 50 A.D. There is nothing on the stone which makes the identification unreasonable.

63. Bluish marble base, right side and part of left face cut away. Moulding at base originally on three sides, now cut or broken away. Height of stone 0.275 m.; width 0.445 m.; thick-



ness 0.32 m. Found 1901 in west buttress of Propylaea. Letters 0.045–0.042 m. in height.

Transcription:

?C]lodi[u]s.....  
 Concordia/.....

64. White marble slab, much weathered and discolored. Height 0.222 m.; width 0.298 m.; thickness 0.025 m. Date and place of finding not known. Letters 0.043–0.03 m. in height.

Transcription:

*Clodia Polla*  
*sibi et*  
*Clodia(e) D ractice?*  
*... et liberis suis.*



FIGURE 23.—LATIN INSCRIPTION FROM CORINTH, No. 61

The letters at end of lines 3 and 4 are very faint.

65. White marble fragment. Height 0.045 m.; Width 0.115 m.; thickness 0.03 m. Only lower portions of letters preserved.

Transcription:

.....Cl]odia.....

66. White marble slab. Height 0.37 m.; width 0.355 m.; thickness 0.12 m. Date and place of finding not known. Letters 0.09–0.057 m. in height.

Transcription:

*Secun]dus....*  
*...nus Q CO...*  
*.....e.../ /..*

67. White marble slab. Height 0.10 m.; width 0.293 m.; thickness 0.09 m. Found 1898 place not known. Only upper portion of letters preserved.

Transcription:

*Secu]ndus.....*

68. White marble slab. Height 0.135 m.; width 0.18 m.; thickness 0.025 m. Date and place of finding not known. Letters 0.02 m. in height.

Transcription:

... / / / / / ...  
*Fusissima* / .....  
*nam et / ir* .....  
*munif* .....

69. Two fragments of white marble. Part of original right side preserved. Other sides broken. Thickness 0.125 m. Found October, 1914, southeast of Pirene. Letters 0.047-3 m. in height and poorly cut.

Transcription:

..... / / / .....  
 .....-i IIII vir  
 .....-storem  
 .....-rotam  
 .....?i vir  
 ....S]aturni fac(iendum)  
 .....[cur(avit)]

70. White marble slab. Height 0.20 m.; width 0.145 m.; thickness 0.033 m. Back rough. Found May, 1904. Letters 0.032-0.26 m. in height.

Transcription:

*Aurel*[io .....  
*Maxim*[o .....  
*Aurel*[io .....  
*A]urel*[ius? .....

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## ARCHAEOLOGICAL DISCUSSIONS<sup>1</sup>

### SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

SIDNEY N. DEANE, *Editor*  
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#### GENERAL AND MISCELLANEOUS

**The Development of the Theory of Proportion.**—In *Mh. f. Kunstw.* XV, 1921, pp. 188-219 (2 pls.; 10 figs.), E. PANOFSKY discusses the theories of proportion in succeeding historical periods in their relationship to the artistic attitude of the times. For example, the Egyptian artist's mechanical theory of proportion was due to his ignoring three facts, viz., that any movement of an organic body changes that body throughout and not merely the surface; that the artist sees the object foreshortened; and that the spectator sees the artist's representation foreshortened. All these facts were recognized by the Greek. Hence, he could not form an independent system of proportion that left the artist no freedom of variation. It is for this reason that, from the works of art, we are much less able to judge of the Greek's theory of proportion than of the Egyptian's. The more the subjective element was allowed to enter into art, the more, naturally, was the significance of theories of proportion crowded out. The last of their real significance came with the Renaissance in Italy. Problems of light and shade, of color, and of expression have usurped their place in later art.

**Computing Jetons.**—An address on the history of methods of computation, recently delivered by Professor DAVID E. SMITH before the American Numismatic Society, has been printed. After a brief discussion of the necessity for aids in reckoning, the primitive forms of the abacus are described: the dust abacus, the line abacus, exemplified by the one found at Salamis, the Roman calculi, the various forms of abacus used in the Far East. The abacus of Gerbert (Pope Sylvester II) is also described; and various modern forms of the abacus are illustrated from early printed text books. Finally there is a brief discussion of the history of minted jetons. These had no prolonged use in Italy, where the abacus was early superseded by Arabic notation. They continued in use for some time in Northern Europe, and were stamped extensively in Germany in the sixteenth and seventeenth centuries. Even after the close

<sup>1</sup> The departments of Archaeological News and Discussions and of Bibliography of Archaeological Books are conducted by Professor DEANE, Editor-in-charge, assisted by Professor SAMUEL E. BASSETT, Professor C. N. BROWN, Miss MARY H. BUCKINGHAM, Dr. T. A. BUENGER, Professor ELMER T. MERRILL, Professor JOHN C. ROLFE, Dr. JOHN SHAPLEY, Professor A. L. WHEELER and the Editors, especially Professor BATES and Professor PATON.

No attempt is made to include in this number of the JOURNAL material published after June 30, 1922.

For an explanation of the abbreviations, see pp. 129-130.

of the seventeenth they were manufactured for gaming purposes. [*Computing Jetons*, by DAVID EUGENE SMITH, *Num. Not.*, No. 9. New York, 1921, American Numismatic Society. 70 pp.; 3 pls.; 22 figs. 16mo.]

**Epigraphic Bulletin.**—In their 'Revue des Publications épigraphiques relatives à l'Antiquité romaine' for 1921 (*R. Arch.*, fifth series, XIV, 1921, pp. 449-483), R. CAGNAT and M. BESNIER give the text of 97 inscriptions (21 Greek, the rest Latin), with bibliographical notes and references to epigraphic publications. A classified index is appended (pp. 484-492).

**The Photographing of Palimpsests.**—P. R. KÖGEL describes the process and results of photographing palimpsests with the use of ultra-violet rays. "The textual results of fluorescence photography exceed those of earlier processes by fifty per cent." (*Sitzb. Ber. Akad.* 1914, pp. 974-978.)

**The "Bird of Venus."**—In a recent dissertation GEORGE R. THROOP shows that the sparrow was originally more closely associated with Aphrodite than any other bird, and that this association persisted, although partially obscured by the connection of doves and other birds with the goddess. The evidence for Mr. Throop's thesis is mainly literary. Sparrows are not often represented with Aphrodite in works of art. (*Washington University Studies*, IX, Humanistic Series, No. 2, pp. 275-291.)

**Thracian Archaeology.**—In *R. Arch.*, fifth series, XV, 1922, pp. 46-78, GEORGES SEURE continues his series of articles on unpublished or little-known Thracian monuments. In this article he describes 17 silver paterae (*coupes*) of the so-called omphalos type (No. 186), three bulging silver vases (No. 187), a silver aryballus (No. 188), and gives a list, with bibliographical references, of 161 bronze statuettes of Thracian *provenance*, which have been already studied and reproduced. The tumuli at Brézovo, Panaghiorichte, and Alexandrovo, in which seven of the omphalos paterae were found, are described, with their contents, in detail. The ten paterae found at Radovene were not in a tumulus. These paterae all belong to a time extending from the latter part of the fifth to the early part of the third century B.C. One bears an inscription, *Κόρυς Ἐγγήιστων*, in letters of the fifth century. These vessels are of Greek manufacture and thus testify to trade relations of Thrace and Greece. They are found in the tumuli near the right hand of the deceased, which points to Greek influence upon the burial customs of the Thracian dynasts. The Thracian bronzes are in part imported, in part made by local artisans. They have not the genuinely Thracian qualities of the reliefs in stone, and whatever their value for the study of Roman civilization, they will never teach us much about the civilization of Thrace.

**The Work of Oscar Montelius.**—BERNHARD SALIN is the author of a biographical sketch of the late Professor Montelius, accompanied by an appreciation of his distinguished service to archaeology. With it is published an exhaustive bibliography of Montelius' publications, prepared by GUNNAR ECKHOLM. (*Minnesteckning över Oscar Montelius av Bernhard Salin; Bibliographia Monteliana uprättad av Gunnar Eckholm*. Kungl. Vitterhets Historie och Antikvitets Akademien Handlingar, XXXIV, third series, I, 1 and 2, Stockholm, 1922, Wahlström. 44, 43 pp.; pl. 8vo.)

**Arabic Inscriptions.**—An analytic study of bands of Arabic inscriptions in relief, employed as architectural ornament at Amida-Diarbekr, has been made by S. FLURY. (*Syria*, I, 1920, pp. 235-249, 318-328; II, 1921, pp. 54-62; 14

pls.) The plaited form of the Cufic characters in these inscriptions is derived from the East: it is found near the Caspian Sea as early as 1016 A.D. The migration of this form of letter from east to west is due to the Seljuk conquest. M. Flury inclines to the belief that this style of writing was the invention of one of the nomad tribes converted to Islam, and not an ancient Arabic form adopted by the nomads in their westward march.

**Mohammedan Aesthetics.**—The methods of artistic expression among the peoples of Islam are the subject of a recent essay by LOUIS MASSIGNON. Although there is no absolute prohibition of imitative or representative art, the scope of such art is restricted by the dogma according to which the visible world is the mechanical creation of God, and its phenomena transitory and unreal. Only the Creator has an enduring existence, hence there is a reluctance to give even a seeming completeness or permanence to the representation of any phenomena of the natural world. The application of this principle to the design of architectural ornament, rugs, and tapestries, and to landscape gardening as well as to Arabic poetry and music, is discussed. (*Syria*, II, 1921, pp. 47-53, 149-160.)

**Sassanian Art.**—C. L. A. (*B. Metr. Mus.* XVII, 1922, pp. 135-136; 3 figs.) gives a brief discussion of Sassanian art, based on Pézard's *La céramique d'Islam et ses origines*, and illustrated by cuts showing some Sassanian vases recently acquired by the Metropolitan Museum.

**The Gandhara Sculptures.**—ALBERT GRÜNWEDEL is the author of a recent essay on the so-called decorative element in the Gandhara sculptures. He finds a religious or cosmological significance in the minor figures which surround and frame the principal scenes of the Gandhara reliefs. (*Ber. Kunsts.* XLIII, 1922, pp. 21-27; 14 figs.)

**The Coins of Northwestern India.**—R. B. WHITEHEAD has outlined the history of pre-Mohammedan coinage in Bactria and northwestern India. After preliminary remarks on the value of coins as supplementing and illustrating the literary records of these regions, the author sketches the history of Greek exploration and domination in the Far East, from the expedition of Alexander through the period of Seleucus, who made a treaty with Chandragupta, king of India, the rise of the independent state of Bactria and the extension of Greek power south of the Hindu Kush under Demetrius and Eucratides, to the final fall of the Greek dynasty before the invading Saka Scythians. The coins of the Greek kings of Bactria are well known as including brilliant examples of Hellenistic coin design. The Saka Scythians issued bilingual coins which show the persistence of the Greek tradition. The coins of Gondophares recall the Christian legend of the conversion of this monarch by St. Thomas. A later invasion of Kushans swept away the Sakas and also a lingering remnant of Greek rule in the Kabul valley. Coins throw some light on obscure points in the chronology of the Kushan rulers. They also issued bilingual coins, with legible Greek inscriptions, but with kingly titles in Iranian. Their most celebrated king was Kanishka, the convener of the Fourth Buddhist Council. This discussion of the coinage of the Greeks and their successors in Bactria is followed by a description of the early native coins of India. The earliest of these, which may be dated as far back as the sixth century B.C., are rectangular punch-marked pieces of silver. The monetary system was based on the Indian *rati*, the seed of the Indian liquorice. Die-struck coins of a date earlier

than Alexander's invasion are known, including the coins of Taxila, which show a lion on one side and an elephant on the other. After this date one may observe mutual influences between Indian and Greek types of money. In the fourth century A.D. the Gupta dynasty reached the height of its power and issued gold coins on a standard derived through the Kushans from the Roman aureus. At the end of the fifth century the White Huns invaded India, and issued coins which were barbarous imitations of the money of the invaded countries. After their expulsion in the sixth century the Lesser Kushans ruled the Punjab for three hundred years. Their coins show relationship to the currency of the greater Kushans and the Sassanian kings. The Hindu kings of Kabul issued the "bull and horseman" currency in the ninth century. This continued until the Mohammedan conquest and was perpetuated by the Mohammedans. In Kashmir degraded copies of Kushan currency were in use until the sixteenth century. Debased imitations of Sassanian money were in use in the United Provinces and Central India in the mediaeval period; and some of the native princes issued coins imitative of the "bull and horseman" currency of Kabul. [*The Pre-Mohammedan Coinage of Northwestern India*, by R. B. WHITEHEAD, *Num. Not.*, No. 13. New York, 1922, American Numismatic Society. 56 pp.; 14 pls.; map. 16mo.]

**Explorations in Turkestan.**—An address delivered by Sir HERCULES READ at the latest annual meeting of the Society of Antiquaries of London is in great part a review of the archaeological explorations and discoveries of Sir Aurel Stein in Central Asia and Western China, described in detail in the monumental publications *Serindia* and *The Cave of the Thousand Buddhas*. Special emphasis is laid on discoveries at Niya, where a hoard of wooden tablets with writing in Kharoshti was found, together with evidences of both Greek and Hindu influences; and on the Cave of the Thousand Buddhas, with its rich ornament in stucco relief and in painting, and the great collection of books and paintings of the T'ang period which was discovered there. (*Ant. J.* II, 1922, pp. 177-192; 12 pls.)

**Japanese Sword Mounts.**—R. H. RUCKER describes a special exhibition of Japanese sword mounts at the Metropolitan Museum. (*B. Metr. Mus.* XVII, 1922, pp. 173-176; 2 figs.)

## EGYPT

**The Problem of Akhenaton.**—T. ERIC PEET states and discusses briefly some of the problems raised by recent discoveries connected with the religious revolution of Amenophis IV or Akhenaton. The examination of the body of this king indicates that he died at about the age of thirty, and hence was nineteen years old when he broke away from the established religion, and set up his new capital and cult at El Amarna. There is no foundation for the theory that this worship was introduced by his mother, Queen Ty, from Syria. The evidence shows that she was an Egyptian. On the other hand the Aton worshipped by Akhenaton seems to have had a place in the Egyptian pantheon in the reign of Amenophis III. Akhenaton's innovation was in making this deity his sole god. His essential monotheism can hardly be controverted by the existence of occasional traces of polytheistic conceptions in inscriptions of his reign. The origin of the new style of art which appears under Akhenaton is the subject of controversy. Probably it is due to the liberation of ideas

which could not find free expression under the restriction of the old religion. (*Journal of the Manchester Egyptian and Oriental Society*, IX, 1921, pp. 39-48.)

