

# CORINTHIAN RELIEF WARE: PREHELLENISTIC PERIOD<sup>1</sup>

(PLATES 25–33)

WHEN Courby published his account of Greek relief wares in 1922,<sup>2</sup> the evidence for a Corinthian group was slight. In enumerating the known centers of manufacture of these wares, he ended the list by saying, “and perhaps Corinth.” For the whole of the archaic period he knew of one fragment from the Argive Heraion (Pl. 26, d)<sup>3</sup> which was connected stylistically with Corinthian painted pottery and

<sup>1</sup> The material presented here could not have been assembled without the co-operation of a number of scholars and institutions, and to these I wish to express my indebtedness. The largest body of finds, from the excavations at Corinth, is published for the first time with the permission of the American School of Classical Studies at Athens; the photographs are my own. Agnes Newhall Stillwell, the excavator of the Potters' Quarter at Corinth, in advance of her own publication of the pottery, has made available all the information concerning the several fragments from that establishment, while Gladys Davidson Weinberg has done the same for those from the Tile Factory, which she is preparing for publication. The photo of the oinochoe on Pl. 32, c is from the files of the American School; the drawings for the figures are by Dr. Marian Welker. The next largest group of relief ware, that from Perachora, is presented here, in advance of its publication by the excavators, by courtesy of the Managing Committee of the British School at Athens. Mr. T. J. Dunbabin has most generously provided the photographs made by Mr. G. Tsimis, photographer of the National Museum at Athens, and catalogue descriptions of the Perachora fragments, soon to be published in *Perachora*, II. He has very kindly read the manuscript and has made many valuable criticisms and additions. Mme. Semni Karouzou, Curator of Vases of the National Museum at Athens, very kindly located the relief plaques and vase fragments from the Argive Heraion and the fragments from Perachora shown on Pl. 32, a, when these were still in the packing cases in which they were stored during the last war, and thus made it possible for me to study their fabric and re-photograph them. For the photograph of the new fragment from the Heraion (Pl. 26, j), found and published by Miss Shirley Hersom, I am indebted to the discoverer. Professor A. J. B. Wace has most generously provided both the photograph (Pl. 26, g) and the description of the relief rim fragment from Mycenae. The hitherto unpublished photograph of the basin from Selinus (Pl. 27, c) was furnished by the Palermo Museum; the photograph of the rim fragment of such a basin shown on Pl. 27, b is from the British Museum. The fragment from the North Slope of the Acropolis is shown in a photograph (Pl. 28, f) furnished by its excavator, Professor Oscar Broneer. For the photographs of a vase and the several relief fragments of fourth century date (Pls. 32, b; 33, a, b), I am indebted to Professor W. Züchner of Würzburg. The excellent bronze plaque shown on Pl. 27, a, previously known only from a drawing, was photographed and is published here with the kind permission of Mlle. Joanna Constantinou, Curator of Bronzes of the National Museum at Athens. The photographs of the two bronze vessels shown on Plate 31, c-d, were furnished by the Metropolitan Museum of Art, which authorized their publication.

<sup>2</sup> F. Courby, *Les vases grecs à reliefs*, Paris, 1922.

<sup>3</sup> C. Waldstein, *The Argive Heraeum*, New York, 1902, Vol. II (hereafter *A. H.*), pl. LXIII, 5.

*Hesperia*, XXIII, 2

which was assumed to be an import from Corinth. With this Courby mentioned a votive tablet in relief, whose style he thought also to be Corinthian.<sup>4</sup> The only other pre-Hellenistic relief vase which Courby associated with Corinth was a large krater with a wide relief band portraying the Labors of Herakles, and the connection here was largely one of its discovery at near-by Tenea.<sup>5</sup>

Although actual remains of Corinthian relief vases known to Courby were exceedingly scant, he was fully aware of Corinth's potential importance as a center of manufacture of such ware. Its pre-eminence is especially apparent for the Classical period, when the imitation of metal vases began to become a large-scale industry in the fourth century. With this development is associated the name of Therikles of Corinth, a contemporary of Aristophanes, perhaps the most famous manufacturer in antiquity not only of vessels of chased or engraved metal but also of wood and, not least well known, of clay.<sup>6</sup> Courby<sup>7</sup> considered Therikles, the most renowned maker of such vases, noted for the perfection of his products, not the originator but the continuer of a tradition dating well back into the fifth century, if not earlier. The connection of the tradition with Corinth, an important center of the manufacture of metal vases in this and earlier periods,<sup>8</sup> is important. Actual remains from Corinth now exist which support the thesis of Courby, particularly in the two lebetes and the oinochoe to be discussed later.

Yet even when Courby wrote, there were several examples of Corinthian stamped or rouletted relief plaques and vases, not recognized by him as Corinthian. Many more have since been discovered, especially at Corinth and the Corinthian sanctuary at Perachora, while stray fragments have appeared elsewhere. The relief plaque No. 541 in Berlin, with a rectangular stamped design of a youth sitting on a horse facing right,<sup>9</sup> is not unique. Among the Corinthian *pinakes* in Berlin is listed a second plaque<sup>10</sup> with a lion to left stamped into the clay. It was recognized by the publishers of the relief tablets from the Argive Heraion that the two small plaques found there (Pl. 25, d-e)<sup>11</sup> were related in form to those in Berlin and were Corinthian; recent examination of the fabric has corroborated their conclusion.<sup>12</sup> The lion plaque (Pl.

<sup>4</sup> Furtwängler, *Beschreibung der Vasensammlung im Antiquarium*, Berlin, 1885, No. 541.

<sup>5</sup> Courby, p. 195.

<sup>6</sup> For the collected sources see Walter Miller, *Daedalus and Thespis*, Columbia, Missouri, 1931-1932, II, pp. 544-549; III, pp. 694-703.

<sup>7</sup> *Op. cit.*, pp. 173 f.

<sup>8</sup> Payne, *Necrocorinthia*, Oxford, 1931, pp. 210 ff.

<sup>9</sup> This is the plaque illustrated in *Ant. Denk.*, II, pl. 24, No. 27.

<sup>10</sup> Furtwängler, *Vas. Berlin*, No. 761; this is the same as *Ant. Denk.*, II, pl. 29, No. 20.

<sup>11</sup> *A. H.*, II, p. 54, pl. XLIX, 9-10.

<sup>12</sup> Plate 25, d is of buff clay with a pinkish tinge and slight impurities: W. 0.055 m., H. 0.046 m., Th. 0.011 m. Stamp of chariot to right drawn by two or four horses, four-spoked wheel to chariot, two people in chariot, probably women. Slight traces of a heavy red slip over all. Plate 25, e is of fine buff clay with slight impurities: W. 0.05 m., H. with flange 0.053 m., Th. 0.01 m. Stamp of lion to right: W. 0.038 m., H. 0.03 m.

25, e), originally compared with Late Corinthian pottery, was dated to the early sixth century B. C. However, the thin body and large head of the lion, and especially the graceful curve of the tail, point to a date contemporary with the Protocorinthian figure style in its latest phase, about the third quarter of the seventh century.<sup>13</sup> To this same period Payne dated the lion plaque in Berlin.<sup>14</sup> On the other hand, the chariot plaque (Pl. 25, d), originally dated earlier than the lion *pinax*, may be of the same date or later. The impression is too worn for detailed comparison. It is possible that each horse has a double outline, representing a pair, and that a quadriga is represented. The two riders, apparently female, are in profile; their hair is caught up in back and falls free below, much like that of the charioteer on the Chigi vase.<sup>15</sup> The chariot itself first appears in the Middle Protocorinthian period,<sup>16</sup> either with two or four horses. The device of distinguishing the horses, or pairs, by placing one a little in front of the other, one with head down and the other with head thrown back, while not characteristic of Protocorinthian examples, appeared already in the Early Corinthian period<sup>17</sup> and became common in Attica as well from the late seventh century on.<sup>18</sup> The chariot itself is almost entirely defaced. The plaque must be dated to the late seventh or early sixth century. The horse and rider relief plaque in Berlin was called "late archaic" by Payne.<sup>19</sup>

A plaque of similar nature with a gorgon in low relief was found in a fifth century grave at Argos;<sup>20</sup> while said to be of Argive clay, the type is Corinthian and the stamp possibly originated there. On the other hand, the large plaque of a "daimon" in Corinthian clay from Perachora<sup>21</sup> came from the same matrix as one found at the Argive Heraion,<sup>22</sup> which is of Argive clay; the matrix itself is believed to be Cretan.<sup>23</sup> There is a fragment of a second Corinthian plaque from Perachora<sup>24</sup> preserving only the lower third of a group of a woman and a boy walking to right; again, the matrix may have been Cretan. The latter is dated to the early seventh century, which

<sup>13</sup> Cf. Payne, *Protokorinthische Vasenmalerei*, Berlin, 1933, pls. 16, 1; 19; 30, 2 and 5; 31, 2; Kraiker, *Aigina, Die Vasen des 10. bis 7. Jahrhunderts*, Berlin, 1951, pls. B, 341; 28, 343, the latter especially for the tail, for which also cf. Johansen, *Les vases sicyoniens*, Copenhagen, 1923, pl. XL, 1c.

<sup>14</sup> *NC*, p. 222, note 2.

<sup>15</sup> Johansen, *Vases Sic.*, pl. XL, 1c.

<sup>16</sup> *Ibid.*, pp. 152-4, pls. XXIII, 2 b-c; XXXII, 1 e; XXXIV, 1; Kraiker, *op. cit.*, pl. C.

<sup>17</sup> *NC*, p. 127, fig. 45 A.

<sup>18</sup> Buschor, *Griechische Vasen*, Munich, 1940, p. 99, fig. 114; Beazley, *Development of Attic Black-Figure*, Berkeley, 1951, pls. 11, 1; 13, 1.

<sup>19</sup> *NC*, p. 222, note 2.

<sup>20</sup> S. Karouzou, *Ἀρχ. Δελτ.*, XV, 1933-35, p. 31, fig. 15.

<sup>21</sup> Payne and others, *Perachora*, I, Oxford, 1940, pl. 102, No. 180 (Terracottas by R. J. H. Jenkins).

<sup>22</sup> *Ibid.*, pl. 102, No. 180 bis; *A. H.*, II, pl. XLIX, 1.

<sup>23</sup> *Perachora*, I, p. 231.

<sup>24</sup> *Ibid.*, p. 230, pl. 102, No. 179.

would make it the earliest Corinthian example of a stamped design. The large plaque of a "daimon" is somewhat later, mid-seventh century,<sup>25</sup> slightly earlier than the two lion tablets. The gorgon tablet from Argos shows a still later type, probably mid-sixth century.