**Amon and Toutankhamon.**—In *Mon. Piot*, XXIV, 1920, pp. 47-68 (pl.; 11 figs.) G. BÉNÉDITE discusses an eighteenth dynasty group of sculpture of black granite in the Louvre representing Amon with the king Toutankhamon. The god is seated and rests his hands on the arms of the king who stands in front of him. The king is much smaller than the god, and at some period his head and arms were purposely broken off and his cartouches partly erased. The group is a fine example of Egyptian sculpture.

**Egyptian Documents of the Persian Period.**—EDUARD MEYER has discussed an interesting papyrus which has been published in the series of *Demotische Studien*. (*Die sogenannte demotische Chronik des Papyrus 211 der Bibliothèque Nationale*, W. Spiegelberg, 1914.) On one side of this roll is a series of oracular sayings, ostensibly of the Persian period, together with prophetic interpretations which the reader was expected to attribute to the same period. As a matter of fact the oracles are a fraudulent invention of the Hellenistic age, and the interpretations are prophecies after the event. Meyer shows the relation of the chronology indicated in the "prophecies" to other records of the history of Egypt under the Persians. The prophecies are written on papyrus which had been used before; and on the back are fragments of a document of the Persian period, a code of the laws of Egypt prepared under Darius, including a copy of a decree of Cambyses, exempting the people from the payment of taxes for the support of the temples. Apparently Darius restored the revenues of the temples. (*Sitzb. Ber. Akad.* 1915, pp. 287-311.)

**Triptychs and Similar Objects.**—The triptych or folding altar-piece of the Christian church had its ancient prototype in Egypt. Here a relief or painting of a divinity, whether an *ex voto* or an object of family worship, sometimes had shutters or wings on the inside of which the attendant votaries were represented. A stone relief from Tel-el-Amarna of King Akhenaton and his family as divine beings, was once furnished with such folding wings; and a pair of wooden panels in Berlin, about two feet tall, with four figures painted on each, are the wings of a similar arrangement. The same eight worshippers with their attributes, including a camel, are represented in a single scene on a relief in the Museum at Cairo. Vitruvius and Pliny both mention the box frames with covers, in which frescoes cut from their walls in Greece were brought to Italy; and such paintings, still in the boxes with covers standing open, are represented on the architecturally decorated walls of Roman and Pompeian houses as if set against the wall; but the Italian artists seem not to have used the wings for painting. The wooden panels in question are late Roman and crudely executed but show the general technique of the Fayoum funeral portraits. (R. PAGENSTECHEK. *Arch. Anz.* 1919, cols. 9-25; 4 figs.)

**The Egyptian Lexicon.**—In *Z. Morgenl. Ges.* LXXVI, 1922, pp. 72-84, A. ERMAN describes the process by which for many years the new Egyptian lexicon has been in process of construction. A paragraph of about twenty-five words is autographed from a text, and as many copies are printed as there are words in the paragraph. Then each word is underscored and placed on a card and filed away under the respective word in the general catalogue. About a million and a half cards have already been gathered. It is estimated that it will take about four years more to finish the collation of material. Two

more years will be necessary to prepare from the cards the manuscript that will go to the printer. The work when printed will contain about 2000 folio pages of type and 5000 pages of autograph photographically reproduced. The dictionary will be so expensive that, under existing conditions, only a few libraries in Germany can afford to buy it; but it is hoped that, when the time to print comes, a subvention will be found that will make it possible to complete this great undertaking on which the entire present generation of Egyptologists has labored.

**A Bulletin of Papyrology.**—Another section of SEYMOUR DE RICCI's 'Bulletin Papyrologique,' comprising the second part of a list of books and articles on papyri published between 1904 and 1912, has appeared. Items are frequently accompanied by brief summaries or descriptions of the publications in question. (*R. Ét. Gr.* XXXIV, 1921, pp. 80-112, 275-336.)

### BABYLONIA AND ASSYRIA

**Early Babylonian History.**—In *Publications of the Babylonian Section of the Museum of the University of Pennsylvania*, XIII, L. LEGRAIN has published in text, transcription and translation a number of extremely important tablets of the Nippur collection of the Museum of the University of Pennsylvania that bear on the history of the earliest period in Babylonia. The first two are lists of old Babylonian dynasties that supplement the lists of kings previously published by Scheil and Poebel. One of these is specially valuable because it gives a summary of all the preceding dynasties, many of which are broken out of the text. It enumerates eleven royal cities, each of which held the hegemony from one to four times, and gives the total number of kings of each city and the total number of years that they reigned. With the aid of these tablets it is now possible to reconstruct the list of Babylonian kings back to 4000 B.C., and to determine with approximate accuracy the date of each king. Another most interesting document is a seal given by King Ibi-Sin of the third Dynasty of Ur to the high priest of Enlil at Nippur, which contains a portrait of the king in the usual Sumerian flounced skirt, seated on a throne and holding an alabaster vase in his hand.

**Babylonian Anticipations of the West Asiatic Mystery Religions.**—In *Z. Morgenl. Ges.* LXXVI, 1922, pp. 36-54, H. ZIMMERN shows that old Babylonian religion in external form supplied much material to the West Asiatic mystery religions, as well as to Parseeism, Judaism and early Christianity in the realms of astronomy, cosmology, astrology, magic, cult, and myth. The mystical trait, however, that was the essence of these later religions, was alien to the Babylonian religion, and came into them from a new external influence of Indo-European origin.

**Development of the Sky-Goddess Nut into a Goddess of the Dead.**—In *Mitt. Vorderas. Ges.* XXVII, 1922, Part 1, pp. 1-62, A. RUSCH shows that in the Pyramid Texts the sky-goddess Nut is constantly invoked to help the dead king to secure solar immortality by making his grave or his coffin the counterpart of the sky. This conception lingers in the coffin decoration of the later period. The coffin is designed to represent the sky, and Nut is figured upon it. This thought is combined with the idea that the dead man is identified with the sun-god Re. Thus gradually Nut comes to be associated with the dead, and is transformed in the latest period into a chthonic deity.



**The Medium of Exchange in Ancient Babylonia.**—In *Or. Lit.* XXIV, 1921, cols. 21–25, W. SCHWENZNER shows that in earliest times in Babylonia the standard of value was the *gur*, the same as the Hebrew *cor*, or *homer*, “ass’s load,” of barley. All other commodities were reckoned by their equivalence with this. In the third millennium B.C. silver gradually came into use, and for all purposes of exchange one shekel of silver was regarded as the equivalent of one *gur* of barley, that is about sixty cents’ worth of silver would buy six bushels of barley. By the time of Dungi of the Dynasty of Ur four-fifths of a *gur* was the equivalent of a shekel, and in the period of the First Dynasty of Babylon the equation was three-fifths of a *gur* to the shekel.

**Transportation of a Statue by Samsu-iluna.**—In *Or. Lit.* XXIV, 1921, cols. 18–19, B. MEISSNER translates a text of Samsu-iluna of the First Dynasty of Babylon as follows: “I am Samsu-iluna, who set up in E-turkalama a statue of marble (?), a monolithic block which depicted the entire form of the body, weighing 84 talents.” Such blocks of stone were transported all the way from Syria, and the transportation was considered such an important event that Samsu-iluna named one of the years of his reign after this event. Similar transportations are often mentioned in the texts or are depicted on the reliefs.

**The Second King of Amurru.**—In *Or. Lit.* XXIV, 1921, col. 18, W. F. ALBRECHT translates an inscription of Ammiditana which reads ‘King *da-ga-mu* of the land of Amurru.’ The word *dagamu* is neither Sumerian nor Akkadian Semitic, but is probably Amorite, like so many words in texts of the First Dynasty, and is to be translated “second.” Ammurawih is the first king of Babylon who claims this title, and Ammiditana is the second. In view of the present active discussion over the ‘Amorite Empire’ this passage has importance.

**An Old Babylonian Military Dispatch.**—In *Or. Lit.* XXIV, 1921, cols. 71–72, A. UNGNAD translates a letter which probably dates from the period of the war between Rim-Sin and Hammurabi. It reads as follows: “To my Lord, thy servant Awil-Anim speaks thus: The enemy has come twice and defeated thy best troops; and in consequence of the weakness of the force in Sakkainpa the fort cannot be held. From the troops that are with thee send reinforcements. A garrison of 500 men in Sakkainpa and 500 in Adab can hold the places. The fort must not be lost. Urgent!”

**The Sinai Inscriptions.**—In *Or. Lit.* XXIV, 1921, cols. 242–246, H. SCHNEIDER contests the view of Petrie, Gardiner, Cowley, Sayce, Eiseler, Sethe, Bauer and others that the newly discovered Sinai texts date from the period of the eighteenth dynasty, that they are Semitic, and that they disclose the first stages of the evolution of the alphabet out of Egyptian hieroglyphs and prove that alphabetic writing was known to the Semites long before the time of Moses. He shows that these texts were scratched on older Egyptian monuments at a time when Egypt had lost control of the mines at “Sinai” and these had fallen into the hands of barbarian invaders. This cannot have been earlier than the tenth century B.C. The invaders of whom one thinks most naturally are the Philistines, and this script bears a closer resemblance to the linear script of Crete than it does to Egyptian. All attempts to read the texts as Semitic are doubtful, and it is quite as likely that they are Philistine. Since the alphabet was probably brought into Canaan by the Philistines, this Sinai script may still be related to it, but it does not establish an earlier use of the alphabet in Western Asia than 1000 B.C.

**The Old Assyrian "Law-Code" from Ashur.**—In *Mitt. Vorderas. Ges.* XXVI, 1921, Part 3, pp. 1–84, P. KOSHAKER investigates the sources of the recently published so-called Assyrian law-code, and comes to the conclusion that it is not properly a law-code like the Code of Hammurabi, but is rather a system of jurisprudence based upon laws and legal decisions. It is a "Rechtsbuch" rather than a "Gesetz." It is a private work for the guidance of the student of law rather than a codification of legislation. This does not detract in the least from its value as a document for the study of old Assyrian law, because the author does not give any subjective coloring to his presentation of the law in his time, but compiles slavishly from documents and court records.

**The God of the Hebrews in an Old Assyrian Text.**—In *Or. Lit.* XXIV, 1919, cols. 246–247, A. JIRKU calls attention to a text discovered by the German expedition at Ashur that gives a list of gods worshipped in various temples and by various peoples of the empire. Among these appears "Habiru, god of the Habiru." The Habiru are the race that appears in the Tel el-Amarna letters as menacing Palestine, and there is now general agreement that they are to be identified with the Hebrews. Here then it would seem that their tribal god bore the same name as themselves, just as Ashur is both god and people, and Gad is both god and tribe. This god Heber is identical with the patriarch 'Eber the ancestor of all the Hebrews in *Gen. xi*.

**Veiling in Ancient Assyria.**—In *R. Arch.*, fifth series, XIV, 1921, pp. 209–238, is an article by the late MORRIS JASTROW on "Veiling in Ancient Assyria." The discussion is based upon the prescriptions concerning women's attire contained in the code of laws discovered at Ashur and published by Otto Schroeder (*Texte aus Assur verschiedenen Inhalts, wissenschaftliche Veröffentlichungen der deutschen Orientgesellschaft*, Leipzig, 1920). The rules that wives and free maidens, as well as slave women, be veiled in public was made because such women were the property of husband, father, or master. Harlots, no man's, or every man's property, were forbidden to wear veils. References in the Old Testament to veiling are discussed. From Assyria the custom spread to other places. Mohammed adopted a custom already existing. In some instances veiling is derived from fear of demons and is intended to serve as a protection, *e.g.*, when the head is veiled in the presence of death or after a death in the family. The veiling of the bride is derived from the same original conception as the ancient Assyrian custom of veiling.

**The Present Problems of Assyriology.**—In *Z. Morgenl. Ges.* LXXVI, 1922, pp. 85–100, B. MEISSNER discusses the discoveries of the last few years and the new problems that they have raised for Assyriologists. The chief of these are the chronological tablets which now give us the names of nearly all the kings of Babylon in chronological order from 4000 B.C. to the fall of Babylon, and of the kings of Assyria from 2000 B.C. to the fall of Nineveh. If the date of the Hammurabi Dynasty can be determined with certainty from astronomical observations, as Weidner has attempted, then we shall have a precise chronology of the entire history of Babylonia and Assyria. The newly discovered Assyrian law-code opens up a whole series of problems, and the large numbers of hymns, prayers, omens, and incantations discovered at Ashur provide material for study for many years to come.

## PALESTINE AND SYRIA

**Jupiter Heliopolitanus.**—The statuette of Jupiter Heliopolitanus recently published by R. Dussaud (*Syria*, I, 1920, pp. 3–15; see *A.J.A.* XXIV, 1921, p. 94) is discussed by F. CUMONT (*Syria*, II, 1921, pp. 40–46.) In the series of busts represented in relief on the front of the figure the one identified by Dussaud as Athena is really Ares. If one gives the several gods represented by these busts their Latin names, it is easily seen that they stand for the seven planets: the sun, the moon, Mars, Mercury, Jupiter, Juno, and Saturn. The substitution of Juno for the more usual Venus is noteworthy, but is due to the fact that Ishtar united the functions of Juno and Venus. On either side of her is a star of five rays, indicating that she is at once the morning and the evening star. If the names of the planets are read on the image as in a Semitic text—the right-hand column first, then the left—their order is that of vicinity to the earth: moon, Mercury, Venus (Juno), sun, Mars, Jupiter, Saturn. If on the other hand the names are read from left to right, line by line, the order is sun, moon, Mars, Mercury, Jupiter, Venus, Saturn—in other words, the order of the days of the week. Moreover, the horizontal pairs of busts represent pairs of spheres which bear the relation of the fourth in music. According to Dio Cassius the harmony of the spheres is said to have determined the order of the days of the week. We see then the Pythagorean origin of this element in an oriental cult. The bronze is of importance because it shows for the first time the significance of the planets in the cult and doctrine of Heliopolis.

## ASIA MINOR

**A New Hittite King.**—In *Or. Lit.* XXIV, 1921, cols. 36–70, F. SCHACHERMEYER gathers evidence to show that before Hattusil II, who is commonly regarded as the founder of the main Hittite Dynasty, the name of Dudhalia must be inserted.

**Hittite Art.**—A recent series of articles by EDMOND POTTIER (*Syria*, I, 1920, pp. 169–182, 264–286; II, 1921, pp. 6–29, 96–119; 111 figs.) constitutes an unusually detailed and comprehensive treatment of Hittite art; it is, the author says, a sort of corpus of the subject. A review of the history of the Hittites and of their relations with other oriental peoples establishes the fact that their art is earlier than Assyrian art. The monuments of Carchemish show that Hittite art is based on Sumerian, Akkadian, and Elamite models of the period 3000–1500 B.C., but adapts these models to the customs and fashions of the Hittites. M. Pottier's latest chapters are devoted to the monuments of Zandjirli, a site which exemplifies with exceptional completeness the Hittite civilization, its city-plans, walls, palaces, reliefs, and statues.