While these small tablets, each with a single rectangular stamp, thus form a series beginning as early as 700 B. C. and lasting for at least a century and a half, there is a second series of somewhat larger plaques, decorated with more than one impression of the same stamp or with two or more different stamps. Their range is more limited; all those of known provenience come from the Argive Heraion;<sup>26</sup> all the fragments that could be examined are of Corinthian fabric.<sup>27</sup> There are fragments of three tablets each with two or three impressions of the same stamp, one above the other; the borders and the space between the stamps are filled with incuse circles. The best preserved example is shown on Plate 25, a.<sup>28</sup> The subject of the stamped design has recently been reconsidered by Mme. Semni Karouzou, who identifies the winged "daimon" as the god Aristaios, and who also recognized the fragment shown here as Corinthian.<sup>29</sup> She cites other examples on Attic and Boeotian vases of the late seventh century, and it is to the second half of this century that the Argive Heraion tablets showing Aristaios must be dated. Another similar tablet shows a second complete stamp (Pl. 25, b).<sup>30</sup> Here two nude male figures face each other, each with hither leg advanced and outer arm raised and stretched forward so that the fingertips touch; the other arm seems to be bent at the elbow with the lower arm stretched forward, but not touching. The suggestion by the original publishers that this might be the preliminary to a wrestling match seems most logical;<sup>31</sup> the figures might be boxers, though no thongs are indicated on the hands. Representations of wrestling, especially of the "upright wrestling" which seems to be indicated here,<sup>32</sup> are common on vases from the Geometric period on, particularly on Attic black-figured ware.<sup>33</sup>

<sup>25</sup> *Ibid.*, p. 231.

<sup>26</sup> Only one other is cited by the publishers of the Heraion fragments.

<sup>27</sup> The fragments 6 and 7 of *A. H.*, II, pl. XLIX had not yet been found when I examined and photographed the other pieces and I have not since had the opportunity to do so again; hence they are not considered here.

<sup>28</sup> *A. H.*, II, pp. 47, 51-52; pl. XLIX, 2-4. No. 4, shown here, H. 0.119 m., W. 0.073 m., Th. 0.023 m.; its full height is preserved and shows it had but two stamps. No. 2 had at least three stamps, one close to the upper edge with no border of incuse circles above it. No. 3 had at least two stamps, probably no more. The stamp is the same in all the pieces.

<sup>29</sup> *Annuario*, XXIV-XXVI, 1950, pp. 37-46.

<sup>30</sup> *A. H.*, II, pl. XLIX, 5. The two fragments certainly belong to the same piece, made of buff clay with a heavy admixture of grit. The larger fragment: H. 0.099 m., W. 0.087 m., Th. 0.031 m.; the stamp W. 0.031 m., H. 0.039 m.

<sup>31</sup> *A. H.*, II, p. 52.

<sup>32</sup> Gardiner, *Athletics of the Ancient World*, Oxford, 1930, p. 181.

<sup>33</sup> For the collected references see Kunze, *Olympische Forschungen II: Archaische Schildbänder*, Berlin, 1950, p. 178, note 2. See Schröder, *Der Sport in Altertum*, Berlin, 1927, p. 154, fig. 41, for the position with hands up at the beginning of the "pankration."

In none of the representations is this particular position portrayed. Closer to the stamp used on this terracotta plaque are the rectangular panels on bronze shield bands<sup>84</sup> of the first half of the sixth century,<sup>85</sup> and especially in the central panel of a bronze matrix from Corfu, now in the Ashmolean Museum,<sup>86</sup> which Payne dated about the middle of the seventh century.<sup>87</sup> In this panel alone, as in our terracotta, are the hither legs both in the same position, placed back on the matrix but forward on the terracotta; in all the later representations on the shield bands both figures put forward either the left or the right leg. In the bronze matrix the extended hands touch as on the terracotta, and again they are a right and a left hand, as on the terracotta, rather than right or left hands, as on the bronze shield bands. The tripod present in the matrix and on the shield bands, which was most likely the prize for the match, is much rarer on the vase paintings.<sup>88</sup> The date of the stamp on the terracotta plaque, originally suggested to be early in the sixth century, would now seem to be about a half century earlier, for the Daedalic heads, the very large almond-shaped eyes, the crude rendering of the hand in full view, the similarity of the position to that of the wrestlers on the Corfu matrix, all suggest a date in the Late Protocorinthian period. The stamp at the bottom of this tablet, and probably the only other one on it, has a different subject, but since only the lower left corner is preserved it is not possible to identify it. The lower leg and foot facing left suggest a kneeling or running figure, as shown on Plate 25, a and c, but behind the foot there seems to be a rod held in a hand; this matrix is otherwise unknown.

Somewhat different in arrangement is the plaque decorated with at least three different stamps not placed one above the other (Pl. 25, c).<sup>89</sup> In the upper preserved part there are the remains of two stamps, not quite on the same level, separated by a vertical band with the same incuse circles as on the tablets just described. However, the band to the right of the right hand stamp is plain. This stamp, placed highest on the plaque, portrays a single figure facing left in the archaic running or "knielauf" position. A wide girdle encircles the thin waist; the torso is covered by a short chiton or possibly a corselet; the body is nude below the waist, or covered by a skin-tight garment. The left arm is held back, the fist clenched; the right arm must be forward and up. The figure is difficult to reconstruct or identify; the centaur in the space below suggests Herakles, and indeed a short chiton and girdle are often

<sup>84</sup> Kunze, *op. cit.*, pp. 178, 192 f.; pls. 14, III  $\alpha$  and 66, XLII  $\beta$ .

<sup>85</sup> *Ibid.*, p. 242.

<sup>86</sup> *J.H.S.*, XVI, 1896, p. 328, fig. 2.

<sup>87</sup> *NC*, p. 222.

<sup>88</sup> Gardiner, *op. cit.*, figs. 149-168.

<sup>89</sup> *A.H.*, II, pp. 53 f., pl. XLIX, 8 a-b. The two joining fragments cannot be more than half of the original tablet. Preserved dimensions: W. 0.084 m., H. 0.109 m., Th. 0.019 m. The tablet must then have been at least 0.15 m. high and almost as wide. The clay is light buff throughout with a heavy admixture of grit.

worn by this hero,<sup>40</sup> though the usual representation of the short chiton shows a piece below the girdle which is absent here.<sup>41</sup> But if this be Herakles, his weapon is other than the bow, and there are many possibilities. Also, there are other human associates or antagonists of centaurs.

To the left, and at a slightly lower level, is a stamp of which only a small section of the right side is preserved, depicting an outstretched wing, pointing downward and seen in full view. It suggests the owl on Athenian coins shown in full front view with the wings opened out,<sup>42</sup> rather than a running figure with turned-down wing tips.<sup>43</sup>

The only clearly identifiable figure on the plaque is that in the lower rectangle, centered between the two of the upper row. There are no incuse circles in the border between the upper and lower row, but the wide border to the right of the lower design is filled with a large octafoil rosette stamped into the clay; probably a second one occurred below this one, and the left border would have been similar. The finely cut rosette stamp is suggestive of metal work. A similar one occurs on a bronze relief of the mid-seventh century from Olympia.<sup>44</sup> It appears even earlier as a field ornament on early Protocorinthian vases,<sup>45</sup> but quickly gives way to the dot rosette and, in the Early Corinthian period, to the solid rosette, often in similar octafoil form,<sup>46</sup> which occurs as well on contemporary Attic vases.<sup>47</sup>

The lower stamp shows a centaur, facing right, with a human head and torso and an equine body below the waist. In his left hand he holds a small branch. The upper left hand corner of the rectangle is filled with an octafoil rosette of alternating rounded and pointed petals, a favorite design on Protocorinthian pottery from its earliest phase on,<sup>48</sup> but which does not seem to survive that period. The centaur, too, is fairly common on both Protocorinthian and Corinthian pottery, but on only one

<sup>40</sup> Kunze, *op. cit.*, pl. 30, X a; Baur, *Centaur in Ancient Art*, Berlin, 1912, figs. 4, 6, 9, 15; Payne, *Protokor. Vas.*, pl. 21, 1.

<sup>41</sup> In addition to the representations of Herakles listed above, the girdle and chiton, worn by others, appear in Kunze, *op. cit.*, pls. 30, X b; 31, X d; 59, XXXI γ; Baur, *op. cit.*, fig. 15; Payne, *Protokor. Vas.*, pls. 27-28. One figure in the wide belly zone on the Chigi vase (Payne, *Protokor. Vas.*, pl. 27), the one behind the lion, has no clothing below the girdle, though it is not certain that he is wearing a chiton at all. On a bronze plaque from Boeotia there is a very similar figure with triangular torso and wide girdle (Johansen, *Vases Sic.*, p. 139, fig. 106). On none of these are the folds of the short chiton rendered as they are on this terracotta plaque.

<sup>42</sup> Seltman, *A Book of Greek Coins*, Penguin, 1952, pl. 9, No. 47 b.

<sup>43</sup> *C.V.A., Br. Mus.*, III.H.e, pl. 13, 1a.

<sup>44</sup> Kunze, *Meisterwerke der Kunst: Olympia*, Munich, 1948, figs. 32-33; for another see Curtius and Adler, *Olympia IV*, Berlin, 1894, pl. XXXVII, No. 712.

<sup>45</sup> Payne, *Protokor. Vas.*, pl. 5, 2; Kraiker, *Aigina*, pl. 14, 201 a-b.

<sup>46</sup> Payne, *NC*, pls. 17-18.

<sup>47</sup> Kraiker, *Aigina*, pl. 46, No. 565.

<sup>48</sup> Payne, *Protokor. Vas.*, pls. 8, 2; 17, 2; Kraiker, *Aigina*, pls. 12, 191; 17, 254; 24, 299; Johansen, *Vases Sic.*, pl. XXII, 1 c.

example of the Late Corinthian period does it have equine legs, as on our plaque.<sup>49</sup> Baur<sup>50</sup> has pointed out, however, that both types were known to the Greeks from the Geometric period on, and actually both appear together on a stamped gold band said to be from Corinth.<sup>51</sup> Such a centaur with equine legs is shown on an ivory carving from Sparta dated to the late eighth or early seventh century.<sup>52</sup> On vases, however, the centaur with human legs certainly prevails until late in the seventh century; one of the earliest representations on pottery of a centaur with equine legs is that on the neck of the Attic black-figured Nessos amphora of the end of the seventh century.<sup>53</sup> Our centaur seems to be wearing a short chiton with short sleeves. The delineation of the face and of the hair is considerably more advanced than that of the wrestlers of Plate 25, b. The matrix was of excellent quality, in the manner of bronzework, which makes comparison with vase-painting difficult. It would appear to date about the turn of the century, if not even in the first quarter of the sixth century, but all the other indications of style on the plaque, including the rosette on the centaur stamp itself, would suggest a date somewhat before rather than after 600 B. C.

The same combination of rectangular stamped designs with decorated borders, often with stamped rosettes, is found on Cretan pithoi,<sup>54</sup> but not on the other well known series of archaic relief vases, the Rhodian, Boeotian or Laconian. This suggests again, as did the Cretan style of some of the earliest stamped plaques from Perachora, that Crete may have been the source of inspiration for stamped relief ware made at Corinth.

These few tablets of Corinthian fabric, with rectangular impressed designs, assume an importance beyond their intrinsic artistic worth because of their bearing on the identification of the products of the Corinthian manufactory of metal reliefs. The so-called Argive-Corinthian reliefs, decorated similarly with small rectangular panels, have been much in dispute for the last half-century or more. Payne<sup>55</sup> collected the material to 1930; the most considerable addition since then has come from the excavations at Olympia.<sup>56</sup> But even the greatly increased number of bronze reliefs, due to the Olympia finds, has not helped materially in identifying their place of manufacture by an analysis of style. The argument is not germane to the presentation of the terracotta reliefs, whose fabric clearly identifies their place of manufacture, which certainly was Corinth. It can be argued that the matrices for these tablets need not

<sup>49</sup> Payne, *NC*, p. 90, note 6; pp. 129 f.; Johansen, *Vases Sic.*, pp. 145 ff.; Weinberg, *Corinth*, VII, i, Cambridge, Mass., 1943, pp. 74 f., No. 312.

<sup>50</sup> *Centaur*s, p. 135.

<sup>51</sup> *Ibid.*, p. 5.

<sup>52</sup> Dawkins, *Artemis Orthia*, London, 1929, p. 210, pl. CI.

<sup>53</sup> Beazley, *Attic Black-Figure*, London, 1928, pl. 3, 1.

<sup>54</sup> *A.J.A.*, V, 1891, p. 406, fig. 1, pl. XIV, 7-8; *Hesperia*, XIV, 1945, pl. XXXI.

<sup>55</sup> *NC*, pp. 222-231.

<sup>56</sup> Kunze, *Archaische Schildbänder*, pp. 215-250.

necessarily have been of Corinthian origin; indeed, we have seen an example from Perachora in which this was certainly not the case,<sup>57</sup> while a second example from there seems also to have been made from a foreign matrix.<sup>58</sup> The likelihood is that the matrices used for the plaques published here were Corinthian, and certainly stylistic comparisons with Corinthian pottery indicate strongly that they were. Of special interest also is the close similarity between the wrestlers on Plate 25, b and those on the Corfu matrix, which Payne used as one basis for his identification of the Corinthian style in metal reliefs.<sup>59</sup> Judging from comparisons with pottery, the tablets would date mainly in the second half of the seventh century, while the bronze reliefs are more predominant in the sixth century and only a small proportion is earlier.<sup>60</sup> The tablets can, then, be accepted as Corinthian in design as well as in fabric, and as such they, together with the Corfu matrix, remain the most important documents for identifying metal reliefs of Corinthian manufacture.

At the same time as rectangular stamps were used to decorate clay plaques at Corinth, cylindrical matrices, rolled onto clay to give a continuous repeating design, were being used to decorate vases of heavy fabric, such as pithoi and large open bowls. The impression was usually made in a layer of fine clay spread on the surface for this purpose. The earliest Corinthian examples of this technique come from the Argive Heraion, where several fragments have been found.<sup>61</sup> Two of the fragments are from splaying feet of large, heavy vases, one having also a section of the cylindrical base above the foot (Pl. 26, b-c).<sup>62</sup> The preserved section of the design on Plate 26, c is very small but it is identical with that on Plate 26, b which is almost entirely preserved. It shows a centauiromachy, the centaur with full human forepart facing left, confronted by a standing bowman identified as Herakles, who is nude and apparently bearded. He holds a bow with upcurved ends, while the centaur is armed with a long branch that extends back the length of his body and as far as the head of Herakles. One hand, apparently the right one, is held out with open palm in full view. The equine hind part has a long, square-cut tail. The third fragment (Pl. 26, a), of clay identical with the first and apparently from the same vase,<sup>63</sup> is

<sup>57</sup> *Perachora*, I, pl. 102, No. 180.

<sup>59</sup> *NC*, p. 222.

<sup>58</sup> *Ibid.*, pl. 102, No. 179.

<sup>60</sup> *NC*, pp. 224-5; Kunze, *op. cit.*, p. 242.

<sup>61</sup> *A.H.*, II, pp. 180-182, pl. LXIII. The fragments 1, 2, 3 and 5 shown on this plate have been examined and seem certainly to be of Corinthian fabric; No. 6 was not seen; only two small pieces of No. 4 were examined and it seems more likely that this vase is Argive.

<sup>62</sup> Both pieces are called pithoi bases in *A.H.*, II, p. 181. However, pithoi have small pointed bases meant to be sunk into the ground; bases of the type shown here would crack under the weight of a filled pithos. They belong, rather, to a wide bowl on a high cylindrical stand with a splaying foot, as shown on Plate 27, c. The type will be discussed more fully later.

<sup>63</sup> This has also been called a pithos fragment, from the lowest part of the belly of such a vase, where it joins the base. This, too, seems patently impossible, for the design would never be seen. Actually, as already mentioned, the lowest part of the vase was most likely buried. The fragment has a very wide splay; the design runs in a small circle about a central focus, which suggests rather

decorated with an almost identical design, the only variant being in the position of the centaur's right hand which here appears to be raised and extended, almost touching the top of the bow, rather than extended from the waist, as in the other two fragments.<sup>64</sup> The heavy plastic band bordering the top of the decorated band is identical, where preserved, on the two pieces; so is the band below. The bands are decorated with rouletted impressions of parallel chevrons on the plastic bands, and similar chevrons occur in three bands on the splaying foot of the fragment on Plate 26, c.

The centauromachy was originally recognized as containing no trace of orientalizing influence and, indeed, it resembles most closely the stage of design and composition illustrated by the gold band from Corinth, on which centaurs are represented among cavalry and infantry;<sup>65</sup> the latter is of late Geometric date. Similar in style, too, are the centaurs on some early Rhodian pithoi of the Ialysos group, dated to the late seventh century.<sup>66</sup> As to date, the Corinthian vases probably fall somewhere between the gold band and the Rhodian pithoi, about the mid-seventh century; hence this cylindrical matrix is the earliest represented on Corinthian ware.

Slightly later in date, but still within the seventh century, is the rolled, impressed design on a fourth piece from the Argive Heraion (Pl. 26, d),<sup>67</sup> a fragment from a large vase, probably a pithos, on which the preserved decorative band would have been about the belly. Unlike the others, this is in the Corinthian orientalizing, animal-frieze style. The design consists of a procession to right of a lion, a sphinx and a panther. The lion has an open jaw and a long tail curving above the back in a sweeping S-curve. Of the sphinx, only the head and hind portion are preserved, the latter showing the end of the up-curved wings, the S-curve of the tail and the standing position of the sphinx, not the usual seated posture. The panther has its head turned full face; it walks gingerly on thin legs, its tail looped forward. Between panther and lion, separating each repetition of the group, is a palmette, and the animal frieze is bordered by a tongue pattern. The composition, the animal forms, the mannered poses, are all typical of late Protocorinthian and Transitional vases of the third quarter of the seventh century, to which period this fragment must belong.<sup>68</sup>

The Argive Heraion has more recently yielded a fragment of Corinthian relief

a large lid, though a design on the shoulder at the base of a cylindrical neck is also possible, but in such a position the heads should be at the smaller diameter, as they are in the foot fragment on Plate 26, b. The type of bowl on which such a lid would fit is shown on Plate 29, h, in a fragment from Perachora.

<sup>64</sup> In *A.H.*, II, p. 181, the difference is stated as being in the left hand, which holds a branch rather than being extended towards Herakles. I believe that in both cases the left hand held the branch and the difference lies in the position of the right hand.

<sup>65</sup> Baur, *Centaurs*, p. 5, fig. 3.

<sup>66</sup> Feytmans, *B.C.H.*, LXXIV, 1950, p. 161, fig. 13; also Baur, *Centaurs*, p. 85, fig. 17.

<sup>67</sup> *A.H.*, II, p. 182, No. 5, pl. LXIII. The coarse fabric is covered with a fine light buff slip, while a heavier band of fine clay is applied separately, and on this the design was then rolled out.

<sup>68</sup> Cf. Payne, *Protokor. Vas.*, pl. 31; *Corinth*, VII, i, pl. 25, No. 186.

ware of the sixth century which is the finest product of the class yet known. A chance find made in 1949, the piece (Pl. 26, j) has been published by its finder,<sup>69</sup> and there is little to add to Miss Hersom's study. The tripod bowl of Corinthian type, and certainly of Corinthian fabric, from which it came had an estimated diameter of 0.38 m.; about the rim ran a continuous frieze, 0.05 m. high, decorated with a repeating impressed design consisting of four figures, the first probably Hermes and the others certainly Perseus pursued by the two gorgons; a bird flies between Perseus and the first gorgon. Miss Hersom believes the stamp to have been a matrix fitted against the curve of the vessel rather than a cylinder, this because of the slight ridge separating each repetition of the scene. Considering the exactness of the spacing at the two ends preserved and the similarity in the form of the ridge, it seems more likely that the design was made by a cylinder, which would conform with the practice in evidence on the other examples presented here, only one of which was known to Miss Hersom. The delicate spiraliform design repeated across the top of the leg was made with a flat stamp, the outlines of which are clear. The fragment has been dated in the second quarter of the sixth century.

A single cylindrical matrix was used to impress a continuous repeating design on the rim of two bowls made in Corinth and now known from a fragment found at Corinth (Pl. 26, f) and one found at Mycenae (Pl. 26, g).<sup>70</sup> The profile of the Corinth piece (Pl. 26, i) shows the vessel to have been an open bowl, larger and much shallower than the one from the Argive Heraion;<sup>71</sup> the thick rim has a heavy, slightly bevelled lip, and its underside extends down slightly below the side of the bowl. The Mycenae bowl was of the same form, though the rim is about 0.03 m. higher, thus giving a wider border above and below the relief zone. The interior of the bowl, or basin, is smooth near the lip, but toward the center the surface coating of clay is gone and the rough core exposed.

The profile and the roughened interior surface at once suggest that these fragments are from large basins on high cylindrical stands, the so-called "perirrhanteria" known to have been made at Corinth over a long period of time. The earliest example from Corinth, of the third quarter of the seventh century,<sup>72</sup> had a plainer bowl without offset rim; it also had long narrow openings in the cylindrical stand. There are frag-

<sup>69</sup> *Hesperia*, XXI, 1952, pp. 275-278, pl. 72. I am grateful to Miss Hersom for having sent me a description and photograph of the fragment soon after it was found.

<sup>70</sup> The piece from Corinth, a chance find, Inv. No. CP-1911, has the following dimensions: H. rim 0.06 m., P. W. 0.09 m., Th. rim 0.02 m. The profile is shown on Plate 26, i. The Mycenae piece is mentioned by Wace in *B.S.A.*, XLV, 1950, p. 227, ii: H. 0.08 m., P. W. 0.11 m.; it too is without context. The clay of the first is reddish buff at the core, buff on the exterior; it has a heavy admixture of grits and is baked hard. The piece found at Mycenae is of greenish yellow clay, with the same characteristic grittiness, and with a yellowish surface.

<sup>71</sup> Cf. *Hesperia*, XXI, 1952, p. 275, fig. 1.