## GREECE

### ARCHITECTURE

**The Great Hall at Eleusis.**—At a meeting of the Berlin Archaeological Society, in October, 1919, F. Noack presented measurements and plans which were intended as a contribution toward the history of the buildings of the Sanctuary at Eleusis, and discussed especially the Telesterion or Hall of the Mysteries. The original small square hall, of the time of Pisistratus, was probably partially restored after its destruction by the Persians, but

in the time of Cimon, between 470 and 460, it was rebuilt and doubled in size by an addition on the west, making a long hall with three rows of seven columns each, the bases of which are still to be traced. Later in the same century Ictinus again doubled the area by an addition on the south which contained two rows of four columns each and would have had five rows if the whole square had been rebuilt on the same scale. W. Dörpfeld continued the discussion and gave it as his opinion that the hall as built by Cimon remained in use as the chief meeting place with the newer hall of Ictinus as a separate antechamber, the two being later given greater unity by the architect Philo in the fourth century, who built a portico extending along the eastern ends of both parts. When the Romans again rebuilt after a destructive fire in the second century A.D., they took away the wall between the two parts and made a new square hall with 7×6 columns, covering the whole area and hence four times as large as the hall of the sixth century. As this was later than the time of Plutarch, the gallery running round the hall and the raised lantern or partial third story which he mentions (*Pericles*, 13) must have been in the hall built by Cimon; but these features were reproduced in the larger hall of Roman times. (*Arch. Anz.* 1919, cols. 130–136.)

**Studies on the Corinthian Capital.**—In the first part of her study of the Corinthian capital, M. GUETSCHOW deals with the earliest example of the style, in the temple of Apollo at Bassae, and the capitals of the time of the Roman republic. The Phigalian capital, of which a few fragments gathered up and taken to Athens in recent years are all that remains, belonged apparently to a single marble column, perhaps supporting a votive offering of some kind, in front of the temple, which was itself built entirely of gray limestone. The drawings and descriptions left by the archaeologists who discovered the capital in 1811 are so incomplete and inconsistent that little can be determined with certainty about its form and details. Even whether the leaves were acanthus is questioned. A careful examination of other early Corinthian capitals reveals a number of serious errors in identification and in conjectural dates. A capital from the Stoa of Hadrian (ca. 130 A.D.) has since the time of Stuart and Revett been accepted as that of the Olympieum at Athens (175–164 B.C.). The round temple near the Tiber in Rome, which has been assigned to the second century B.C., is mid-Augustan. The fine capital in the National Museum at Athens is later than the Lesser Propylaea at Eleusis, hence after 50 B.C. The classical form of the capital occurs in Italy only after Sulla brought the columns from the Olympieum to the temple of the Capitoline Jupiter at Rome. The Italian republican form which preceded it probably originated in Sicily and was carried into the peninsula from there. (*Jb. Arch. I.* XXXVI, 1921, pp. 44–83; tables, 3 pls.)

**The "Monument des Taureaux" at Delos.**—In *R. Arch.*, fifth series, XV, 1922, pp. 337–338, a letter of HUBERT MORAND is reprinted from the *Débats* of March 10. He sets forth the hypothesis of Messrs. Couchoud and Svoronos that the building called the "Monument des Taureaux" was erected to house a ship dedicated as a votive offering by Antigonus Gonatas after a naval victory over Ptolemy's fleet, about 250 B.C. *Ibid.*, pp. 338–340, in a letter reprinted from the *Débats* of March 23, R. VALLOIS cites inscriptions which prove that the building in question was the *Pythion* and was in existence at least as early as 275 B.C.

## SCULPTURE

**A Head from the Parthenon in the Louvre.**—In *Mon. Piot*, XXIII, 1918-1919, pp. 1-25 (pl.; 13 figs.) É. MICHON discusses the position on the Parthenon frieze of the head of a youth (Fig. 1) presented to the Louvre in 1916. He cannot locate it beyond dispute, but is inclined to think it belonged to slab No. XIX, now in the Acropolis Museum.

**Monuments of Olympic Victors.**—The monuments, especially the statues, erected in honor of successful contestants in the Olympic games are the subject

of a recently published book by WALTER WOODBURN HYDE. In a preliminary chapter Professor Hyde discusses the origin and development of Greek athletic games in general, tracing their history through the prehistoric and historic periods. The general characteristics of the statues dedicated in honor of Olympic victors are the subject of the second chapter, together with the canons of proportion followed by the several schools of sculpture. Special attention is directed to the assimilation of athletic statues to the types of gods and heroes. The third and fourth chapters deal with works in which the victor was represented at rest



FIGURE 1.—HEAD FROM PARTHENON FRIEZE: PARIS.

and with those in which a characteristic pose of the actual contest was reproduced. The monuments to victors in the hippodrome and to the winners of prizes in non-athletic contests are discussed in the fifth chapter. The sixth, of which the substance has been previously published (*A.J.A.* XI, 1907, pp. 396-416; XVIII, 1914, pp. 462-478), is devoted to a special consideration of two marble heads from victor statues, the first a fragment from Olympia, which is attributed to Lysippus, the second a youthful head from Sparta, now in a private collection in Philadelphia, which has usually been identified as a Heracles, but which Dr. Hyde maintains is the head of an athlete, of eclectic style, showing traces of Praxitelean and Scopaeian influence, but marked especially by Lysippan characteristics. Chapter VII, also based on published papers (*A.J.A.* XIX, 1915, pp. 57-62; XVIII, 1914, pp. 156-164), is a discussion of the material of statues of Olympic victors, with emphasis on the not infrequent use of stone for such monuments. Special attention is directed here to the archaic stone statue of Arrachion at Phigalia, of which the

torso is extant. The concluding chapter lists the statues of victors in the Altis at Olympia, both those mentioned by Pausanias and others, not mentioned by Pausanias, of which the bases have been discovered; also monuments erected to Olympic victors on other sites. Throughout the book the references to the literature and illustrations of the subject are exceptionally abundant and complete. [*Olympic Victor Monuments and Greek Athletic Art*, by WALTER WOODBURN HYDE. Washington, 1921, Carnegie Institution, xix, 406 pp.; 30 pls.; 80 figs.; 2 plans. 4 to. \$10.]

**The Samian Hera.**—At the meeting of the Berlin Archaeological Society in November, 1919, Mr. SCHEDE discussed the cult statue of Hera at Samos, comparing the type seen on late Roman coins with a very ancient terra-cotta figure from Samos itself. Both have the long chiton with very deep kolpos in Cypriote-Phoenician style and the crossed bands around the body, which are symbolic of the bride, while the large triple breast ornament seen on the coins belongs to the Argive cult and indicates the same mixture of oriental and Argive elements that is found in the legends. A coin of Gordian, showing the xoanon in an aedicula with the sacred tree in a tub on the step, suggests that at Samos, as at Didyma, the cella was an unroofed court with a small shrine for the cult statue in the middle. (*Arch. Anz.* 1919, col. 139.)

**An Archaic Statuette.**—VALENTIN MÜLLER discusses a small bronze statuette recently acquired by the Antiquarium in Berlin. It represents a female figure wearing a long Ionic chiton and pointed shoes. The arrangement of the hair, the shape of the skull, the full and fleshy form of the face, and the almond-shaped eyes associate it with the Ionic school. It is to be dated about 590–570 B.C. (*Ber. Kunsts.* XLIII, 1922, pp. 30–32; 5 figs.)

**Polyclitan Notes.**—At the meeting of the Berlin Archaeological Society in November, 1919, W. AMELUNG, following the discourse of A. Brückner on the *talo incessens* of Polyclitus (see 77. *Berl. Winckelmannsprogramm*) called attention to a difference of attitude in this artist's young men and his boys. The former have the head inclined toward the side of the supporting leg, making a peculiar graceful curve from the toe of the free leg to the top of the head, while the latter, with the head bent toward the free leg, have a more self-contained and modest character. An example of the boys' statues of his early years, about 460, is No. 101 in the Braccio Nuovo of the Vatican. The speaker also discussed the Polyclitan influence in the Phigalian and other friezes, and pointed out the Polyclitan character of certain defects in a fifth century statue of a boxer in Dresden, namely a lack of elasticity in the movements, especially of the legs, and a want of realistic coördination of muscular action, e.g., between the extended right arm and the breast muscles. (*Arch. Anz.* 1919, cols. 136–139; 2 figs.)

**A Praxitelean Torso.**—A marble torso of exceptional quality (Fig. 2) which has recently been acquired by the Rhode Island School of Design has been discussed by STEPHEN B. LUCE. This fragment was for many years in the collection of Sir Robert Peel, and still earlier belonged to Sir David Wilkie, who presumably bought it in Italy. The subject is a youthful male figure, leaning upon a tree-stump of which a part is still preserved, attached to the left thigh. The composition, in which the supporting tree forms an integral part, the suave curves of the figure resulting from its attitude, and the delicacy of the workmanship suggest that this fragment is to be closely associated with the school

of Praxiteles. It is of Parian marble and is probably an original work of the fourth century B.C., not a copy by an artist of Roman date. The pose is very similar to that of the *Hermes at Olympia*. The left arm rested at the side of the figure or on the tree; the right, like that of the *Hermes*, held a bunch of grapes. The ends of long locks falling in front of the shoulders show that the subject was not *Hermes* but *Apollo* or *Dionysus*. Comparison with other



FIGURE 2.—TORSO: RHODE ISLAND SCHOOL OF DESIGN: PROVIDENCE.

monuments shows that the statue resembles a familiar type of the youthful *Dionysus*. (Reinach, *Rep. Stat.* I, p. 137, No. 1572; p. 139, No. 1574; p. 377, No. 1583; p. 379, No. 1586; *ibid.* II, p. 121, No. 2; p. 127, Nos. 1, 3, 5; p. 787, No. 3; see especially a statuette in the Vatican, *ibid.* III, p. 236, No. 7.) The composition has a close resemblance to that of the *Dionysus* of Praxiteles at Elis, as represented on coins, though that figure is partially draped, and does not show long locks of hair on the shoulders. Probably the fragment in Providence is the work of a pupil of Praxiteles, based in part on the *Dionysus* of Elis, and perhaps executed during the life time of the master. (*B.R.I. Des.* X, 1922, pp. 29-33; 2 figs.)

**A Replica of the Venus de Medicis.**—In *Mon. Piot*, XXIII, 1918–1919, pp. 45–61 (3 pls.; 2 figs.) E. POTTIER discusses an alabaster statuette of a nude Venus in the Vlasto collection. It was found at Livadia in Boeotia and goes back to the same original as the Venus de Medicis, though copied from an earlier model. It was made in Graeco-Roman times, but preserves a fifth century tradition. The concept is religious—the goddess born of the sea.

**A Marble of the Fourth Century B.C.**—BRUNO SCHRÖDER discusses briefly a marble head of a goddess which has long been in the Berlin collection (*Beschreibung der antiken Skulpturen*, 616). He agrees with Arndt (*Einzelaufnahmen*,

637–638) in assigning it to the second half of the fourth century B.C. The arrangement of the hair and the posture of the head recall the statue of Apollo from Gortyna (*Ausonia*, II, 1907, p. 16; Reinach, *Rép. Stat.* IV, 58, 4) but the earrings prove that the Berlin fragment is a female head. Comparable, but somewhat later, are the head of a statuette of Artemis at Copenhagen (*Ny Carlsberg Glyptothek, Billedtavler* VI, 82) and that of the satyr of Lamia (Bulle, *Der schöne Mensch*, pl. 78). (*Ber. Kunsts.* XLIII, 1922, pp. 17–18; fig.)

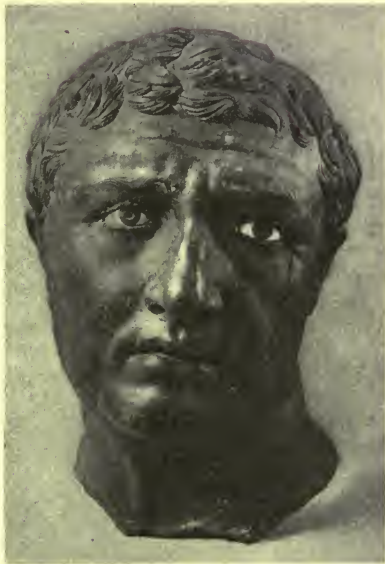


FIGURE 3.—UNIDENTIFIED PORTRAIT HEAD FROM DELOS.

**A Bronze Portrait of an Unknown Man.**—In *Mon. Piot*, XXIV, 1920, pp. 83–100 (2 pls.; 3 figs.), C. PICARD discusses the bronze head of a man (Fig. 3) found in the Old Palaestra at Delos in 1912 by the late Charles Avezou. It is remarkably well preserved and a fine example of portraiture in bronze. The eyes are of paste set in. The head represents

a good fourth century tradition, though the technique is Hellenistic, and it probably dates from about 150 B.C. It has not been identified.

**Asclepius and the Charites.**—In *Mél. Arch. Hist.* XXXIX, 1921–1922, pp. 213–218 (pl.), MARCEL DURRY publishes the relief in the rotunda of the Museo Clementino of the Vatican representing, from left to right, Hermes and a kneeling man, Asclepius and the three Charites. It is a votive relief offered to Asclepius, apparently a late Greek work. The execution is coarse. The types are well known, but the combination of persons is unusual. Various interpretations are discussed, and the conclusion is reached that two scenes are represented: first, the prayer of the man who is ill (prayer to Hermes as intercessor); second, the recovery and gratitude of the patient, the Charites symbolizing health and also gratitude. This approaches very closely the interpretation of Otto Jahn.



**A Lost Replica of the Barberini Faun.**—KURT CASSIRER calls attention to the figure of St. John in one of a series of engravings illustrating the Apocalypse, published by Jean Duvet about 1550. Its posture is far more bold than those which this artist ordinarily represented, and is quite obviously copied from some antique model. That model must have been an ancient replica, now lost, of the Barberini Faun, since the figure now in Munich was not discovered before the seventeenth century. Duvet's work is, therefore, of some importance in the reconstruction of the missing parts of the Barberini statue. It seems to confirm Furtwängler's theory of the original position of the right leg. The existing restoration is purely in the spirit of baroque art, giving the whole composition a restlessness which is foreign to the style of ancient sculpture. (*Münch. Jb. Bild. K. XII*, 1922, pp. 90-97; fig.)