<sup>72</sup> *Corinth*, VII, i, p. 50, No. 182, pl. 25.

ments of such bowls from the late sixth century,<sup>73</sup> while several fragments from a well dating *ca.* 460-420 B. C. permitted a full reconstruction of the shape.<sup>74</sup> Numerous unpublished fragments at Corinth show the popularity of the shape throughout the sixth and fifth centuries and possibly into the fourth century as well. By far the majority of these were decorated only with ridges on base and rim and with black and red painted bands; one large fragment has a painted ivy pattern on the rim and painted decoration was also used on the stands. The stamped designs on rim, stand and base will be discussed below.

Early in the sixth century the shape, having already achieved some age at Corinth, became popular at Sicilian Akragas, modern Agrigento, whence has come a large and long series of rims especially, decorated with continuous repeating patterns impressed from cylindrical matrices, like those from Corinth now under discussion. At Selinus, however, was found the most complete example yet known of the shape with a relief rim zone (Pl. 27, c).<sup>75</sup> The profile of rim and bowl is identical with those from Corinth and Mycenae; the stand and base are of the type known from numerous Corinthian examples; the interior has the same roughened surface, except at the outer edge. In a recent study of the shape<sup>76</sup> Gabrici reports his observations on the fragments in Palermo, from which he concludes that the roughened surface was caused by the action of fire, which sometimes left a reddened area as well; on some fragments bits of carbon were still traceable.<sup>77</sup> He therefore suggests that these basins on stands<sup>78</sup> were used as braziers. The large slits around the stand of a seventh century example from Corinth<sup>79</sup> might indicate that fire was in this case put under the bowl rather than, or as well as, on it. This explanation seems preferable to that of Miss Pease, who interpreted traces of clay found on such bowls as indication that they were used for the mixing and kneading of clay.<sup>80</sup>

The relief band of the Corinthian example known from two fragments (Pl. 26, f and g) has as its decoration a scene of a Nike running to right, followed by a quadriga, behind which is a water bird with raised wings hurrying along in the same direction. The torso and up-curved wings of the Nike are seen in front view, the head and lower body in profile, showing the right side. The position is the archaic "knielauf" with the left knee almost touching the ground; the left arm is extended

<sup>73</sup> *Hesperia*, VII, 1938, p. 602, No. 184-186.

<sup>74</sup> *Hesperia*, VI, 1937, p. 296, fig. 28.

<sup>75</sup> The vase was previously known only from a sketch (*Not. d. Scavi*, 1894, p. 219, fig. 20). Fortunately, this photograph was taken before the last war, during which the Palermo Museum was bombed and this vase shattered. It was in this condition that I saw it in 1948.

<sup>76</sup> *Archivio storico per la Sicilia*, Series III, Vol. I, Palermo, 1947, pp. 1-29.

<sup>77</sup> *Ibid.*, p. 8.

<sup>78</sup> The well-preserved example from Selinus: H. 0.46 m., diam. 0.68 m.; the reconstructed basin from Corinth: diam. 0.765 m.

<sup>79</sup> *Corinth*, VII, i, pl. 25, No. 182.

<sup>80</sup> *Hesperia*, VI, 1937, p. 297.

straight forward, the right one back and down. The Daedalic head has a large round eye, a scroll-like ear, the hair arranged in an "Etagenperücke" with a fillet. The water bird is preserved only on the fragment from Corinth, and even here its lower part is missing; the wings show the same precise modelling as do those of the Nike; the eye is round. Of the quadriga, the whole chariot and the rear parts of the horses are preserved on the Corinth fragment, the heads and forelegs of the horses on the Mycenae sherd. The horses race forward with necks extended, forelegs raised in a mass with incisions marking off the legs. The hind legs are shown in two groups, with the outward leg in each group fully delineated and those behind shown by repeating the outline of the front one. The tails fly out behind, indicating the speed of the horses. The chariot, with four-spoked wheels, has a straight front and one center support for the curved side rails. In each hand the charioteer holds a group of four reins, very precisely indicated, each group held by a buckle just in front of his hands; in the left hand he holds a whip. His head is damaged, but on the hair can be seen a fillet with the loose ends flying out behind. He wears a long garment, probably sleeveless, girdled at the waist.

The sharp modelling of the relief is reminiscent of the best bronze work and it is, indeed, to bronzes that one must look for some of the closest parallels to this scene. The Nike is in style and stance, except for the turn of the head, very close to one from Perachora<sup>81</sup> dated to the mid-sixth century or a little earlier. A gorgon on a bronze relief from Olympia shows similar style; it is dated to the first quarter of the sixth century.<sup>82</sup> The running posture is especially characteristic of "daimons," largely male, shown on Corinthian vases in the Early Corinthian and especially the Middle Corinthian periods.<sup>83</sup> While the "knielauf" continues after the middle of the sixth century, the bend of the knee tends to become less deep.<sup>84</sup> The hairdress is equally characteristic of the early sixth century and the round eye, also, prevails during the first half of this century.<sup>85</sup> The swiftly moving quadriga can be paralleled on a bronze relief in the National Museum in Athens (Pl. 27, a),<sup>86</sup> on which the horses are especially like those of the terracotta reliefs. There are innumerable parallels on Corinthian and early Attic vases of the second quarter of the sixth century, where the representations of chariot, horses, charioteer, and even the rein buckles, are almost identical with those of the reliefs.<sup>87</sup> Though the chariot race remains a common scene on black-

<sup>81</sup> *Perachora*, I, p. 134, pl. 42, 3-4.

<sup>82</sup> Kunze, *Archaische Schildbänder*, pl. 10, II b.

<sup>83</sup> Payne, *NC*, pls. 28, 10; 31, 5; *Corinth*, VII, i, pls. 28, No. 193.

<sup>84</sup> For the collected material on this posture see Schmidt, E., "Der Knielauf," in *Münchener archäologische Studien*, Munich, 1909.

<sup>85</sup> Cf. especially Payne, *NC*, p. 102, fig. 35 D, of Middle Corinthian date, for hair and eye.

<sup>86</sup> De Ridder, *Catalogue des bronzes de la Société Archéologique d'Athènes*, Paris, 1894, No. 856.

<sup>87</sup> To mention but a few of the most obvious parallels: the second frieze of the François Vase

figured vases after the middle of the sixth century, particularly on Panathenaic amphoras, there is a change in style in the later representations, principally in the greater differentiation of the two pairs of horses and in the tendency away from strictly profile poses, as well as in a more advanced type of rendering of the charioteer, which precludes dating our example after the middle of the century. The style of the second quarter of the sixth century is the milieu to which they belong, about the same date as that which Miss Hersom has given to the bowl from the Argive Heraion.

A very small fragment of the rim of another such basin was found in the Potters' Quarter at Corinth (Pl. 26, h),<sup>88</sup> unfortunately without significant context. Only the rear part of the horses is preserved, but it is clear that the two pairs are here much more widely separated and that they are standing or moving slowly rather than running. Not unlike this in arrangement, as well as in the borders of tongues, is the chariot on a bronze relief from Noicattaro in Bari<sup>89</sup> which has been dated in the Protocorinthian period;<sup>90</sup> the Corinth rim fragment seems hardly to be this early and is more likely to be dated after the pieces just discussed.

The fragment from the Potters' Quarter is especially reminiscent of the arrangement of the horses on most of the Sicilian relief rims, particularly those from Agrigento, which are decorated with scenes of Nike and a chariot. The series is a long one, running perhaps a century from the late sixth on. One typical fragment in the British Museum is shown on Plate 27, b; there are numerous other examples which show the whole range of the development.<sup>91</sup> In all, the column is used to separate Nike and quadriga, the function performed by the water-bird on the Corinthian example, where there is no separation between the front of the horses and Nike. In none of the Sicilian examples is the style as early as that of the Corinth fragments and it seems not too bold to suggest that the Corinthian product was the prototype, both in shape and decoration, for the popular Sicilian series. The bird which flies above the horses on so

(*Wiener Vorlegeblätter*, 1888, pl. II), the Amphiaros Krater (*ibid.*, 1889, pl. X), Akropolis vase No. 606 (Graef, *Akropolis Vasen*, I, Berlin, 1909, pl. 30), Louvre E874 by Sophilos (Karouzou, *Ath. Mitt.*, LXII, 1937, pl. 54, 1), an amphora by Lydos in Florence (Beazley, *Dev. of Attic B-F.*, pl. 18, 2), a calyx krater of the Exekias type in Athens (Roebuck, *Hesperia*, IX, 1940, p. 154, fig. 9). Many of the pertinent parallels have recently been brought together by Åkerström in a study of architectural terracottas on which racing chariots are depicted (*Architektonische Terrakottaplatten in Stockholm*, Lund, 1951, p. 26, fig. 4; pp. 33-47, figs. 8-21; also figs. 30-33, 38 and 40).

<sup>88</sup> This piece, Inv. No. KN-160, is 0.052 m. high, which means that the cylinder from which the impression was made was ca. 0.05 m. high, as it was on the other examples.

<sup>89</sup> Jantzen, *Bronzwerkstätten in Grossgriechenland und Sizilien*, Berlin, 1937, pl. 10.

<sup>90</sup> Payne, *NC*, p. 225.

<sup>91</sup> For instance: *C.V.A.*, Copenhagen 5, pl. 225, 4-5; Marconi, *Dedalo*, IX, 1928-29, p. 598; Marconi, *Agrigento*, Florence, 1929, pp. 201-203, figs. 137-140; there are several other fragments in the museum at Agrigento. The several pieces found at Motya are believed to have been imported, probably from Akragas or Selinus (Whitaker, *Motya*, London, 1921, p. 322, fig. 103). One fragment is reported to have been found at Caere in Etruria (Pottier, *Vases antiques du Louvre*, I, Paris, 1897, pl. 38, No. D 355).

many of the Agrigentine reliefs also has its prototype in the one between Perseus and the first gorgon on the Argive Heraion bowl (Pl. 26, j). Lacking more material from Corinth, it is not yet possible to study further the problem of the possible Corinthian origin of the other motives which decorate the relief rims of Agrigentine braziers, though the Centauromachy on the sherds from the Argive Heraion (Pl. 26, a-c) is a possible prototype for the scene on Sicilian examples, some of which are as early as the late sixth century. One can only mention here the further possibility that the Corinthian relief wares, still only slightly known, were the inspiration for the stamped reliefs on Etruscan bowls and pithoi.<sup>92</sup> In this connection Miss Goldman had suggested, before any Corinthian relief ware had been published, that possibly there was Corinthian influence on the decoration of the rim of a large basin found at Halae, which is stamped with single and double lotuses and which also has applied plastic heads.<sup>93</sup> While she could then give no parallel for the shape in Corinthian ware, it was known in bucchero; the common source for the type and decoration both at Halae and in Etruria would now seem to be Corinth.