#### PAINTING AND VASES

**A Painted Attic Votive Relief.**—A small fragment (20×27.5 cm.) of a marble polychrome Attic relief of about 400 B.C. (Fig. 4) is published with photograph and colored plate by G. RODENWALDT (*Jb. Arch. I. XXXVI*, 1921, pp. 1-8, pl.; fig.). It is from Eleusis and shows the head and shoulders of Demeter and the head of a boy behind her, with a torch, doubtless held by a standing Kore, at the broken right-hand edge. The painting consists of a blue background, red-brown hair for the boy, yellow on Demeter's veil, and red for the eyes, eyebrows, contours of heads and arm, and for the grooves on the torch handle and between the fingers. This red line, already known on reliefs of Roman date and there sometimes combined with incision, as on the Neumagen relief



FIGURE 4.—VOTIVE RELIEF; ELEUSIS.

at Trier, is here carried back to the Greek classical period. Its aesthetic function is to prevent the uncolored portions from looking like holes in the bright background, as they might without it, in the small and low reliefs on which it is found. Large and fully rounded or undercut figures do not need it.

**A Recovered Vase.**—The Attic vase, of the fourth century, on which Heracles carrying Hades is represented (Passeri II, 104; Weleker, *Alt. Denkm.* III, pl. 19, 1; Furtwängler, in Roscher's *Lexikon*, art. Herakles, p. 2187), was formerly in the Vatican, then disappeared. It was sold by Sotheby, London, April 28, 1922, and the description given in the catalogue of the sale is published in French translation by S. R., *R. Arch.* XV, 1922, p. 340.

### INSCRIPTIONS

**The Inscription of the Stadium at Delphi.**—P. FOURNIER has renewed the discussion of the fifth century inscription found on the retaining wall of the Stadium at Delphi, and originally published by M. Homolle (*B.C.H.* XXIII, 1899, p. 612). He accepts an emendation of Homolle's reading proposed by M. Keramopoulos (*Ἀρχ. Ἐφ.*, 1906, p. 157) and confirmed by Dr. Buck (*Cl. Phil.* VII, p. 78); and he adds a new reading of his own, τὸ νέουον for τὸν φοῖνον. Admitting that this word does not occur elsewhere, he seeks to justify it as a possible word for new wine. The inscription thus forbids new wine to be carried from the Stadium, and indicates the existence at Delphi of a Dionysiac festival parallel to the Anthesteria at Athens. (*R. Ét. Anc.* XXIV, 1922, pp. 1-12.)

**The Athenian Proedroi of the Fourth Century B.C.**—GUSTAVE GLOTZ shows that the date at which the executive functions hitherto discharged by the prytanes were taken over by the proedroi was the winter of 378-377 B.C., a period which was marked by a renaissance of Athenian power and ambition and by a number of changes in the governmental machinery of Athens, including the constitution of a syndedion representing the cities of the empire. M. Glotz's conclusions are based on a study of the epigraphic evidence. (*R. Ét. Gr.* XXXIV, 1921, pp. 1-19.)

### GENERAL AND MISCELLANEOUS

**A Comparison of Painting and Sculpture.**—In *Ath. Mitt.* XLIV, 1919, pp. 47-174, (6 pls.; 17 figs.), G. VON LÜCKEN reviews the development in the representation of the human form by the Greek vase painter and the Greek sculptor. The former focused his attention chiefly on the human figure in motion; the latter endeavored to express the "corporality" of his subject. At the end of the archaic period the two aims coalesce, and from this time on each branch of art could influence the other.

**Penelope's Work.**—In *R. Arch.*, fifth series, XV, 1922, pp. 319-323 (pl.; fig.) J. SIX publishes a terra-cotta spool the two ends of which are covered with gold medallions. On one of these Odysseus is represented sitting on a stool and carving or whittling a staff with a curved top while his dog lies at his feet. On the other medallion is Penelope engaged, not in weaving, but in making a fine web or net (*filet sans noeud*), such as Greek women used to bind about their hair. The spool is said to have been found in the Crimea, and is now in the possession of M. M. Feuardent. It appears to be Attic work of a date not far

from the middle of the fifth century B.C. It is a curious fact that the only women represented in Greek vase-paintings as weaving are Circe and Penelope.

**The Peplus of the Greek Woman.**—In *Mon. Piot*, XXIV, 1920, pp. 5–46 (26 figs.) L. HEUZEY discusses the “peplus” of the Greek women. He distinguishes four types of the open garment: 1, the simple form; 2, the form with fold; 3, that with long fold; and 4, the one with long fold and girdle. He notes the half-closed type, the closed type with girdle and fold, and the closed type with long fold. His paper is illustrated with photographs of living models compared with vase-paintings and pieces of sculpture.

**Aphrodite and the Tortoise.**—The frequent association of Aphrodite with the tortoise, especially when the goddess is represented as the support of a mirror, is discussed by W. DEONNA (*R. Hist. Rel.* LXXXI, pp. 135–144). The disc of the mirror probably symbolizes the heavens. The tortoise on which the foot of the goddess rests is a symbol of the earth, as in the mythology of many primitive peoples. Aphrodite herself may have had in primitive belief this animal form which later appears only as an attribute.

**Plato's Alarm Clock.**—H. DIELS, following a suggestion derived from the musician Aristocles as quoted by Athenaeus (IV, pp. 174c ff.) has presented a new reconstruction of the alarm devised by Plato to wake the students of the Academy. A quantity of water suddenly released from an upper receptacle fills a lower, forcing the air in the latter through a pipe and so producing a sound which was an ancient anticipation of the modern factory whistle. (*Sitzb. Ber. Akad.* 1915, pp. 824–830; 3 figs.)

**Lycurgus and Druidism.**—In *R. Arch.*, fifth series, XV, 1922, pp. 302–318, SALOMON REINACH calls attention to a passage near the beginning of Plutarch's *Life of Lycurgus* in which the Spartan writer Aristocrates is cited as authority for the statement that Lycurgus visited Libya, Iberia, and India. Libya here means Egypt, and Iberia means Gaul. By a process of elimination the result is reached that some Greeks believed Lycurgus to have introduced at Sparta something derived from Gaul, and the only thing not otherwise accounted for is the military education. There must, then, have been some similarity between the military education of the Gauls—and this was under the direction of the druids—and that of the Spartans.

**The Powers of the Athenian Boule.**—PAUL CLOCHÉ has published a study, based in large measure on literary evidence, of the powers exercised by the Boule in Athens in the fifth and fourth centuries B.C. The orators regularly associate the Boule with the Ecclesia and the popular courts. Its difference from the Ecclesia is one of degree rather than kind. It persisted as an inferior and subordinate organ of government, exercising more influence than is granted in the *Politics* of Aristotle. A scholiast on Aeschines speaks of the Boule as a small city; and as an image in little of the Athenian state, it retained the respect of the citizens. (*R. Ét. Gr.* XXXIV, 1921, pp. 233–265.)

## ITALY

### ARCHITECTURE

**An Annex of the Imperial Palace on the Palatine.**—An unfinished building in the southeast corner of the Roman Forum, connected by stairways on the east side with the Palace of the Caesars on the hill above and containing a large

west hall, a smaller hall and atrium with exedra, etc., was originally planned and partially constructed in the time of Domitian, apparently to serve as a place where the emperor could hold receptions. Under Hadrian it was converted into barracks for slaves, the lofty west hall being divided into three stories, each with cellae or cubicula built along the two long walls and outside the west wall. In late antiquity the atrium, exedra, and a small room adjoining were elaborately decorated with marble incrustations, columns, capitals, etc. This was probably a church. The building, which has been wrongly identified with the *Templum Divi Augusti*, has the same orientation as the temple of Castor, which is north of its western half, but the pre-Domitian remains beneath it, from the time of Caligula or earlier, have that of the *Horrea Germanicana*, which adjoin it on the southwest. The Domitian building represents the last development of the architecture with plain barrel vaulting. The details of the structure, with measurements and elaborate plans based on studies made in 1914, are published by R. DELBRÜCK. (*Jb. Arch. I. XXXVI*, 1921, pp. 8-33; 8 pls.; 8 figs.)

**The Excavations of Pius VI at Tivoli.**—According to local tradition Maecenas had a villa at Tivoli. The ruins commonly called by that name, however, belong to the temple of Hercules. It is probable that the villa of Maecenas is to be identified with the so-called *Villa di Cassio* which was excavated in the time of Pius VI. The numerous sculptures discovered here were installed in the *Sala delle Muse* of the Vatican. One of these was the relief including figures of a frog and a lizard, signatures of the Augustan artists *Batrachos* and *Sauros*. The number of portrait busts of celebrated men found in this villa is also notable; and the existence here of a group so grandiose as that of the *Muses* suggests that the proprietor was the emperor or a rich patrician. R. LANCIANI calls attention to these facts in publishing extracts from a manuscript "*Codice topografica di Tivoli*," containing the correspondence exchanged in the years 1772-1780 by the proprietor of the site, the excavator, and the Pontifical Superintendent of Antiquities. (*Atti e Memorie della Società Tiburtina di Storia e d'Arte*, II, 1922, pp. 3-15; fig.)

**The Subterranean Basilica of the Porta Maggiore.**—In *Mél. Arch. Hist.* XXXIX, 1921-1922, pp. 165-192 (4 pls.; 2 figs.), H. M. R. LEOPOLD describes and discusses the subterranean basilica discovered in 1917 near the *Porta Maggiore* in Rome (*A.J.A.* XXIII, 1919 p. 82 and p. 429, XXV, 1921, p. 412). The religious ideas indicated by the scenes and persons represented in the decoration of the basilica are as much Orphic and Dionysiac as Pythagorean. In the first half of the first century the imperial cult was closely connected with that of the mysteries, but from about 50 A.D. to the reign of Hadrian the mysteries were not favored by the emperors. Very likely T. Statilius Taurus was authorized by the Emperor Claudius to build this subterranean Orphic basilica. The condition of the basilica shows that it can have been in use only a short time.

## SCULPTURE

**Archaic Terra-cotta Agalmata in Italy and Sicily.**—That great technical skill as well as artistic excellence was attained by the artists of the sixth and fifth centuries B.C. in Sicily and Italy who worked in terra-cotta because of the lack of stone suitable for sculpture, is shown by the numerous fragments of their work that remain. The votive and cult statues and groups erected in

temple precincts are discussed by E. D. VAN BUREN (*J.H.S.* XLI, 1921, pp. 203-216; pl.; 7 figs.). Notable are a very early seated goddess, 75 cm. high, from Granmichele; a Gorgon holding a diminutive Pegasus, from the temple of Athena at Syracuse; part of a very delicately finished head, possibly of Athena, from Metaurum; and the splendid group at Veii, of four lifesize deities, representing the contest of Apollo and Heracles over a stag. Heads and other parts remaining from some fine statues in the sanctuary at Satricum suggest that the Capitoline triad of Zeus, Hera and Athena was worshipped there. Among the smaller remains are many feet variously shod and parts of lions, bulls, and other animals, which remind one of Mycenaean and Minoan art. In Italy this form of art lasted well down into the fifth and fourth centuries, but in Sicily it was superseded by works in bronze, marble and the chryselephantine technique.

**The Column of Trajan and the Dacian Wars.**—G. A. T. DAVIES has published a study of the topography of the Dacian wars of Trajan, based on personal inspection of the terrain, together with reference to the column of Trajan. There has been great divergence of opinion on the route taken by the Roman army in the campaign of 102 A.D. Professor Davies shows that the Romans crossed the Carpathians at the Red Tower Pass, and that they advanced upon the Dacian capital, Sarmizegethusa, by a route directly across the Mühlbach Mountains. A group of fortresses in this mountain district was the primary objective of the Roman advance. Exploration has revealed abundant remains of the Dacian fortifications in this region. (*J.R.S.* X, 1920, pp. 1-28; map.)

**The Golden Bough on Roman Sarcophagi.**—On a sarcophagus in Vienna (Overbeck, *Kunstmythologie, Atlas*, pl. XVII, 22) is a representation of the Rape of Persephone in which Athena, facing the chariot of Pluto, holds in her right hand a laurel bough. The late CARL ROBERT (*Sitzb. Ber. Akad.* 1915, pp. 709-711; fig.) has interpreted this as the golden bough offered to Persephone to insure her return to earth, in opposition to the gesture of Aphrodite on the same relief, who offers the fatal pomegranate. This relief confirms Robert in his similar interpretation of a bough held by Adonis on a relief in the Lateran (*Antike Sarkophagreliefs*, III, 1, pl. V, 21).

#### VASES AND PAINTING

**A Campanian Vase.**—In *Mon. Piot*, XXIV, 1920, pp. 183-213 (3 pls.; 6 figs.) E. GABRICI discusses a Campanian vase found in a tomb at Falcone, Sicily, in 1904 and now in the museum at Palermo. The chief scene represents Silenus and nymphs. Blue, yellow, pink and white are used in the decoration. In different parts of the vase are a few Greek letters which the writer thinks stand for different colors. They were put on to guide the painter in applying his decoration.

**An Ancient Wall Painting in a Fifteenth Century Manuscript.**—In a manuscript of Servius's Virgil dated in 1467, there is at the beginning of Book VI a contemporary pen drawing of Theseus and the dead Minotaur with the rescued Athenian children, which evidently goes back to the same original as the wall painting of this subject in the basilica at Herculaneum, though it lacks the door of the dungeon and the goddess or symbolic figure, possibly Crete, seated on a high rock at one side. The origin of the drawing and its relation to other similar compositions are discussed by M. MAYER. (*Arch. Anz.* 1919, cols. 118-127; fig.)

## INSCRIPTIONS

**Inscriptions from Piedmont.**—PIERO BAROCELLI publishes a few fragmentary Latin inscriptions from various sites in Piedmont. (*Bolletino della Società Piemontese di Archeologia e belle Arti*, V, 1921, pp. 72-75.)

## COINS

**Four Historic Coins.**—H. MATTINGLY discusses four imperial coins of unusual historic interest: (1) An aureus of Caligula, struck at Lugdunum in 37 A.D., soon after his accession, is remarkable for his neglect of the example set by the first coins of Tiberius, which showed the head of his predecessor on the reverse, together with the name of the former emperor. The coin of Caligula has a head, but no inscription on the reverse. But the two stars in the field probably symbolize the reigning and the former emperor. (2) An aureus of Nero, struck in Greece, has the inscription IVPPITER LIBERATOR, a translation of Ζεὺς Ἐλευθέριος with boldly flattering allusion to Nero himself. (3) An aureus of Vitellius, struck at Tarraco, has the inscription A. VITELLIVS IMP, GERMANICVS, "Emperor made in Germany," a boastful and defiant motto. On later coins the last two words were reversed, with less offensive effect. (4) A sestertius of Vitellius has the inscription VRBEM RESTITVIT S. C. The city in question is probably not Rome, but Lugdunum, which Vitellius restored to a position of favor which it had forfeited under Galba. (*J.R.S.* X, 1920, pp. 37-41.)

**Multiple Solidi of the Late Empire.**—Five Roman gold medallions of the fourth century are the subject of a recent study by AGNES BALDWIN: (1) A ternio of Constantinus II, now in the Pierpont Morgan collection, commemorates the decennial festival of this son of Constantine the Great, but was issued in 326 A.D., the year before the actual tenth anniversary of the accession of Constantinus II to the title of Caesar. The posture of the head is significant; it is raised, as is the head of Constantine on coins subsequent to the Council of Nicaea. This attitude as represented on the coins is, according to Eusebius, one of Christian devotion. It is not borrowed, then, from portraits of Alexander the Great; else it would hardly appear on the coins of the younger Constantine. (2) A gold medallion equal to  $4\frac{1}{2}$  solidi, also in the Morgan collection, was issued in 336 A.D., the year of the celebration which marked the completion of the thirtieth year of the reign of Constantine, and (by anticipation) the twentieth anniversary of Constantinus Junior. (3) The third medallion, also of Constantine, now in the collection of Dr. de Yoanna, was stamped at Nicomedia and has the value of  $1\frac{1}{2}$  solidi. It is one of a number of pieces which the emperor distributed to men of the senatorial and equestrian orders, perhaps on his visit to Rome in 326. (4) A double solidus, now in Berlin, shows a radiate head of Constantine on the obverse, and a gate of Augusta Trevirorum on the reverse. Maurice has dated this coin between 326 and 330; but the inscription AVGG, on this specially minted medallion shows that it must have been issued during the life of Licinius, who shared with Constantine the title of Augustus. It is, therefore, to be dated between 312 and 324. The radiate head is a pagan symbol, in allusion to Constantine's alleged descent from the Sun-god. It appears on coins even after the date of the emperor's conversion to Christianity. The gate on the reverse is not the existing Porta Nigra, but

the Porta Ineluta at the bridge head on the Moselle. This is proved by the representation of the bridge on the coin, and confirmed by a mediaeval description of the city. (5) A ternio of Valentinian, now in Brussels, was struck in commemoration of his victory over the Alemanni in 368. Miss Baldwin concludes her study with some general observations on the nature and purpose of these medallions. They were not like private medals, since they were issued only by imperial authority, and since they are regularly multiples of standard coin weights. On the other hand they were not used as ordinary currency. They were issued on special occasions and distributed to specially privileged classes. They seem often to have been adapted to use as personal ornaments, in rich settings. [*Five Roman Gold Medallions, or Multiple Solidi of the Late Empire*, by AGNES BALDWIN. *Num. Not.*, No. 6. New York, 1921, American Numismatic Society. 103 pp.; 5 pls.; 7 figs.; map.]

### GENERAL AND MISCELLANEOUS

**Situla of Terra-cotta and other Utensils of the Bronze Age.**—In *Mél. Arch. Hist.* XXXIX, 1921–1922, pp. 25–46 (pl.; 2 figs.), GIOVANNI PANSA publishes three objects all of which are connected with the solar cult of the Bronze Age. The first is a bronze bowl with a high, vertical handle. This handle is adorned with a number of large rings and curves in open work, resembling three solar barks and ending at the top in swans' heads with long beaks. From the outer ring six chains hang down and are held by two swans standing on the rim of the bowl. The second object is also of bronze. It resembles in form a rather short sword, except that the blade is cylindrical and has a sort of cord wound about it, giving it the effect of a screw. The guard of the hilt has the form of a votive bark with each end shaped as a swan's neck and head. The end of the hilt is again a swan. About the hilt are several (apparently eight) loose rings. The third object is a terra-cotta chariot in the writer's private collection. It was found near Canosa. The body of the chariot consists of a swan with spreading tail and drooping wings. A hole in the back may originally have had a lid, perhaps in the form of another swan or of a human being. This small object represents the processional chariot used in the religious (or magic) rites by which the weather was to be affected and rain produced. The loose rings on the sword-like object were probably intended to make a jangling sound, and the object itself was for use in religious rites. In connection with these three objects numerous others are cited as analogies, and cases of the survival in later times of the beliefs and even the ritual of the early times to which the objects belong are discussed.

**Prehistoric Antiquities of Piedmont.**—PIERO BAROCELLI discusses a number of prehistoric antiquities of Piedmont: (1) pre-Roman swords; (2) an axe of pure neolithic type, found near Villeneuve; (3) a *tranchet* obtained from a peasant of Mombasiglio. This latter object is of a type common beyond the Alps, but almost unknown in Italy. (*Bolletino della Società Piemontese di Archeologia e belle Arti*, V, 1921, pp. 40–55; 3 figs.)

**The Lucus Feroniae.**—LILY R. TAYLOR has made a new study of the evidence for the site of the Lucus Feroniae, which is known to have been in the territory of Capena in southeastern Etruria, near Soracte. Opinion has been divided between modern Nazzano and Rignano as possible sites of the ancient grove. Miss Taylor concludes that the evidence decisively favors Nazzano.

(1) The inscription *C.I.L. XI, 3938*, which mentions the *Lucus Feroniae*, is derived from a manuscript of the eleventh century which also contains the Rule of the Sabine monastery Farfa. From another collection of documents it is known that this monastery had numerous holdings on the right bank of the Tiber. Nazzano is several times mentioned as the site of properties of the monastery. Hence the inscription is more likely to have been found at Nazzano than at Rignano. (2) The site of Nazzano satisfies the requirements of Strabo's reference, and also of the testimony regarding Hannibal's visit to the grove. (3) Discoveries on the site make this identification probable. The local inscriptions indicate the existence of an independent municipal organization here. (4) Discoveries at Rignano, on the other hand, show its close association with Falerii. Nazzano is by its situation fitted to be the centre of a Sabine and Latin cult. The worship of Feronia in this grove is to be regarded as a rite of the Italic, not the Etruscan race. (*J.R.S. X, 1920, pp. 29-36; map.*)

**The Lupercalia.**—A dissertation by ALBERTA M. FRANKLIN is devoted to the history and significance of the Lupercalia. Recent discoveries have shown the emphasis which was placed on the worship of the earth goddess in the religion of the Mediterranean race, and justify a renewed discussion of the ceremonies of the Lupercalia, which the Romans regarded as a rite insuring protection, fertility, and purification. The wolf-deity associated with the Lupercalia was a chthonic power, as was the Pelasgian wolf-god of the Greeks. The sacrifice to Lupercus, a rite derived from the Ligurians, was apotropaic in purpose. The goat-god whose worship is also implied in the ceremonies of the Lupercalia was a god of fertility, as in Greece, and his cult is closely associated with that of Juno. Pelasgian Greece also had dog-cults, mainly of Thracian origin, the purpose of which was purificatory. The sacrifice of a dog in the Lupercalia had the same motive, and was probably an element of the ceremony derived through the Sabines from the Greeks of Magna Graecia. The blood ceremony of the Lupercalia recalls Orphic rites, and like them symbolizes the union of the worshipper with the deity. It was probably during the war with Hannibal or the period immediately after it that this orgiastic ceremony was added to the Lupercalia. [*The Lupercalia*, by ALBERTA M. FRANKLIN. New York, 1921, published by the author, 105 pp.; 8vo.]

**The Museum of Novara.**—The archaeological collection of the Museo Civico at Novara is described by G. B. (*Bolletino della Società Piemontese di Archeologia e belle Arti*, V, 1921, pp. 77-83; 4 pls.). It includes some neolithic celts, a few small objects of the Bronze Age, and a number of fibulae and other ornaments of the Iron Age; some Gallic weapons of iron and Gallic pottery; and other objects of the Gallic and Roman periods.

## SPAIN

**A Double-faced Marble Relief.**—In connection with an unusually perfect example now in Barcelona, G. LIPPOLD discusses the class of marble discs sculptured on both sides, which are known as *oscilla*, and of which some hundred have been found, scattered over the western half of the Roman Empire. Many of them have been published but no complete catalogue has yet been made. They are most numerous in Italy, especially in Herculaneum and Pompeii, where they were hung as ornaments between the columns of the



peristyle in private houses of the third style, but they have been found also in theatres. On Campana reliefs they are shown in the colonnades of the palaestra, and sometimes alternate with similar pelta-shaped reliefs, actual examples of which are also known. This indicates their origin in the clipeus or round Greek shield, so often associated in Greek art with the Amazonian pelta. The marble discs, which are all of approximately Augustan date, are purely decorative and make no attempt to imitate the structure of the shield. The surfaces are not curved, they have rims or borders of many different kinds, and the subjects are rarely such as were used for shield devices. Most of them have higher relief on one side than on the other and a few have the reverse blank, probably once painted. They were occasionally set up on a stand instead of being hung by chains. The rectangular double-faced reliefs, which are a modification of the votive wall-relief, are regularly so placed. The latter have usually a mask on one or both sides. The preponderance of Dionysiac and offertory scenes and the frequent occurrence of torches on the discs have apparently nothing to do with their derivation from shields but show a pre-Roman religious connection of some sort. The Barcelona specimen, sole relic of some wealthy Roman's provincial sojourn, has on one side a young countryman carrying his wares to market and on the other a satyr offering wine before a herm. It is executed with great delicacy, the contours being marked by a slight depression in the ground. The diameter is 34.5 cm. (*Jb. Arch. I. XXXVI*, 1921, pp. 33-44; pl.)

## FRANCE

**The Cavern of Isturitz.**—In *R. Arch.*, fifth series, XV, 1922, pp. 1-45 (42 figs.), E. PASSEMARD describes the great two-fold cavern of Isturitz, in the Basque country, and states the conclusions to which he is led by the study of the implements, bones, paintings, sculptures, and engraved drawings discovered. He distinguishes eleven strata, one of which contains thousands of bones of the *ursus spelaeus*. These strata range without interruption from the upper Mousterian to the end of palaeolithic times. The objects found prove that the Aurignacian is earlier than the Solutrean, that magic was practised in the Magdalenian epoch, that the reindeer existed throughout all the periods here represented, but that the climate became noticeably colder toward the end of the Magdalenian epoch. Apparently an equine animal different from the classic quaternary horse existed. The sequence of the forms of bone javelin-heads from the typical Aurignacian to the end of palaeolithic times has been determined, and some of the technical methods employed in their manufacture have been made clear. Among the drawings and relief sculptures are some of very unusual excellence.

**A Female Head at Lyons.**—In *Mon. Piot*, XXIII, 1918-1919, pp. 27-43 (2 pls.; fig.) H. LÉCHAT discusses a female head recently purchased by the museum at Lyons. The back, which was hollowed out, was undoubtedly finished in stucco, as in many Greek heads of Egyptian derivation. The marble head seems to have been attached to a hollow body probably made of stucco. It is likely that the statue was funerary and, perhaps, inspired by the Niobe.

**The God of the Waters at Aix-en-Provence.**—At Aix-en-Provence, in the *thermae* of Sextius, excavations have led to the discovery of a Roman *piscina*,

fragments of statues, and an inscription, *Pompeia Antiopa Orbano v.s.* In the third line, an initial *B* of the name is lost. Borbanus (Bormanus, Bormo, Borvo) is the god of thermal waters, who is known at Aix-en-Savoie, at La Bourboule, at Bourbon-Lancy, and at Bourbonne-les-Eaux. (P., *R. Arch.*, fifth series, XIV, 1921, p. 409, from *Débats*, July 21, 1921.)

## SWITZERLAND

**Gallo-Roman Treasures of Goldsmith's Work.**—In *R. Arch.*, fifth series, XIV, 1921, pp. 243-304 (21 figs.), W. DEONNA describes the treasures of Gallo-Roman goldsmith's work in the Musée d'Art et d'Histoire at Geneva. These are: I, the treasure of Reignier (1776); II, the treasure of Saint-Genis (1821); III, treasure I of Cruseilles (1875); IV, treasure II of Cruseilles; V, treasure I of Fins d'Annecy (1902); VI, treasure II of Fins d'Annecy (1912). The last was described and discussed in *R. Arch.* XI, 1920, pp. 112-206. The objects found at the various places mentioned were probably buried for safe-keeping in the troubled years of the third century A.D. They comprise coins, silver *palerae* or other vessels, statuettes, personal ornaments, metal parts of caskets, and the like. They appear to be chiefly, if not entirely, of native manufacture and offer interesting information concerning the technical skill, the household furnishings, the taste, and, in some instances, the religious beliefs of the people.

## SWEDEN

**Gold Rings of the Period of Migrations.**—GUNNAR ECKHOLM discusses the development and relationship of various forms of gold rings belonging to the period of the great European migrations. The great Nordic gold collars were developed by welding together several neck rings of a type common in Eastern Europe in the third century. Three stages of the evolution of the wide gold collar of the fifth century are illustrated. The earliest form originated in the ring ending in a serpent's head. This evolution took place in the East Baltic region, where a later form of the serpent's head ring persisted until the fifth century. (*Forvännen*, XIII, 1918, pp. 53-60; 3 figs.)

**Solidi in Öland and Gotland.**—T. J. ARNE discusses the significance of two hoards of Roman gold solidi, one of 166 coins, found in Öland, the other of 108 coins found in Gotland. With the exception of one coin of Justinus, all the solidi of the first find date from the fifth century. Of the other, forty-one were issued by Anastasius, who is not represented in the Öland hoard. It is inferred by Dr. Arne that such importations of coins are isolated phenomena. They do not imply a continuous trade in Sweden; probably they were brought in on definite and distinct occasions by South German soldiers who were helping the Götar against the Svear. (*Forvännen*, XIV, 1919, pp. 107-111.)

**The Later Iron Age in Sweden.**—The later pre-Roman Iron Age or *La Tène* period in Sweden, according to a recent dissertation by T. J. ARNE, is to be dated from about 300 B.C. to the beginning of the Christian era. Graves of this period are in part under the level surface of the ground, and in part covered with mounds of stone or of earth mixed with stones. Incineration prevails in these early graves. Some contain the burned white bones without ashes; others contain both bones and ashes. The bones in both classes of graves are sometimes contained in clay urns, sometimes buried without any containing

vessel. Some of the graves which are level with the ground are marked by a single stone; others have a pavement below the ground level. The custom of burying ashes with the bones is not found in the Bronze Age, but came into use during the first period of the Iron Age. La Tène graves are rare in South Sweden, except in Öland. (*Fornvännen*, XIV, 1919, pp. 188–223; 12 figs.)