One more fragment decorated with figured relief has come from Perachora (Pl. 26, e).<sup>94</sup> The preserved section shows, from left to right, a sphinx to left, hind legs of an animal to left, two animals, probably lions, heraldically grouped about a floral ornament.<sup>95</sup> The style of the relief, as Dunbabin has observed, is Protocorinthian, and it probably dates near the middle of the seventh century B. C. Though only bits of the animals are preserved, the lithe bodies are most in keeping with that style. The ribbon-like character of the floral ornament, too, is Protocorinthian.<sup>96</sup> The heraldic group is seen in terracotta relief on an altar from Selinus and on an architectural fragment from Delphi,<sup>97</sup> and it is common on the so-called Argive-Corinthian bronze

<sup>92</sup> Mingazzini, *Collezione Castellani*, Rome, 1930, pls. IX, X, XII-XIV (cf. especially the animals in Protocorinthian style on pl. IX with our Pl. 25, e and Pl. 26, d; the chariot scene of pl. X, 3 with those from Corinth, the centaurs of pl. XIII, 2 with those on the Argive Heraion sherds); *C.V.A.*, Copenhagen 5, pl. 225, 1-3; Pottier, *Vases antiques du Louvre*, I, pls. 2, 36-38 (pl. 38, No. D 355 is the Sicilian relief rim found at Caere).

<sup>93</sup> *Hesperia*, IX, 1940, p. 408, No. 11, fig. 39.

<sup>94</sup> The piece, made of pale orange clay which is definitely Corinthian, is 0.15 m. long. Dunbabin, not knowing the other relief fragments, has suggested that it was part of a pithos. I would suggest that it, too, was part of a rim of one of the large basins, which seems likely from the finished bottom edge.

<sup>95</sup> Judging from the photograph, I would suggest that this relief, too, was made with a cylindrical matrix, that we do not have the entire impression and that when the cylinder was finally rolled around the entire perimeter of the vase there remained a small section which was filled in a makeshift manner, as indicated by the oddly placed animal between the sphinx and the heraldic group, the ground line of which seems to have been obliterated by a rather rough treatment of the surface.

<sup>96</sup> Cf. Johansen, *Vases Sic.*, p. 116, fig. 58; p. 119, fig. 75; pl. XXIII.

<sup>97</sup> *Mon. Ant.*, XXXII, 1927, pl. XXXV, 2; Van Buren, *Greek Fictile Revetments*, London, 1926, p. 32, pl. XXV, fig. 89. The group is stamped on the Delphi sima in the same manner as

reliefs, ranging in date from the last quarter of the seventh century to the end of the sixth.<sup>98</sup> One of the earliest and finest of the groups is represented by the mid-seventh century lion found at Perachora.<sup>99</sup> In none of the examples from the bronze reliefs is the motive about which the animals are grouped like that on the Perachora vase fragment and I know of no exact parallel, but those in which the stance and form of the animals seem closest to the terracotta relief belong to the earlier part of the series, the late seventh and early sixth century. Thus the Perachora fragment dates to about the same time as the orientalizing fragment long known from the Argive Heraion. Together they give the earliest evidence for the Corinthian style in relief decoration.

The pieces of figured Corinthian relief pottery, thus far nine in number (two perhaps from the same vase), cover a span from the mid-seventh to the mid-sixth century, with the possibility that one fragment from Corinth was made later in the sixth century. This period correlates roughly with the life span of the developed Protocorinthian and Corinthian figure styles. Though the remains are still scant, they suggest that the figured relief ware, like the figured style of vase painting, might have ended during the middle decades of the sixth century. But just as on the painted pottery, decoration in relief with geometric and floral motives, which had played a minor role during the flourishing of the figured style, continued for the rest of the sixth century and for a good part of the fifth as well. Already on the mid-seventh century pieces from the Argive Heraion (Pl. 26, a-c) there were bands of parallel chevrons impressed with a roulette either on the plastic bands bordering the relief zone or on the splaying base of the high stand. The earliest of the basins on a high stand from Corinth, of about the same date, had a somewhat different rouletted decorative band about the center of the stand, consisting of five rows of impressed triangles.<sup>100</sup> Similar rouletted wedges decorated the surface of one of the "koulouria" (votive cakes) found in a deposit dating largely from ca. 630-600 B. C. at the temple of Hera Akraia at Perachora.<sup>101</sup> A plastic zigzag band was produced on the heavy ledge handle of a bowl found in the Potters' Quarter at Corinth (Pl. 28, i),<sup>102</sup> apparently again by a roulette with wedges arranged in zigzag fashion. The deposit from which the piece came ranged from Early to Late Corinthian, but a few pieces date even a little later. A simple chevron-like design occurs in the branches stamped on the ledge

on the vases; a second stamp has a nude youth riding a horse. Both look Corinthian in style and the fabric of the sima should be examined to see if it could be Corinthian.

<sup>98</sup> Kunze, *Archaische Schildbänder*, pls. 2, I g; 8, I g; 13, III b; 14, III b; 16, IV a; 20, Va; 25, VIII e; 38, XIV b; *Olympia Bericht*, III, pls. 34-35; *Olympia*, IV, pl. LIX; *F. de Delphes*, V, p. 124, fig. 466; Payne, *NC*, p. 222, fig. 102; p. 229, fig. 104 G; Payne, *Perachora*, I, pl. 50, 1-2.

<sup>99</sup> *Perachora*, I, pp. 130-133, pl. 39; cf. also *Olympia*, IV, pl. LVII, 969.

<sup>100</sup> *Corinth*, VII, i, pl. 25, No. 182.

<sup>101</sup> *Perachora*, I, p. 101, pl. 33, 16.

<sup>102</sup> Inv. No. KP-1417, P. H. 0.057 m., P. W. 0.124 m. It is from a wide open bowl with a thick lip, flat on top, and wide handles with vertical sides. A fine surface coating was put over the gritty, buff clay.

handles of several bowls from Corinth, one of mid-sixth century date,<sup>103</sup> another from a late fifth century well,<sup>104</sup> and a third from the Asklepieion.<sup>105</sup>

However, other decorative stamps of more developed nature have already been seen on the tablets and vases with figured ornament. The incuse circles of the Argive Heraion plaques seem limited to the seventh century period to which these belong; there is a possible late reflection on the fragment shown on Plate 28, e. On one tablet (Pl. 25, c) there was a rosette stamp, the first of a long series of this impressed motive, which will be discussed below. On the bowl from the Argive Heraion (Pl. 26, j) there is an elaborate stamp with a double row of running spirals and a palmette (?) at either side. This particular example is unique, but the spiral motive is known on at least two other pieces. One is the fragment of a cylindrical stand (Pl. 28, b) which has palmettes stamped at the base and, about 0.02 m. above these, a chain of interlocking S-spirals about the circumference of the stand.<sup>106</sup> The existence of an imperfection on the underside of each of the S-curves indicates that this was part of the matrix with which each of the impressions was made. This might suggest a flat stamp, but as there is no indication of a break it is more likely that a small cylindrical matrix or roulette, with a diameter of about 0.009 m., was used. Similar interlocking S-spirals, apparently also rouletted, occur as the lowest motive of three on the splaying base seen in Figure 1 and on Plate 30, f.<sup>107</sup>

Just as the Argive Heraion example of the spiral was datable by the style of the figured relief it accompanies, so the other occurrences must be considered with their complementary relief patterns. That on the fragment of a stand (Pl. 28, b) is a series of individually stamped palmettes, representative of a whole series from Corinth and Perachora which are shown on Plates 28 and 29. Unfortunately, only one of these is securely dated by its context; that is the fragment (Pl. 28, f) found on the North Slope of the Acropolis in Athens in Well D, which was filled with debris from the Persian destruction of 480 B. C.<sup>108</sup> and therefore dates from the years of the clean-up not long thereafter. But while the *terminus ante quem* is sure, the contents of the well

<sup>103</sup> *Corinth*, VII, i, pl. 45, No. 378.

<sup>104</sup> *Hesperia*, VI, 1937, p. 299, No. 189, fig. 32.

<sup>105</sup> *Corinth*, XIV, p. 135, No. 62, pl. 50.

<sup>106</sup> Inv. No. C-40-36. P. H. 0.117 m., P. W. 0.13 m. Clay pinkish at the core, buff at the surfaces, very gritty except for a fine coating of buff clay added to the outer surface to receive the stamps. The piece was found in the Tile Factory in mixed fill which does not help determine its date.

<sup>107</sup> Very similar spirals occur, sometimes with palmettes like those on Corinthian ware, as relief ornaments on pithoi from the Artemis Orthia sanctuary at Sparta, dated to the first half of the sixth century (*Artemis Orthia*, p. 94, pl. XIV). On bronzes the spirals occur as border designs (*Olympia*, IV, pl. LX, 981-982). Also of the early sixth century is a sima from Corfu on which the motive occurs (Payne, *NC*, p. 256, fig. 108B).

<sup>108</sup> Roebuck, *Hesperia*, IX, 1940, pp. 142, 238, No. 259, fig. 47. Roebuck called the fragment a piece of the shoulder of a large jar. I would suggest, rather, that it came from the flaring base of a high stand for a basin, like Plate 28, a. The palmettes would then radiate from the base of the circular stand as they do in the other stand.

go back to about 700 B. C. and the majority would seem to belong to the second half of the sixth century, the period to which this Corinthian fragment too might belong. Unfortunately, on this piece not enough of the palmettes is preserved to compare their form with that of other examples on Corinthian relief ware. However, the five short leaves, all of the same length, form a squat palmette, very small in proportion to the volute bands, which is early in the series known both from bronze reliefs and architectural terracottas;<sup>109</sup> a date early in the sixth century is most probable for this stamp,

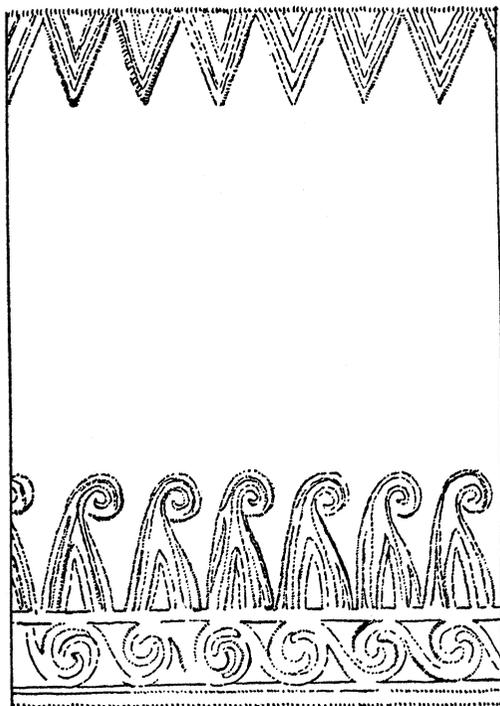


FIG. 1. Stamped designs on base from the Potter's Quarter, Corinth.

though the piece itself may have been made later in the century. The form of these palmettes is almost identical with those on the cylindrical stand (Pl. 28, b), and for these an early sixth century date agrees with the date already ascribed to the spiral chain. The full form of the palmette shown here is especially close to that on an antefix from Athens.<sup>110</sup> A similar stamp was used on a large pithos from Perachora (Pl. 29, g), here too combined with the triangular stamp which also occurs on the piece from Well D in Athens. Both types of stamps may actually belong to the early sixth

<sup>109</sup> Kunze, *Archaische Schildbänder*, pls. 74-75, especially pl. 75, 14-15/6 of the early sixth century; Payne, *NC*, p. 257, figs. 106-7; Van Buren, *Greek Fictile Revetments*, p. 12, pl. VIII, fig. 22, also of the early sixth century; *Artemis Orihia*, pl. XIV, B, dated to the same half century.