~ **Oval Fibulae.**—GUNNAR ECKHOLM shows that the oval fibulae in use in Eastern Europe in the early mediaeval period, which show a progressive increase in size, have their prototype in a small bronze clasp which was sewed on garments, and originated about 300 A.D. (*Fornvännen*, XIII, 1918, pp. 78–84; 2 figs.)

**Swedish Weights in the Viking Period.**—T. J. ARNE has published a rejoinder to Dr. F. de Brun's criticism (*Fornvännen*, XII, 1917, pp. 56–66) of his theory of the system of weights prevalent in Sweden during the Viking period (*Fornvännen*, XIII, 1918, pp. 61–64). The controversy is continued by a further article from Dr. DE BRUN (*ibid.* XIV, 1919, pp. 232–241) and a reply by Dr. ARNE (*ibid.* XIV, 1919, pp. 241–245).

**Scandinavian Golden Bracteates.**—In *R. Arch.*, fifth series, XIV, 1921, pp. 373–395 (30 figs.), D. JANSE discusses the representations on the Scandinavian medals called bracteates. They belong to the fifth and sixth centuries A.D. The bird represented on many of them is a falcon, and falconry was practised at that time. The author's chief contention is that the representations have nothing to do with Nordic religion or mythology, but have a historical signification, that they represent Attila, the barbaric chieftain, hunting with a falcon and scenes which have to do with the legends that grew up about the name of Attila.

**The Royal Mounds of Adelsö.**—Opposite Birka in the Mälars Lake lies Adelsö, the site of numerous antiquities of the Iron Age and the early mediaeval period. Among these are the three so-called royal mounds, of which the largest is five meters high. The name may have been derived from an ancient tradition. The mounds belong to the later Iron Age, and cannot be earlier than 750 A.D. They are to be associated with the Svear kings who ruled during the ninth century. Probably some of these kings were actually buried here. (BIRGER NERMAN, *Fornvännen*, XIII, 1918, pp. 65–77; 2 figs.)

## GREAT BRITAIN AND IRELAND

**The First Celts in England.**—In a recent paper O. G. S. CRAWFORD submits evidence that "towards the close of the Bronze Age the British Isle was invaded by the first wave of Celtic-speaking peoples, bringing with them leaf-shaped bronze swords, many other entirely new types of bronze objects, and at least two types of pottery new to these regions." The invaders may have been the Goidels, and the date of their arrival about 800–700 B.C. The types of pottery which are specified as evidence of alien occupation are the pots marked with finger-tip impressions found in southern England, and the globular urns of Wessex. These are associated with bronze razors, and with winged axes and other bronze objects characteristic of the Bronze Age in Central Europe. (*Ant. J.* II, 1922, pp. 27–35.)

**Polygonal Earthworks in England.**—Lieut.-Col. J. B. P. KARSLAKE supplements a previous paper on the pre-Roman remains of Silchester (*Proc. Soc. Ant.*

XXXII, pp. 185 ff.) with a study of earth-works of rudely polygonal plan found in this part of England, indicating the course of Gallic immigration from the Sussex coast towards the Berkshire downs at the head-waters of the Thames. There are clear traces of a fortification of polygonal outline around Lambourne. Other remains and place-names of the parish indicate the original Gallic organization of this territory: a *civitas* consisting of several *pagi*; a principal town (Calleva) and smaller towns, such as Lambourne. This system seems to have been maintained in the Roman period; and the modern land measures have been transmitted from these Gallic communities. (*Ant. J.* I, 1921, pp. 303-315.)

**Coldharbours.**—Lieut.-Col. J. B. P. KARSLAKE has presented to the Society of Antiquaries of London a paper on the numerous places in the southern counties of England known as Coldharbours. A topographical examination has led him to the conclusion that these places are to be associated with Gallo-Roman, pre-Saxon communities. Each appears to be within the banlieue or leugata of a Gallic settlement. The cold harbour was a place for the shelter of the cattle of the community in winter. Other names in the immediate neighborhood of these sites point to pre-Saxon settlements. (*Ant. J.* II, 1922, pp. 240-253; 8 figs.)

**Historical Monuments of Essex.**—The English Royal Commission on Historical Monuments has published the second volume of its inventory of the historical monuments of Essex. The present volume is devoted to Central and Southwest Essex. A preface gives a concise general account of prehistoric and later earthworks, Roman remains, and the ecclesiastical and secular architectural monuments of this region. The principal furnishings, fireplaces, stained glass windows, sculptures and paintings associated with these buildings are also mentioned. The preface is followed by an exhaustive inventory with detailed description of the monuments of each parish, arranged as prehistoric, Roman, ecclesiastical, secular, and unclassified. The scope of the book is illustrated by the fact that many old farms, inns and cottages are illustrated and described, as well as the more imposing buildings of the county. In the formal report of the Commission a number of monuments are listed as especially worthy of preservation. [*Royal Commission on Historical Monuments (England). An Inventory of the Historical Monuments in Essex*, Vol. II. London, 1921, His Majesty's Stationery Office. xli, 335 pp.; numerous plates, figures, maps, and plans. 4to.]

**Miscellaneous British Antiquities.**—R. A. SMITH discusses (*Ant. J.* II, 1922, pp. 93-104; 10 figs.) a number of British antiquities: (1) The two gold crescents of Harlyn Bay, now in Truro (cf. *Ant. J.* I, 1921, pp. 131 ff.) may be associated in date with the flat celt which was found with them. This belongs to the eighteenth century B.C. Probably both crescents and celt belong to a period before the Celts came to Britain. (2) A model or toy shield of bronze from Hod Hill, Dorset, is from the site of a fort which was probably a centre of resistance to the Claudian invasion, 30-40 A.D. It is of Gallic origin. (3) A stone mould for metal ornaments was discovered near the Roman wall at Hatton Chesters. (4) A Viking "trial piece" found in Banffshire, Scotland, is described as a cylindrical stone engraved with both Christian and pagan emblems. (5) A bone cylinder now in the British Museum is also ornamented with characteristic Viking designs.

**Mills in Ireland and the Story of Ciarnat.**—In *R. Arch.*, fifth series, XIV, 1921, pp. 362–372, J. VENDRYES, after calling attention to the introduction of the derivative of *fenestra* (*senestir*) along with the thing (window which can be closed), proceeds to the word for “mill,” *muilenn* and similar forms, which appears with the introduction of the water-mill. The story that King Cormac caused the first mill in Ireland to be constructed for his beautiful mistress Ciarnat is pure legend.

## NORTHERN AFRICA

**Some Topographical Names of Ancient Carthage.**—In *R. Arch.*, fifth series, XV, 1922, pp. 114–118, L. CARTON discusses several modern topographical names which seem to be derived from the ancient names. He mentions *Thamugadi* = *Thugga*, *Nefzaua* = *Nybgenvi*, two common nouns, *fious* = *folhis*, and *cadous* = *cadus*, *Cartagenna* applied to a region north of the ancient harbors, *Dermèche* = *Ad Themas* or *Thermis*, *Damous Karita* = *Domus Caritatis* (perhaps), *Rades* = *per rates*, *Qart-Hadast* = *Catadas*, *Malga* and *Marsa* = *Negara*, *Ksar-Tina* = *Constantina*, *Tebour-Souk* = *Thubursicum*, *Hammam Darradji* = *Bulla Regia*, and suggests that the name of the goddess *Tanit* may be another form of *Dido*(n), as *Guelma* is another form of *Melek*.

**The Tomb at Lambiridi and African Hermetism.**—In *R. Arch.*, fifth series, XV, 1922, pp. 211–301 (pl.), JÉRÔME CARCOPINO describes a tomb found at Lambiridi in 1918 and publishes the mosaic, now in the museum at Alger, which covered its floor. The tomb was that of Cornelia Urbanilla, wife of Tiberius Claudius Vitalis, and was built in the latter part of the third century A.D. The large central medallion or *emblema* of the mosaic is circular and surrounded by a meander pattern. In it a very thin nude male person with prominent breasts sits opposite a powerful, bearded, fully draped man who holds his hand. In segments of circles to right and left are, at the right, two ducks with a vase between them and, at the left, two peacocks and a vase. In smaller segments are, at the top the body of Urbanilla wrapped in a white shroud and lying on a bier, at the bottom, where the mosaic is almost destroyed, apparently a ship. In the spaces at the corners of the nearly square mosaic are four youthful genii whose legs end in serpents with heads and whose arms are held up so that their hands touch the circle. Between the central *emblema* and the segment at the top is an inscription in four lines which the writer, after discussing other possibilities, reads *Eu! ler pi us*. Between the *emblema* and the segment at the bottom are the Greek words *οὐκ ἤμην, ἐγενόμην, οὐκ εἶμι, οὐ μέλει μοι*. The whole is explained as presenting the symbolism of the mystic Hermetism, which, originating in Egypt, was carried to the more western regions of Africa and flourished there rather modestly from near the end of the first century to about the end of the third. Arnobius was converted from Hermetism to Christianity. The greater part of the article is taken up with the elucidation of the religion of Hermes, its relations to Epicureanism, to Christianity, and to other beliefs against which it had to contend, and to which it bore greater or less similarity.

**A Terra-cotta Statuette in Tunis.**—In *Mon. Piot*, XXIV, 1920, pp. 69–82 (colored pl.) A. MERLIN discusses a painted terra-cotta statuette 33 cm. high in the Museum of the Bardo, Tunis. It was found in 1917 in a large tomb at Carthage and preserves its color intact. It represents a woman standing stiffly in a close-fitting garment and holding in both hands a tambourine which she

seems to be playing. She has on her head a heavy diadem at the top of which is a hole for suspension. There is a row of stiff curls over her forehead and three long curls hang down in front of each shoulder. The whole figure is stiff and has an oriental look. On the cheeks, chin and forehead are red spots denoting tattooing. The statuette appears to date from the sixth century B.C., although the tomb in which it was found dates from the fifth century. It appears to be of Greek manufacture in spite of its Phoenician character. It undoubtedly represents a goddess.

**Conductores Praediorum.**—J. CARCOPINO disputes Poinssot's reading and interpretation of an inscription from the region of Thugga published by him in *C. R. Acad. Insc.* 1920, pp. 357-359 (see *A.J.A.* XXV, 1921, p. 314). M. Poinssot, regarding *conductoris* in the inscription as an error, reads *conductoris*, in apposition with the name of the important man to whom the inscription is dedicated, and accordingly infers the existence of an important office, that of conductor of the imperial estates of the regio Thuggensis. M. Carcopino would read *conductores*, nominative plural, and maintains that these conductores were a fraternal association of publicans who derived their incomes from the several great estates of the region. (*R. Ét. Anc.* XXIV, 1922, pp. 13-36.)

## EARLY CHRISTIAN, BYZANTINE AND MEDIAEVAL ART GENERAL AND MISCELLANEOUS

**The Origin of the Asiatic Sarcophagi.**—In *The Art Bulletin*, IV, 1922, pp. 64-70 (13 figs.), C. R. MOREY gives a *résumé* of his study of the provenance of the earlier group of so-called Sidamara sarcophagi, that is, those that were produced during the second half of the second century A.D. The distribution of places in which the known examples of this group have been found indicates Lydia as the region in which they were made. Especially positive is the evidence given by the sarcophagus found by Professor Butler at Sardis. A study of this together with the remains of the tomb of Claudia, to which it belonged, shows that it was made with reference to the tomb and could not have been prepared far from Sardis. Certain details common to architectural sculpture and sarcophagi at Ephesus and to sarcophagi elsewhere in Asia Minor and in Italy suggest Ephesus as the exact location of the atelier that produced these earlier sarcophagi and as the seaport from which they were distributed. The evidence for the location of the atelier of the later group is not so decisive; it was apparently in some northern coastal city, as Nicaea, Cyzicus, or Nicomedia. (See also *A.J.A.* XXVI, 1922, pp. 83-84.)

**The Story of Joseph in Literature and Art of the First Twelve Centuries.**—In *Mél. Arch. Hist.* XXXIX, 1921-1922, pp. 193-211, PIERRE FABRE sketches the development of the story of Joseph in the literature and art of the first twelve centuries. It appears in literature as early as Tertullian, but is not found in the art of the catacombs. In art it appears in the fourth century as part of the history of Israel in narrative and in allegorical series. It is seldom found from the sixth to the twelfth century, and reaches its fullest development in the thirteenth century in the windows of Gothic churches.

**Religious Plays in the Greek Church.**—In *Mon. Piot*, XXIV, 1920, pp. 101-128 (4 pls.; 12 figs.) L. BRÉHIER brings forward further evidence to prove that the Greek church between the sixth and ninth centuries presented religious

plays or homilies in dramatic form. The miniatures in two manuscripts of the Homilies of the monk Jacobus of Coccinobaphos (Codex Parisinus, Gr. 1028 and Codex Vaticanus, Gr. 1162, both dating from the first half of the twelfth century) supply the evidence, which is more convincing than any yet presented. The writer tabulates the different scenes.

**The Frescoes of the Church of St. Nicholas at Kurte Arjish.**—In *Mon. Piot*, XXIII, 1918–1919, pp. 113–127 (5 pls.; 9 figs.) O. TAFRALI discusses the frescoes of the Byzantine church of St. Nicholas at Kurte Arjish in Wallachia. They date from the thirteenth century. Especially interesting are the large paintings representing the Dormition and Assumption of the Virgin, and the miracle of the Multiplication of the Loaves. A scene which appears to be unique is inscribed *ἡ σκηνή τοῦ μαρτυρίου*. In the centre is a draped table on which are vases and a golden reliquary. Beside it are two cherubim. Above is a sort of canopy. On either side is a long procession of kings led by a chief priest approaching the table. The kings carry offerings. Another scene represents Christ carrying the Cross preceded by the two thieves carrying their crosses. Behind follow soldiers, St. Peter and a crowd of women.

**Processions and Cinctures about the Church.**—In *R. Arch.*, fifth series, XV, 1922, pp. 79–113, P. SAINTYVES discusses the various origins and meanings of processions about churches and sacred places and of cords or other girdles about them (*le tour et la ceinture de l'église*). He finds that the two have the same meanings. They (or one of them) may be (1) rites of giving possession or of recognizing property, (2) rites of respect and honor or of simple devotion, (3) rites of refuge by the extension of the sanctity of the church to its surroundings, (4) rites of binding or keeping away, to protect from the approach of evil. Then, too, these *motifs* interpenetrate and become fused. Examples of all the types mentioned are given and explained. It is suggested that the twelve stones erected by Moses (*Exodus*, xxiv, 4) and Joshua (*Joshua*, v, 5–24) may have been circles with one of the typical meanings. The friezes of Greek temples and the circles of gargoyles and monsters about mediaeval cathedrals may also be connected with the same tradition.