<sup>110</sup> Van Buren, *loc. cit.*

century, as indeed might the bases found at Perachora and Athens on which they were used.

Of somewhat more developed form are the several seven-leaved palmettes stamped on Corinthian relief ware. The type seen on the splaying base of another high stand for a basin (Pl. 28, a)<sup>111</sup> has a slight increase in the height of the leaves towards the center and is very likely to be dated in the second quarter of the sixth century. A very similar stamp, probably not the same, seems to have been used on a fragment from the Potters' Quarter (Pl. 28, d).<sup>112</sup> Still further developed is the palmette on the bowl rim shown on Pl. 28, c,<sup>113</sup> similar in form to the type of mid-sixth century date on the bronze relief bands from Olympia.<sup>114</sup> To about the same date would seem to belong the palmettes in a chain on a large pithos fragment from Perachora (Pl. 29, d), but here the actual leaves are missing and without them it is difficult to judge the date. The mid-sixth century certainly seems to be the date of the palmette cross on the rim of another vase from Perachora (Pl. 29, e);<sup>115</sup> this is an unique occurrence of the cross motive on relief ware. The complete degeneration of the palmette is to be seen on the fragment from the rim of a very large bowl (Pl. 28, e)<sup>116</sup> on which the individually impressed five-leaved palmettes are of the crudest possible execution. The bowl was probably made in the fifth century, but no other pieces of the period exhibit such careless workmanship.

The octafoil rosette was also used as a decorative motive on a late seventh century plaque from the Argive Heraion (Pl. 25, c), and we have seen it as well, in a less

<sup>111</sup> Inv. No. C-31-446. The very gritty clay is pink at the core, buff at the surface; a finer surface coating took the impressions, stamped individually. The piece was found in the Asklepieion at Corinth in Votive Deposit V, which dates from the late fifth to the late fourth century, but contained some earlier objects (*Corinth*, XIV, pp. 113, 135, No. 64, pl. 50). The fragment is here called a lid, but the thickness of the bottom, which would have to fit on the rim, argues in favor of its being the base of a stand.

<sup>112</sup> Inv. No. KP-1418. P. H. 0.048 m., P. W. 0.075 m. The piece is too small to judge much of the shape, which must have been very large.

<sup>113</sup> Inv. No. C-48-117; found without context in the area of the Julian Basilica at Corinth. P. W. 0.165 m., H. of rim 0.046 m. Clay greenish buff, very gritty, fine surface coating. The shape is a very wide open basin. The mouldings of the borders have been formed by a roulette; a clay pellet was applied between the borders and the impression of a palmette stamp was made on it. The palmette is closely paralleled by those on the base of a "perirrhanterion" found at Delphi (*F. de Delphes*, V, p. 182, fig. 775) but very likely of Corinthian origin.

<sup>114</sup> Kunze, *Archaische Schildbänder*, pl. 74, 43.

<sup>115</sup> H. 0.09 m. This is apparently another basin rim. For the palmette cross compare Kunze, *op. cit.*, Beil. 16, 3 of the third quarter of the sixth century. For the palmette cross on vases see Jacobsthal, *Ornamente Griechische Vasen*, Berlin, 1927, pl. 16 a; Rumpf, *Chalkidische Vasen*, Berlin, 1927, p. 186, fig. 18, of about the same date. The motive seems almost unknown outside of Chalcidian ware and is rare on it.

<sup>116</sup> Inv. No. C-38-684. P. H. 0.124 m., P. W. 0.188 m., estimated diam. ca. 0.48 m. Light buff clay with a greenish tinge, much fine grit. Found in the great manhole in the middle of the South Stoa at Corinth; the deposit ranged over the fifth century and some pieces were even of fourth century date.

plastic form, on a decorated zone of a pithos from Perachora (Pl. 29, d) of the mid-sixth century. As early as the rosette on the plaque is the series decorating one of the votive cakes from the Southeast Deposit at the Temple of Hera Akraia at Perachora,<sup>117</sup> dating *ca.* 630-600 B. C. A rosette occurs alone on the top of a basin rim from the Potters' Quarter (Pl. 30, c)<sup>118</sup> while on two other pieces from Corinth and on one from Perachora the rosette is found in combination with dotted tongues. One of these rosettes is stamped at the base of the handle of a coarse amphora (Pl. 30, a) found at Corinth in a well in which was a quantity of pottery for which the best collective date is *ca.* 500 B. C.<sup>119</sup> The other two combinations of rosettes and tongues are on seemingly similar fragments, and the more complete one from Perachora (Pl. 29, f) indicates that the shape was a large lid, such as was suggested for Plate 26, a, which would fit on the type of bowl rim shown on Plate 29, h, also from Perachora. I do not know the profile of this fragment, however, and the piece from Corinth (Pl. 28, g) which looks so similar, even to the plastic corded band at the keel between rim and body, has a flat bottom to the rim which is 0.025 m. wide and would seem to preclude a lid shape and favor its interpretation as another foot of a high stand.<sup>120</sup> On both pieces the tongue stamp, like that on the amphora handle, is the major decorative motive, but stamped rosettes occur in the same zone with the tongues, apparently more widely spaced. That on the Corinth fragment is octafoil, while an unique hexafoil rosette is stamped on the Perachora piece.

Before considering the tongue stamps, which extend from the late sixth into the fifth century, there is another earlier motive already seen on several fragments in combination with spirals and palmettes, as well as with early tongues. That is the triangular stamp filled either with concentric triangles or with parallel chevrons. The first type is shown on the fragment from the North Slope of the Acropolis in Athens (Pl. 28, f), combined with a palmette of early sixth century type as well as with tongues and corded bands. The same combination with early palmettes and bands decorated with a toothed roulette is seen on the fragments of a large pithos from Perachora (Pl. 29, g), but here the filling of the triangle consists of parallel chevrons. Contiguous impressions from a similar triangular stamp decorate the top of the bevelled shoulder of the large base (Fig. 1; Pl. 30, f) on which one occurrence of

<sup>117</sup> *Perachora*, I, p. 101, No. 11, pl. 33.

<sup>118</sup> Inv. No. KP-1415. P. H. 0.074 m., P. W. 0.138 m. Buff clay with a fine surface coating. The vertical side of the rim is grooved, with the grooving interrupted by a semi-cylindrical impression in the side, above which the rosette is stamped on the top of the rim. The piece was found in a deposit ranging generally from Geometric to Early Corinthian, but with a few pieces dating well into the sixth century. The basin would probably not have been made after the mid-sixth century.

<sup>119</sup> Inv. No. C-32-29. P. H. 0.167 m., D. of handle 0.044 m., of a very gritty, buff fabric.

<sup>120</sup> Inv. No. C-50-17. P. W. 0.101 m., P. H. standing on bottom 0.087 m. Clay gray at core to reddish buff at surfaces, very gritty except for the fine surface coating. The piece was found in the South Stoa, north of Shop XXVIII, in late sixth to early fifth century context.

spiraliform decoration was noted.<sup>121</sup> On a fragment from Perachora (Pl. 29, a) the triangles filled with parallel chevrons occur again together with rouletted plastic bands, but here they contain, besides the usual chevrons, a further inner triangle, composed of three parallel chevrons, which lies at the base of the inner chevron of the large triangle; thus far the stamp is unique. The more usual stamp, again combined with tongues and corded bands, is seen on the fragment from Perachora shown in Plate 29, j. The parallel chevrons form the sole decoration preserved at the outer edge of another heavy base (Pl. 28, j), again radiating from the circular base line of what may have been the stand, though it would seem that the base itself must have been wider, probably with another step in it.<sup>122</sup> As many as five chevrons fill a triangular stamp used on a fragment of pottery from Corinth (Pl. 30, m), so small that the shape is undeterminable.<sup>123</sup>

The spiral hooks, combined on the large base with running spirals and triangles (Fig. 1; Pl. 30, f), are unique, but they seem to be an embellishment of the triangle filled with parallel chevrons, for here the apex of the triangle has been turned into a spiral. The resultant design is strongly reminiscent of the spiral hooks common on Protocorinthian pottery,<sup>124</sup> but not usual after the seventh century. Together with the running spiral, this motive suggests a date for the base not very much after the beginning of the sixth century.

One of the simplest of the decorative motives impressed with individual stamps on Corinthian relief ware is the tongue pattern, which occurs in a variety of forms through the sixth century and well into the fifth. The motive can be closely related to the decoration used on bronze vessels of this same period.<sup>125</sup> Among the earliest tongues used on pottery are probably those on the fragment from Athens (Pl. 28, f), which we have seen reason to date early in the sixth century. The tongues are very precisely formed and have a double border. Tongues of a similar shape, but with a

<sup>121</sup> Inv. No. KN-162. P. H. 0.165 m., G. W. 0.198 m. Light buff clay, slightly greenish cast to the fine surface coating; very gritty, except at surface. The foot has a square base, 0.068 m. high, on which is a circular vertical band *ca.* 0.03 m. high; the wide bevelled shoulder above is *ca.* 0.10 m. broad and from its inner edge would have risen the cylindrical stand, *ca.* 0.24 m. in diameter. The triangles radiate from the bottom of the cylindrical stand; the running spirals are at the outer edge of the shoulder and just above them is a series of spiral hooks, not yet discussed. The deposit south of the terracotta factory in which the base was found was probably laid down in the late fifth century, but its range is very wide. The spirals are probably the best criterion for dating, placing the base in the first half of the sixth century.

<sup>122</sup> Inv. No. KP-1416. P. H. 0.046 m., P. W. 0.12 m. Clay pink at core, light buff at surface. The fragment is from the Potters' Quarter, where it was found in a road with a deposit which ranged from Early Corinthian to the early fifth century at least.

<sup>123</sup> Inv. No. C-39-281. The fragment came from the Museum West area and was found in a well filled with early fifth century pottery (*A.J.A.*, XLIII, 1939, p. 596, figs. 7-8).

<sup>124</sup> *Corinth*, VII, i, pp. 37-38, No. 116, pl. 16; the motive is discussed on p. 38. See also pl. 37, No. 309 for an early Attic use of the motive, late in the seventh century.

<sup>125</sup> *A. H.*, pls. CIX, 1875; CXVII, 2003; CXVIII, 2034.

single border, are stamped on a fragment from Perachora (Pl. 29, c), while two other vases from there were decorated with tongues which narrow towards the base (Pl. 29, b and j). We have seen three examples of tongues combined with rosettes, and in every case (Pls. 28, g; 29, f; 30, a) the tongues have a dotted border. On the large fragment from Perachora (Pl. 29, f) thought to be from a lid, there are two rows of tongues, the inner one considerably smaller than the outer series; both have a single border filled with dots, probably twenty-four in each case. On the fragment of one of the large bases from Corinth (Pl. 28, g), which was found in context of the late sixth-early fifth centuries, the tongues have twenty-seven dots in the border and the stamp is *ca.* 0.027 m. long. It is likely that the same stamp was used to decorate a large pithos, a piece of which (Pl. 28, h) was found in the same deposit as the base just mentioned.<sup>126</sup> Only slightly different is the tongue on the amphora handle dated to about 500 B. C. (Pl. 30, a); apparently the same stamp was used on another amphora handle, shown on Plate 30, b.<sup>127</sup> There thus seems good evidence that the dotted tongue stamps were in use around 500 B. C.

The fine bowl shown on Plate 30, e is the most complete vase we have decorated with tongues, and on it there are four rows of them about the bowl, each series suspended from rouletted bands; all but the lowest band are made with a toothed roulette. The same rather long, pointed tongues appear in the three upper rows, while the lowest row consists of more fully rounded tongues; all the impressions are very light.<sup>128</sup> Not much later in date are the fragments from a large pithos (Pl. 30, d) which also were found in the well in the Museum West area, filled during the first half of the fifth century.<sup>129</sup> Many of the fragments decorated with plain tongues, largely bowls or basins of heavy fabric which have their rims so decorated, come from the Tile Factory at Corinth, and it is obvious that such bowls, both decorated and plain, were among the products of this factory in the fifth century, perhaps even earlier.<sup>130</sup> The fragments shown on Plate 30, g and h,<sup>131</sup> may come from the base and the cylindrical stand of basins on high stands, though the pieces are not from the same vessel. If this is so,

<sup>126</sup> Inv. No. C-50-18. P. W. 0.21 m., P. H. 0.191 m. Clay reddish-buff at core to light buff on exterior.

<sup>127</sup> Inv. No. C-39-442. P. H. 0.087 m., P. W. 0.088 m. Clay gray at core to buff at surface. The fragment is from the early fifth century well in the Museum West area. The dotted tongue stamp is also known on pottery of sixth to fifth century date from Naukratis (Petrie, *Naukratis*, I, London, 1886, pl. IV, 5).

<sup>128</sup> Inv. No. C-47-786. H. 0.202 m., D. of lip 0.30 m. Very light greenish buff clay, heavy admixture of small grits. Unglazed, surfaces well smoothed both on int. and ext. The bowl was found in the Southeast Building in a well which contained pottery of the third quarter of the sixth century (*Hesperia*, XVI, 1947, pp. 237 f., pl. LV).

<sup>129</sup> Inv. No. C-39-280 (rim) and 282 (body). Reddish buff clay with heavy grits.

<sup>130</sup> The whole establishment will be published, and the stamped wares put in their proper context, by Gladys D. Weinberg.

<sup>131</sup> Inv. Nos. C-39-38 and C-40-74 respectively.

it suggests that these basins of heavy fabric were also among the products of the factory and many of those found at Corinth may have been made at this place. This is certainly true of the bowls, which were found in quantity at the factory; even a piece of a mould for making them was found there. Typical are the basins shown in Figure 2, b-c.<sup>132</sup> Figure 2 a shows a deeper bowl of lighter fabric;<sup>133</sup> possibly the

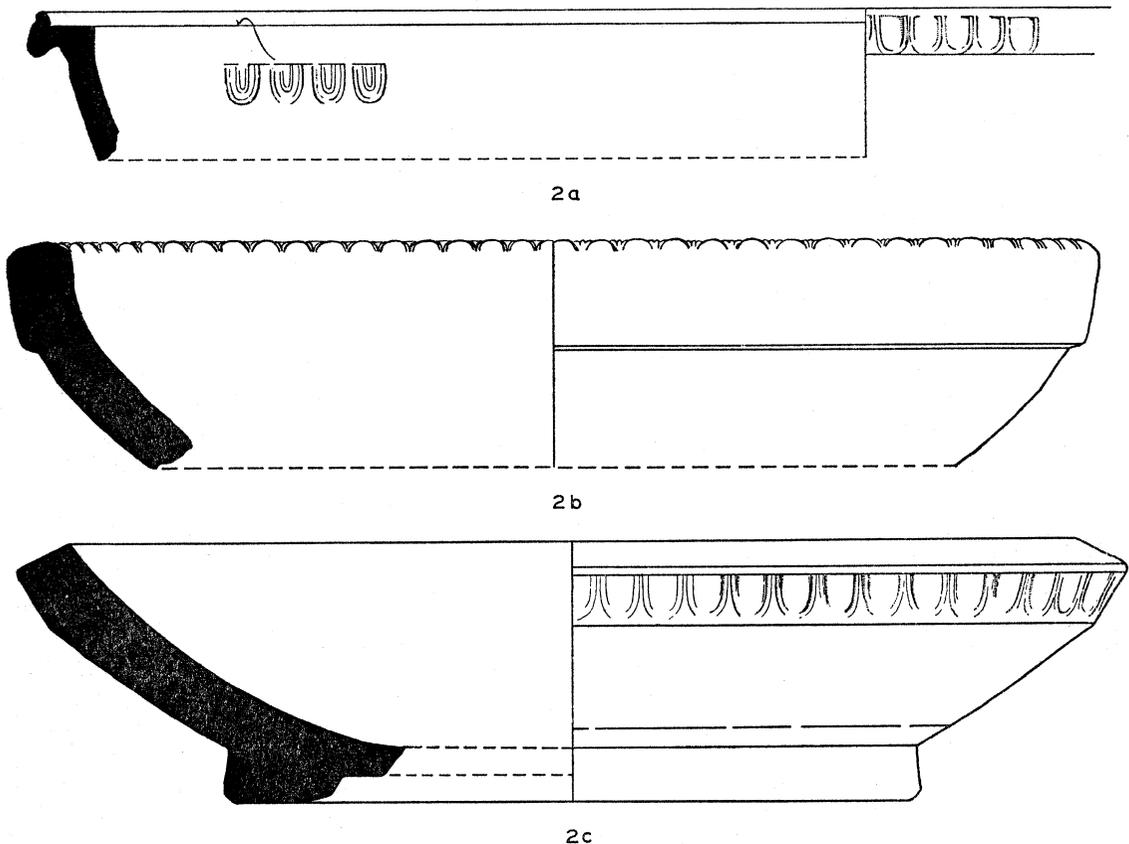


FIG. 2. Bowls with stamped decoration, from the Tile Factory at Corinth.

fragment is from the shoulder of a lebes such as those shown on Plate 31. Tongues are stamped on this last fragment both on the exterior of the rim and on the flat top inside the ridge which would have fitted a lid.<sup>133a</sup> A finer bowl is represented by the fragment on Plate 30, i,<sup>134</sup> while unusually precise workmanship is exhibited by a bowl

<sup>132</sup> Inv. Nos. C-40-510 and C-40-339. The latter was found in Well C, which indicates a date before 450 B. C.

<sup>133</sup> Inv. No. C-40-507. See also tongues on a basin at Delphi (*F. de Delphes*, V, p. 182, fig. 774).

<sup>133a</sup> Cf. a bronze vessel in Berlin, *Berlin Winckelmannsprogramm* 98, p. 24, fig. 17.

<sup>134</sup> Inv. No. CP-2039. Clay buff at core to light buff on exterior.

rim from Perachora (Pl. 30, l). Another bowl of the type made at the Tile Factory comes from Perachora (Pl. 30, k) and is unusual in having the tongues standing on their bases rather than suspended from the top of the rim, as in most of the other examples. The piece also shows one of the plastic handles which will be discussed below.

The two finest and most interesting pieces from Corinth decorated with impressed tongues are the lebetes shown on Plate 31, a-b. One of them is complete except for a chip out of the rim and small hole in the body (Pl. 31, a).<sup>135</sup> The only decoration is the series of tongues and darts impressed about the outside of the rim; the dart is on the stamp with the tongue and appears to the right of it in the impression. The ridge on the rim, like that shown in the profile in Figure 2 a, is decorated with light incisions across it, probably in imitation of a bead and reel pattern.<sup>136</sup> A somewhat more elaborately decorated lebes is known from fragments found in the Tile Factory (Pl. 31, b).<sup>137</sup> The shape, while similar to the one just described, differs in having a higher neck, a flatter and wider shoulder (Fig. 3); the reconstructed dimensions give a diameter of the lip of *ca.* 0.272 m., and of the body of *ca.* 0.39 m.; the height would be proportionately greater than the first example, perhaps *ca.* 0.32 m. The decoration on the rim again consists of stamped tongues, these rather wide and short and having a long, narrow tongue incised down the center. On this lebes the tongues are impressed on either side of the ridge, their base at the ridge. Staggered between the tongues on both the interior and exterior periphery of the rim are stamped palmettes, apparently originally with five leaves, though only three show on most of the impressions. This lebes, however, is further decorated with designs painted in a matt dark brown paint. These consist, first, of a stripe around the base of the neck, from which long reserved tongues extend over the shoulder and part way down the body. They have rounded ends, and the background between the ends of the tongues and a straight line just below them is filled with the same paint. Another stripe comes just below this and from it hang ivy leaves connected by arcaded tendrils, the arcading alternating with that of the tongue ends. About the outer edge of the shoulder runs a large garland of ivy, the leaves alternately on either side of the wavy tendril and

<sup>135</sup> Inv. No. C-39-370. H. 0.301 m., G. D. 0.362 m., D. lip 0.253 m. Clay buff, only very slight grits. The unglazed surface is well smoothed. The lebes was brought in from outside the excavations, having been found about five miles to the southwest of Corinth, near an ancient bridge. Brought in with it, and said to have been found with the lebes, were four Corinthian vases, Inv. Nos. C-39-366 to C-39-369, which belong to the mid-fifth century, a very likely date for the lebes as well.

<sup>136</sup> For an especially close parallel in bronze, see *Bul. Metr. Mus.*, XIX, 1924, p. 69, fig. 4, now our Plate 31, c.

<sup>137</sup> Inv. Nos. C-40-75 (rim) and C-40-79 (body). The clay is buff, slightly pinkish at the core, and well levigated. The fill in which the pieces were found dated generally from the first to the third quarter of the fifth century, but some fragments in it might date even as late as the fourth century.

fitted into the concavities. The interior of the neck is covered with a heavy matt red paint.