**Persian Weaving of the Tenth Century.**—In *Mon. Piot*, XXIV, 1920, pp. 129–148 (pl.; 7 figs.) C. ENLART describes a piece of rich Persian material dating from the tenth century. The design represents camels and elephants. It can be dated by the inscription which forms part of the decoration. It was found covering the relics inside a shrine at Saint-Josse (Pas-de-Calais).

**Coins as Illustrations of Armor.**—B. DEAN illustrates from the collections of the Metropolitan Museum the use of coins and medals in the study of the history of mediaeval armor. (*B. Metr. Mus.* XVII, 1922, pp. 180–182; 4 figs.)

## ITALY

**A Small Bronze Group of St. Peter and St. Paul.**—Sir MARTIN CONWAY calls attention to a small bronze of exceptional interest recently found in Rome, perhaps near the Tombs of the Apostles, and now in the hands of dealers. It is a group about four inches high from the back part of a bronze lamp. St. Peter and St. Paul are represented standing side by side. Each raises his right arm in the gesture of blessing, and holds a scroll in the left hand. The two saints, though rudely modelled, are differentiated in accordance with the usual tradition. St. Peter has a square beard; St. Paul's is pointed. The eyes seem to

have been of another material and inlaid. The bronze may be dated in the fifth century (*Ant. J.* II, 1922, pp. 255-256; fig.). O. M. DALTON is quoted as attributing this work to a date earlier than the fifth century (*Ibid.* p. 256).

**The Sanctuary of San Lorenzo.**—In *Mél. Arch. Hist.* XXXIX, 1921-1922, pp. 3-24, Mgr. L. DUCHESNE discusses the history of the sanctuary of San Lorenzo on the Via Tiburtina with the following results: In 258 and until Constantine it was a subterranean tomb. In the fourth century the subterranean tomb communicated by a stairway with a basilica built above ground, a condition which persisted until Pelagius II. Of that basilica there remain only the inscription of Leopardus, preserved in manuscripts, and the white marble columns transported to the basilica of Pelagius. In the fifth century Sixtus III built behind (*i. e.*, to the west of) the Constantinian basilica a second basilica called *maior*. Under Pelagius II the Constantinian basilica was removed and its site excavated to the level of the tomb. At this level a new basilica was built in which the original apse was preserved and the marble columns utilized. Towards the end of the eighth century, the *basilica maior* was placed under the name of St. Mary. The church ceased to be the basilica of St. Lawrence and that which is in the *Liber Pontificalis* said of the foundation of Sixtus III began to be referred to the church of San Lorenzo in Lucina. Under Honorius III the *basilica maior* was demolished, as were also the apse and transept of the basilica of Pelagius. From the naves of this latter a choir was formed which extends behind a new high altar, that which is directly over the tomb. At the west of this old part Honorius III erected the naves and the portico which exist today.

**The Basilica of S. Salvatore near Spoleto.**—M. SALMI discusses the vicissitudes of the basilica of S. Salvatore near Spoleto. From the earliest building, which probably belonged to the fourth century, much of the façade and presbytery still remain. Details of the façade, in particular, have served as direct inspiration for later architects, especially for those of the Renaissance, such as Francesco di Giorgio, Sebastiano Serlio, and the Sanmicheli. Probably the most interesting part of Salmi's study is that of the origin of the style of the architectural and ornamental features of the basilica from Roman and oriental prototypes. (*Dedalo*, II, 1922, pp. 628-645; 17 figs.)

**S. Pietro at Toscanella.**—E. LAVAGNINO studies the church of S. Pietro at Toscanella, which dates, in its oldest fragments, from the eighth century. From this period there are capitals, the apse, and various pieces of sculpture. To the end of the ninth century belong some paintings in the crypt, and various restorations, paintings, and sculptures may be dated in the eleventh and thirteenth centuries. One does not need to go beyond the portal to find good examples of all these periods. (*L'Arte*, XXIV, 1921, pp. 215-223; 9 figs.)

**The Treasure of San Francesco d'Assisi.**—U. GNOLI writes on the most important objects in the sacristy of San Francesco at Assisi. Already in the early years of the fourteenth century valuable parts of the treasure were pilaged, and this process has continued through the centuries. Nevertheless, much still remains of great importance. And the author describes reliquaries, crosses, chalices, statuettes, and miniatures of the thirteenth century and later. (*Dedalo*, II, 1921, pp. 421-441, 555-579; 41 figs.)

**Early Frescoes in Perugia.**—M. SALMI describes and studies the remnants of frescoes in the old chapel of Sts. Catherine and Peter Martyr in the Church



of S. Domenico, Perugia. The frescoes are mentioned by Vasari, but his ascription of them to Buffalmacco is incorrect. The author, or authors, cannot be named, though two definitely characterized hands may be discerned in the work, one of Giottesque following, the other of Sienese (particularly as represented by Simone Martini and Ambrogio Lorenzetti), and the date must lie in the second half of the fourteenth century. (*L'Arte*, XXV, 1922, pp. 403-426; 35 figs.)

**An Annunciation Group.**—In *Art in America*, X, 1922, pp. 57-63 (pl.), S. RUBENSTEIN studies the stylistic qualities of the two sculptured figures of the Virgin and the Angel of the Annunciation in the Dreiser collection of the Metropolitan Museum. The characteristics of the work are those of the artists in Florence immediately preceding Ghiberti, and its author may be looked upon as one of the masters who prepared the way for the golden age of Italian sculpture.

**Duccio and Simone Martini.**—Two paintings are raised in rank by A. VENTURI: A Madonna in the Glyptotheca, Copenhagen, which was formerly attributed to the school of Duccio is assigned to Duccio himself, and a painting of St. Catherine in the Liechtenstein Gallery, Vienna, is shown to be the work of Simone Martini instead of that of Lippo Memmi. (*L'Arte*, XXIV, 1921, pp. 198-200; 2 figs.)

**A Pisan Annunciation.**—A marble statue of the Angel of the Annunciation in an English private collection is shown by R. FRY (*Burl. Mag.* XL, 1922, p. 54; pl.), to correspond to a figure of the Virgin in the Louvre. The exact author of the group would be hard to name, but the work is clearly that of the first generation of Giovanni Pisano's pupils; it belongs, therefore, to the first half of the fourteenth century.

## SPAIN

**A Bronze Polykandelon.**—W. L. HILDBURGH describes a polykandelon of bronze which he bought in Granada. It was found in or near the ruins of Medina Elvira near Atarfe. He compares it with other polykandela in the Granada Museum. It resembles very closely one which is preserved in the Cairo Museum. It may have been imported into Spain through Byzantium. Or it may be Visigothic work in imitation of Eastern models. (*Ant. J.* I, 1921, pp. 328-337; 7 figs.)

## FRANCE

**French Bronzes of the Twelfth Century.**—O. VON FALKE's discussion in *Jb. Preuss. Kunsts.* XLIII, 1922, pp. 47-59 (10 figs.), of the bronze statuette of a prophet in the Kaiser-Friedrich-Museum (Fig. 5) resolves itself into a study of Nicolaus von Verdun. For the nearest analogy to this unusually fine specimen of Romanesque bronze, so classic in design and so splendidly executed as to be worthy of the best Renaissance sculptors, is offered by the figures on the bronze lamp in the cathedral at Milan. And by comparing the details of this lamp with authentic productions by Nicolaus it is shown to be his work. At the same time, other bronze pieces, such as the lamp pedestals at Rheims and Prague, are brought into the circle of this artist's activity. But the more careful treatment of drapery and the pleasing arrangement of lines that one finds in the statuette of the prophet in the Kaiser-Friedrich-Museum betray a different spirit from that of Nicolaus, so that this work cannot be assigned to

him, but to one of his pupils, perhaps to the one who created the two cross reliquaries in Trier, and it is accordingly to be dated about 1220.

**Montreuil-sous-Bois and Master Pierre de Montreuil.**—In *R. Arch.*, fifth series, XIV, 1921, pp. 239–242, J. DE LAUNAY cites church records of the thirteenth century and other documents which prove that the architect Pierre de Montreuil was from the village of Montreuil-sous-Bois, not from the city of Montereau (Seine-et-Marne). The documents give information concerning various members of the family of Montreuil.

**A French Primitive.**—H. PASCAL has written a detailed description and analysis of a three-paneled composition in the church of Saint-Vulfran d'Abbeville which figured in the 1904 Exposition of French primitives. The subject of the central panel is the Last Judgment; in each side panel is an individual answering the call of the last trumpet. The influences evident in the work are so many and varied that any definite conclusions regarding its origin and date are difficult. It seems most probable that it comes from a secondary school of Ponthieu of the late fourteenth century. (*Gaz. B.-A. V.*, 1922, pp. 249–260; 3 figs.)



FIGURE 5.—BRONZE STATUETTE OF A PROPHET: BERLIN.

**The Church of Saint-Thibault-en-Auxois.**—In *Gaz. B.-A. V.*, 1922, pp. 137–157 (8 figs.), L. LEFRANÇOIS-PILLION writes on the mediaeval church in the little village of Saint-Thibault (Côte-d'Or). The church has not been entirely neglected in previous art literature, but it is the sculptures that are here dealt with; their subject matter is analyzed and their dates of origin determined.

Most important among the sculptures are the decorations of the north portal (second half of the thirteenth century) and a polychrome retable (early fourteenth century).

**Ceramics in Southeastern France.**—R. DE CABRENS studies a type of Gothic-Moresque pottery found in the southeastern provinces of France. It is all in fragments, but the fragments are large enough to indicate the styles of decoration, and the kinds of vessels and dishes from which they came. The decorations are in green, manganese, blue, and red, and show some relationship to the pottery found at Paterna. The pottery under discussion was evidently used by all classes, and its date seems to be from about the middle of the fourteenth century through the fifteenth. The problem of its origin cannot yet be solved. (*Faenza*, IX, 1921, pp. 84–92; 4 pls.)

**Sainte Reine and the Excavations at Alesia.**—In *R. Arch.*, fifth series, XV, 1922, pp. 346–350, HENRY COROT (reprinted from *Le Bien Public*, Dijon,

December 21 and 24, 1921) gives, from documents, the chief dates in the history of the body and sarcophagus of Sainte Alise. They tend to show that no sarcophagus recently discovered is the Saint's, whose "basilica" should probably be sought near the entrance to the town. Holes in sarcophagi were in almost all cases made for the purpose of robbery, not in order to allow worshippers to touch the sacred relics.

### GERMANY

**A Late Gothic Group.**—The group of sculptured stone figures, representing the Mount of Olives scene, in the Jacob church at Rothenburg is the subject of a critical study by W. VON GROLMAN (*Jb. Preuss. Kunsts.* XLIII, 1922, pp. 31-34; 4 figs.). Upon close observation one detects a dissimilarity among the figures. Some of the accompanying ones are quite unlike the boldly sculptured form of the Christ, for example. They are more like the figures of the old altar in the same church and may be an early work by the same artist. Their date would be soon after the middle of the fifteenth century, while the later figures belong to the early sixteenth. Some documentary material bears out the internal evidence in this dating.

**The Goldsmiths of Oignies.**—An altar-cross in the Victoria and Albert Museum and a chalice in the Borgia church, Finland, are ascribed by H. P. MITCHELL (*Burl. Mag.* XXXIX, 1921, pp. 273-285; 3 pls.), to the goldsmiths of Oignies in the first half of the thirteenth century. The name of the artist, Sifridus, is inscribed on the chalice.

**German Primitives.**—HERMANN SCHMITZ reports that the Kaiser-Friedrich Museum has recently acquired a number of German paintings of about 1400 A.D. He selects for special description a representation of the Virgin as spinning, to be attributed to a southeast German, probably Austrian artist; and a picture of unusual type, in which the dead Christ is represented in a sitting posture at the foot of the cross, with St. Mary and St. John seated on the ground near by. It is difficult to determine the origin of this painting with certainty. But some traits, especially the picturesque landscape, suggest an artist of southwest Germany who had immediate connection with the Burgundian school. (*Ber. Kunsts.* XLIII, 1922, pp. 28-30; 2 figs.)

### SWEDEN

**Shingled Walls.**—ANDERS ROLAND discusses and illustrates the practice of facing stone walls of Northern Romanesque churches with shingles for protection of the joints. (*Fornvännen*, XIII, 1918, pp. 83-90; 6 figs.)

### GREAT BRITAIN AND IRELAND

**Rievaulx Abbey.**—C. R. PEERS, in calling attention to two leaden relic holders discovered at Rievaulx Abbey in the valley of the Rye in Yorkshire, discusses the original form of the church, which was the earliest large Cistercian church in Great Britain, and the alterations in its plan which were made in the fourteenth century. (*Ant. J.* I, 1921, pp. 271-282; 2 figs.)

**Irish Bronzes.**—E. C. R. ARMSTRONG describes a group of small bronze objects which were found in 1848 near Navan Station on the River Boyne. One is a disc with a stud in the shape of a dog's head, for the attachment of a chain. A similar object is found in the collection from Killua Castle, recently

sold. The Navan find also includes plaques of copper or bronze gilt, showing interlaced and spiral patterns with some animal motives. These were probably harness ornaments. There were also horse bits and other parts of a harness. These fragments cannot be earlier than the eighth century, and may be probably dated in the ninth or the early tenth. (*Ant. J.* II, 1922, pp. 6-12; pl.; 3 figs.)

## RENAISSANCE ART

### ITALY

**A Painting by Carpaccio.**—In describing Carpaccio's picture of St. Eustace in a Landscape, in the collection of Mr. Otto H. Kahn, New York, R. OFFNER (*Art in America*, X, 1922, pp. 127-132; pl.) writes a brief essay on the character of Venetian art in general and of Carpaccio's art in particular.

**Andrea del Castagno at Venice.**—In *Burl. Mag.* XL, 1922, pp. 11-17 (2 pls.), G. Frocco discusses the fresco decoration of the apse of the chapel of S. Tarasio in S. Zaccaria, Venice, which explains the evidences of Andrea del Castagno's influence upon art in the Veneto: the principal part of the painting in the apse is shown to have been done by Andrea. (See also *L'Arte*, XXIV, 1921, pp. 85-89; *A.J.A.* XXVI, 1922, p. 120.)

**The Halberdier by Pontormo.**—A painting by Pontormo of such striking beauty as to be compared to the charioteer of Delphi is discussed by F. J. MATHER, JR. (*Art in America*, X, 1922, pp. 66-69; pl.). It is not the portrait of Francesco Guardi, as some have thought. In fact, it does not look like the portrait of any definite individual, but rather a representation of the universal soldier.

**Cesare da Sesto.**—The Morellian method of study is used by E. DE LIPHART (*Rass d'Arte*, VIII, 1921, pp. 397-406; 9 figs.), in attributing a number of works to Cesare da Sesto.

**Drawings by Leonardo.**—In *L'Arte*, XXV, 1922, pp. 1-6 (4 figs.), A. VENTURI publishes four drawings, formerly unknown or attributed to other artists, in which he detects the hand of Leonardo. They are: A Verrocchiesque head of a girl in the Albertina, Vienna, formerly attributed to Lorenzo di Credi; a study for the Madonna del Gatto, discovered and acquired by Mr. Arthur H. Pollen, London, which is characterized by a more perfect rhythm than any of the previously known studies for the group; a sheet in the ducal palace at Weimar containing studies of the Christ Child and the lamb for the Saint Ann of the Louvre; and a caricature drawing of engraver-like technique in the King collection, London.

**A Cartoon by Raphael.**—The Kupferstichkabinett in Berlin has acquired a fragment of Raphael's cartoon for the Madonna of the Duke of Terranuova, representing the head of the Virgin. It belongs to the period of Raphael's removal from Perugia to Florence, and stands very near the Sposalizio in style. (OSKAR FISCHER, *Ber. Kunsts.* XLIII, 1922, pp. 13-14; 2 figs.)

**Francia and Costa.**—A. VENTURI describes two previously unpublished masterpieces, the Madonna, in a Vienna private collection, by Francesco Francia, and St. Sebastian in the collection of the Counts Cassoli in Reggio Emilia. The Madonna, which probably dates soon after 1492, is one of the best examples of the religious spirit of Francia's art. The St. Sebastian is a

youthful work of Costa's and shows his interest in muscular development and striking effects in light and shade. (*L'Arte*, XXIV, 1921, pp. 185-188; 3 figs.)

**A Portrait of Bernardo de' Rossi.**—The painted terra-cotta bust of a prelate in the cathedral at Treviso, formerly looked upon as a portrait of Broccardo Malchiostro, is shown by L. COLETTI (*Rass. d'Arte*, VIII, 1921, pp. 407-420; pl.; 12 figs.), to represent the bishop Bernardo de' Rossi. The simple, monumental work, done in about 1520 to 1523, proves to be of much greater beauty when examined closely than when seen from where one must usually look at it. After a detailed study, Coletti suggests Andrea Briosco as the author. To him also may be due the same bishop's beautiful seal, representing the Madonna and two saints, in the Archivio Vescovile, Treviso.

**Some Renaissance Portraits.**—A. VENTURI has studied the authorship of several interesting portraits of men. A cameo-like profile portrait in Hampton Court he attributes to Baldovinetti. A portrait of a man at a parapet, in the Uffizi, which there bears the name of Lorenzo di Credi, is attributed to Perugino; while another portrait, in the provincial museum of Hannover, which is there attributed to Perugino, is shown to be the work of Francia. Finally, a portrait in the Glyptothek of Copenhagen is referred to the first period of Titian, at about the time he painted the Pitti Concert. (*L'Arte*, XXV, 1922; pp. 10-14; 4 figs.)

**A Renaissance Birth-Plate.**—T. BORENIUS publishes a birth-plate painted by the sixteenth century artist Bacchiacca, in the collection of Mr. Frederick A. White. It is of unusual interest both as being one of the latest known examples of Renaissance birth-plates and because its subject, representing a crystal-gazing scene, is unique in the decoration of these plates. (*Burl. Mag.* XL, 1922, pp. 131-132; 2 figs.)

**Votive Tablets of Lonigo.**—G. FOGOLARI writes on the oldest and most interesting examples among the almost countless votive tablets of the Madonna of the Miracles in the sanctuary of Lonigo. They date from the late fifteenth century onward. Most of them are of simple conception and rude execution, but they are interesting in their faithful reproduction of customs, clothes, and furnishings of their time and also in their reflection of the more pretentious art of the neighboring towns of Verona and Vicenza. (*Dedalo*, II, 1922, pp. 580-603; 19 figs.)

**Italian Naval Art.**—The art of naval warfare in sixteenth century Italy and the types of ships, often adorned with the work of real artists of the time, are discussed by U. NEBBIA (*Dedalo*, II, 1921, pp. 442-462; 13 figs.). The information is drawn from drawings and paintings of the ships of Andrea Doria in the palace of the prince and the city museum of Genoa.

**Fifteenth Century Glass.**—Two pieces of remarkable work in glass made in Murano and now in the civic library at Trent are described by A. VENTURI (*L'Arte*, XXIV, 1921, pp. 237-240; 2 figs.). One is a plate with a female portrait showing the influence of Piero della Francesca and with a rich border of vines and birds in which Byzantine splendor is reflected. The work may be attributed to Angelo Beroviero, who died in 1461. To his son, Marino, may belong the work on the second piece, a loving cup, where the style of Carpaccio is seen in the two medallion portraits.

**A Collection of Majolica.**—A. DEL VITA describes the most important pieces in the collection of majolica belonging to Count Frassineto, Florence. Besides

a rich collection of Spanish-Arabic pottery there is an important representation of Tuscan ware of the fifteenth century, and of sixteenth century specimens from Deruta, Faenza, and Urbino. (*Dedalo*, II, 1922, pp. 507-536; pl.; 22 figs.)

**Pattern Models.**—MARC ROSENBERG has published a brief discussion of the origin and use of terra-cotta relief models of Renaissance date. He does not agree with Bode in associating them closely with copper engraving, since they are of distinctly earlier origin. Nor is the fact that some were made by goldsmiths a proof that they were of immediate use in the goldsmith's craft. They seem to have been made in part for their own sake; but also served as models in various minor arts. (*Ber. Kunsts.* XLIII, 1922, pp. 37-46; 6 figs.)

### SPAIN

**A Spanish Altarpiece.**—In *B. Soc. Esp.* XXIX, 1921, pp. 229-247 (pl.), J. A. Y REVILLA writes on a very important painting of the Madonna adored by donor and nuns which was formerly in the convent of St. Clara, Valladolid. It seems that the painting is now in the possession of the painter, Zuloaga, and it is hoped that it may be restored to Valladolid. The work is believed by the present author to be attributable to the Flemish artist Michael Sittun, and was probably done in 1515, when that artist was in Valladolid. A painting from the convent of St. Thomas, Avila, and now in the Prado Museum, is attributed to the same artist. It seems likely that the donor of the painting was a member of the rich Boniseni family.

**Two El Grecos.**—T. BORENIUS calls attention to an important painting of The Magdalen, of El Greco's second period, in the Worcester Museum, and R. R. TATLOCK makes the first publication of a bust of John the Baptist, belonging to the artist's last period. The latter painting is in the London collection of Miss Gertrude Davies. (*Burl. Mag.* XL, 1922, pp. 208-213; 2 pls.)

### FRANCE

**Jacques des Rousseaux.**—A. BREDINS writes on the work of a forgotten French painter of the early seventeenth century, Jacques des Rousseaux, and gives a list of documents relating to him. This artist lived in Leyden and was a close follower of Rembrandt, as is shown by the fact that some of his paintings have been attributed to that superior master. Among the most interesting portraits by the French artist are one of himself, three of Rembrandt's father, and one of Rembrandt's mother. (*Gaz. B.-A.* V, 1922, pp. 1-12; 8 figs.)

**Lost Sixteenth Century Paintings.**—In *Gaz. B.-A.* IV, 1921, pp. 331-339 (5 figs.), C. SAMARAN describes the mural paintings which once decorated the walls of the chapel of the Hotel de Guise and disappeared about a century ago. He gives documentary evidence to show that the designer of these lively religious pictures was Primaticio, while Nicolò dell' Abbate, to whom the paintings have been attributed, can be credited with only the execution of the superior artist's designs. An interesting feature of the pictures was their portraits of contemporaries, in such compositions as The Adoration of the Magi.

**A Tondo of the Time of Charles VI.**—In *Mon. Piot*, XXIII, 1918-1919, pp. 63-111 (pl.; 14 figs.) P. DURRIEU discusses a tondo presented to the Louvre a few years ago by Maurice Fenaille. It represents a Pietà. It is French work of the time of Charles VI, but the painter cannot be determined with certainty.

**The Legend of the King of Mercia in a Fifteenth Century Manuscript.**—In *Mon. Piot*, XXIV, 1920, pp. 149–182 (2 pls.; 5 figs.) Comte P. DURRIEU discusses a fifteenth century Book of Hours which contains some very interesting miniatures. They are the work of a skilful illuminator who was either Philippe de Mazerolles or some one from his atelier. Two large ones are especially noteworthy. One represents the Annunciation, and below it on a smaller scale Adam and Eve about to eat the fatal apple. The other represents King David in prayer, and below, also on a smaller scale, five figures. A man sleeping near a fountain is being wakened by an older man in a long robe, while before them stand three nude women. The scene is to be interpreted as the Legend of the King of Mercia. According to the story the fictitious Alfred III, King of Mercia, while visiting one of his subjects was struck with the beauty of one of his host's daughters. The father fearing that the king would choose one of the girls for a concubine, stripped them and sword in hand brought them before the king, declaring that if he wished to choose one for his wife all would be well, but if he was planning the dishonor of one of them he, their father, would slay them all. The king chose the second daughter for his wife. The legend seems to have been localized in Germany, but this manuscript shows its existence in northern France. In its origin the legend may go back to the story of the Judgment of Paris.

**A French Wood-carving.**—W. STECHOW discusses a relief from the choir-stalls of the Château Gaillon in Normandy, now in the collection of the Berlin Museums. It unites Italian Renaissance ornament with some French traits in the representation of human figures and is interesting as an example of mixed styles. (*Ber. Kunsts.* XLII, 1922, pp. 33–35; 2 figs.)

#### BELGIUM AND HOLLAND

**A Model by il Fiammingo.**—A relief in dark wax mounted on a wooden panel, and representing a concert of putti, was acquired some years ago by the Kaiser-Friedrich Museum. On stylistic grounds it is attributed by F. Schottmüller to Frans Duquesny (il Fiammingo). The emphasis on the essential and the easy, fresh, competent technique permit no other attribution. (*Ber. Kunsts.* XLIII, 1922, pp. 14–17; 3 figs.)

**More Paintings by Adriaen Brouwer.**—W. VON BODE adds some important examples to the list of Adriaen Brouwer's works, showing his early style and his achievement in landscape painting. An example of the early period is *The School* in the Kaiser-Friedrich Museum, Berlin. Its most striking feature is its brilliant color design. Five landscape paintings in various places are added by Bode. They indicate a relationship to Rubens in their splendid coloring and light and to Rembrandt in their use of shade and in mood. Brouwer reveals himself in this field of painting as an impressionist in as true a sense as any painter of modern times. (*Jb. Preuss. Kunsts.* XLIII, 1922, pp. 35–46; 10 figs.)

**A Painting by Jacob van Loo.**—The Kaiser-Friedrich Museum has acquired a genre painting by Jacob van Loo, representing a young mother nursing an infant, and an older child playing with a dog. (W. VON BODE, *Ber. Kunsts.* XLIII, 1922, pp. 4–6; fig.)

## GERMANY

A Crucifixion by Grünewald.—In the recent active interest in Grünewald critics have been on the alert for the lost panel painting of the Crucifixion originally owned by Duke Wilhelm of Bayern and long known only from the description, drawings, and copies. In *Jb. Preuss. Kunsts.* XLIII, 1922, pp. 60-62 (pl.), M. J. FRIEDLÄNDER publishes a painting lately acquired from a private collection by Herr Schoene at Essen which is believed to be the



FIGURE 6.—CRUCIFIXION BY MATTHIAS GRÜNEWALD: ESSEN.



much desired original (Fig. 6). It is in a fairly good state of preservation and forms a valuable addition to the monuments ascribable to Grünewald.

**The Krodel Family of Painters.**—W. JUNIUS discusses the artistic development of the Krodel family, the most important members of which were Wolfgang the elder (1528–60) and his nephew Mathias the elder (1550–1605). They were natives of Schneeberg, but their artistic derivation was from Wittenberg, from the workshop of Cranach. Whether the influence of Cranach, so evident in their work, was received directly or indirectly cannot, with the present data, be determined. The Krodel painters were not mere imitators. They show an independent personality that gives interest to their work. (*Mh. f. Kunstw.* XV, 1921, pp. 253–261; 5 pls.)

## AMERICAN ARCHAEOLOGY

### GENERAL AND MISCELLANEOUS

**The Archaeology of Maine.**—A recent study by WARREN K. MOOREHEAD on the archaeology of Maine is a contribution to the solution of the problems of man's antiquity in the far east of the continent. It gives abundant reason for the author's opinion that the so-called Red Paint people were an independent group apart from the builders of the great shell heaps on the Maine coast and also distinct from the Beothuk of Newfoundland. "The utter absence of forms common to Indian graves elsewhere in the United States is characteristic of the graves. This is our strongest evidence that they are not to be classed with Iroquoian or Algonkian and brings us to our final observation, that the Red Paint people lived before the construction of shell-heaps and before the Algonkian development in Maine." [*A Report on the Archaeology of Maine.* By WARREN K. MOOREHEAD. Andover, Mass., 1922, Phillips Academy. 272 pp.; 123 figs.; 21 plans.]

**The "Blond" Eskimos.**—D. JENNESS has published a critical review of Stefánsson's theory of the possible Scandinavian ancestry of the Eskimo in Victoria Island, with observations which invalidate Stefánsson's position. (*Am. Anthr.* XXIII, 1921, pp. 257–267.)

**Mounds in Florida.**—CLARENCE B. MOORE has published a study of additional mounds of Duval and Clay Counties, Florida. (*Ind. Not.* 71 pp.; 6 figs.; map.)

**Ifugao Economics.**—The economics of the Ifugao are the subject of a recent monograph by R. F. BARTON. [*University of California Publications in American Archaeology and Ethnology*, XV, 1922, No. 5; 61 pp.; 7 pls.]

**Spanish Influence in Caspinchango.**—SALVADOR DEBENEDETTI has published an analysis of the contents of graves in Caspinchango (Catamarca), showing the absence of Inca influence, and establishing a chronological position for culture levels on this site. [*La Influencia Hispanica en los Yacimientos Arqueológicos de Caspinchango.* Por Salvador Debenedetti. Buenos Aires, 1921, Sección Antropológica de la Universidad de Buenos Aires, 46 pp.; 26 figs.]



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THE MACMILLAN COMPANY

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Published quarterly at Concord, N. H., for October 2, 1922.

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