The two kinds of matt paint used on the fragmentary lebes found in the Tile Factory have been seen together on Corinthian pottery only once before, on an oinochoe on which a scene of a torch race was painted on the body in the brown paint and the heavy red color was used inside the neck.<sup>138</sup> Now on another painted fragment,

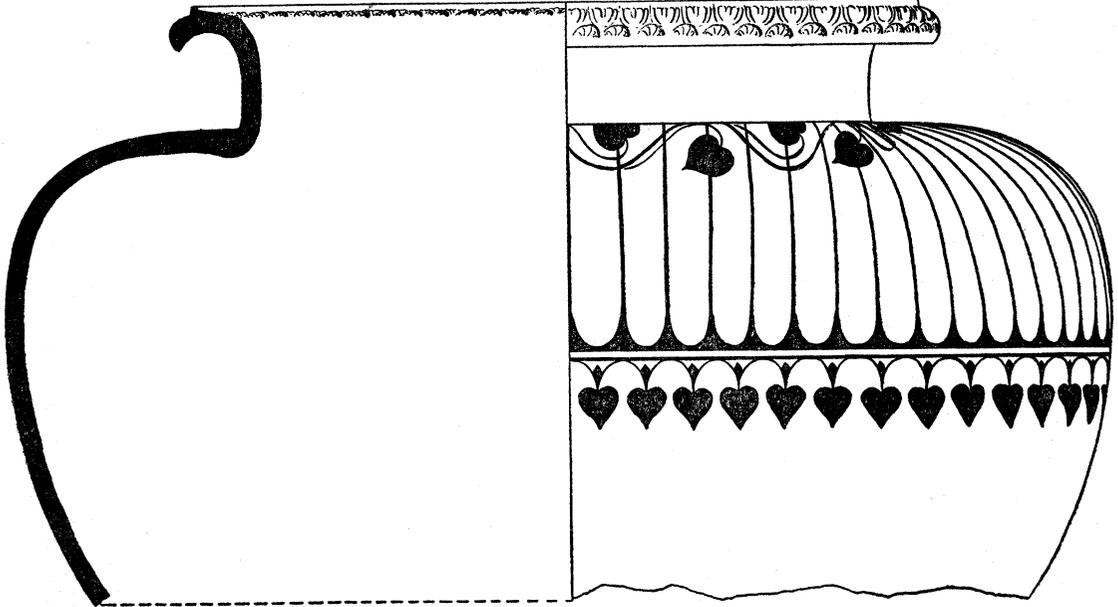


FIG. 3. Reconstruction of a lebes with stamped and painted decoration, from the Tile Factory at Corinth.

a pyxis lid also found in the Tile Factory, the same brown paint, which has a purplish cast when thick, is seen. The fourth instance of its use is on the neck of the vase from Perachora shown on Plate 32, a and discussed below together with the vases having plastic applications. Here the ivy garland is again used for decoration, as on the shoulder of the lebes. It is, perhaps, not premature to propose that the vase with the torch race and the fragments from Perachora were also made in the Tile Factory at Corinth, together with the lebes and pyxis lid which were found there, and that in general these matt paints were a technique of this workshop. They are better known on heavy fabrics from Corinth, such as the altars now appearing in increasing number as well as on heavy vases. There has recently been found a piece of the rim of one of the large basins on a stand which is also decorated with an ivy wreath in matt paint and this too would be a likely product of the Tile Factory. The likelihood is further

<sup>138</sup> *Hesperia*, VI, 1937, pp. 311-312, fig. 40. The fill in the well dates *ca.* 460-420 B. C. Miss Pease here cites two other small fragments in the same technique found at Corinth (*ibid.*, fig. 41).

increased by the finding at the factory of an eaves tile which has its exposed end decorated with the same kind of ivy garland done in a similar purplish brown paint.<sup>138a</sup> In fact, the decoration on many of the Corinthian architectural terracottas found in the Tile Factory is done with the same matt purplish brown and red paint used on the pottery. One begins to discern here a pattern which should prove useful in identifying the Corinthian products when found elsewhere.

With these two Corinthian lebetes we have entered the realm of clay imitations of metal vessels. Many good examples of bronze lebetes of the fifth century are known and the close similarity in shape (Pl. 31, c-d), in the plastic decoration of the rim, in the tongues and even the ivy garlands on the shoulder,<sup>139</sup> show the care taken to produce faithful imitations of bronze originals. There is the further possibility that the excellently finished terracotta vessels might have been gilded. This would have been possible in the case of the plain example from Corinth, but not the painted one.<sup>140</sup> Here, indeed, we seem to have products worthy of the fame of Therikles of Corinth.

One other method of relief decoration on Corinthian pottery still to be discussed is the use of plastic applications. Such decorations were possibly used even earlier than any of the stamped or rouletted designs described thus far, for the fragment of the neck of an amphora or hydria from Perachora with a plastic spiral just below the rim, shown on Plate 29, i, is believed by Dunbabin to be eighth-seventh century, the plastic spiral being comparable to those on votive cakes from the Geometric deposit there.<sup>141</sup> Other plastic spirals, as well as plastic snakes, occur on votive cakes of the late seventh century from Perachora.<sup>142</sup> These bands of clay, applied either as snakes or spirals, are the most primitive form of plastic ornament. Other, and later, forms are strongly suggestive of imitations of metal vases. This is true of the handles seen on the rims of several bowls of late sixth and fifth century date. The impression made in the side of the rim of the bowl shown on Plate 30, c has the form of a metallic handle attachment.<sup>143</sup> Such an attachment applied to the rim of a bowl, rather

<sup>138a</sup> Such painted designs on the ends of eaves tiles are rare, but another instance had long ago been noted among the terracottas from Mycenae (Van Buren, *Greek Fictile Revetments*, p. 49, pl. XXXI, figs. 113-115). Here the edge of the tiles is decorated with a frieze of kneeling satyrs holding kantharoi and ivy-crowned Silenoi; the lower projecting surface is then decorated with an ivy garland much in the manner of the example from Corinth. It is not impossible that these too were made at Corinth; only an examination of the fabric can determine this surely.

<sup>139</sup> For tongues and lip ornament cf. *Berlin Winkelmannsprogramm* 74, p. 21, fig. 19. The shoulder tongues appear on bronze lebetes in the British Museum (*J.H.S.*, XLVI, 1926, pp. 257-259, fig. 3, pl. XIV), dated to ca. 440 B. C., and in Athens (*J.H.S.*, LVI, 1936, p. 143, fig. 5) also of fifth century date.

<sup>140</sup> A fine black-glazed lebes, dated in the second half of the fifth century, is shown in Richter, *Shapes and Names*, fig. 71. Here, too, there is an ivy wreath about the shoulder. A garland on the light clay ground occurs on a vase, very similar in shape to ours, now in Paris. (DeRidder, *Catalogue des vases peints de la Bibliothèque Nationale*, Paris, 1901, p. 309, No. 417, pl. XVII).

<sup>141</sup> *Perachora*, I, pl. 16, 1, 4, 7-9.

<sup>142</sup> *Ibid.*, pl. 33, 16.

<sup>143</sup> For the metal prototypes see *Olympia*, IV, pl. L; and *A.H.*, II, pls. CXXI-CXXII. Such

than impressed into it, is seen on the fragment from Corinth on Plate 30, j.<sup>144</sup> There is a similar handle on a piece from another Corinthian well,<sup>145</sup> and another on the bowl from Perachora shown on Plate 30, k. Such plastic handles in the form of metallic attachments were probably formed in moulds like the terracotta one from Corinth which was the matrix for an imitation of a full metal handle, rather than just the attachment.<sup>146</sup>

The use of plastic figured ornament on Corinthian ware began in the Middle Protocorinthian period, but did not become popular until the first half of the sixth century; many examples of human heads, usually female and largely on pyxides, occur starting with the Early Corinthian period.<sup>147</sup> It is this tradition which has been cited as the inspiration for the heads decorating the rim of an early sixth century bowl from Halae.<sup>148</sup> That Corinthian potters still continued the practice later in the sixth century is indicated by the occurrence of a plastic gorgon's head on the handle plate of a large vessel found at Perachora (Pl. 32, a).<sup>149</sup> The style of the gorgon's head belongs late in the sixth century. The painted ornament, again in a "matt purplish brown and red" paint, consists of an ivy garland about the neck, the leaves brown and the stems red, alternating red and black (or brown) tongues on the lip moulding and a lotus and palmette chain on the top of the rim. Inside of the lip there is again a stripe of heavy red paint. The decoration of the moulding is very close to that of the mouldings on some Corinthian terracotta altars of the late sixth century,<sup>150</sup> on which the same reddish brown and purplish black paints were often used. It is likely that the large vase from which these fragments came should be dated, on the analogy of the altars, in the last quarter of the sixth century, which would make it the earliest example of the combination of plastic ornament and painted designs in matt brown and red paint of the kind seen in the later lebes from the Tile Factory.

This tradition of using plastic applied heads for ornament on Corinthian vases, traced thus far to the late sixth century, can be shown to have continued at least into the early fourth century, for such a head occurs at the base of the handle of an oinochoe (Pl. 32, c) of unquestionably Corinthian fabric, probably found close to that site.<sup>151</sup> Of special interest is not only the satyr's head at the base of the handle, but

handles are common on fragments of basins, many of them Corinthian, from Delphi (*F. de Delphes*, V, pp. 181-183, figs. 772, 777, 781-784).

<sup>144</sup> Inv. No. C-39-435. Reddish buff clay, quite gritty except for the fine light buff surface coating. The shape, again, is a wide open bowl with a heavy rim, flat on top and with vertical sides. The piece came from the well in the Museum West area, which is of early fifth century date.

<sup>145</sup> *Hesperia*, VI, 1937, pp. 286 f., No. 174, fig. 25; the fill dates ca. 460-420 B. C.

<sup>146</sup> *Corinth*, XII, pl. 135, No. 2853.

<sup>147</sup> Payne, *NC*, pls. 1, 23, 35, 47-48.

<sup>148</sup> *Hesperia*, IX, 1940, p. 408, No. 11, fig. 39.

<sup>149</sup> *Perachora*, I, pp. 106-108, fig. 7, pl. 35, 1-2.

<sup>150</sup> *Hesperia*, XVI, 1947, pl. LI; XIX, 1950, pl. 110.

<sup>151</sup> *Hesperia*, I, 1932, pp. 88-89, fig. 29.

the treatment of the handle itself, which has deep incisions in a herringbone pattern, increasing the similarity to metal vases,<sup>152</sup> which this is obviously imitating. Miss Shoe, who originally published the vase, saw no indication of a black slip on it, but I believe I can detect traces of a rather smeary covering of brown paint, perhaps a glaze, which would have covered the entire vase; such a brown glaze appears (see below) on several fourth century Corinthian vases with plastic applications. This brown covering would have heightened the illusion of a bronze vessel. The shape of the mouth, handle and upper body is close to that of an early fourth century bronze jug in the Metropolitan Museum.<sup>153</sup> The mask would also agree well with a date in the late fifth or early fourth century. Are these plastic applications, such as the gorgoneion on the Perachora piece and the satyr's head on the jug from Corinth, perhaps the first "embolia," the kind used on the early "therikleian" vases? They seem to have precedence over both the larger appliqués on the sides of vases and the medallions in the tondos of bowls, both of which were later used at Corinth, but apparently too late to be associated with the artist Therikles.

Among the finds from the Corinthian excavations there are no pre-Hellenistic vases with plastic applications on the sides, but some examples have been attributed to Corinth on the basis of provenience or fabric. Most important of these is the column krater in Berlin, said to have been found at Tenea.<sup>154</sup> The garland of lotus buds painted on the neck in a brown paint suggests that again we have the technique known from Corinth and strengthens the attribution of the vase to that city.<sup>155</sup> On the body is a series of applied reliefs depicting six of the Labors of Herakles. No trace of glaze was found on the body and it has been assumed that it was gilded, as already suggested for the plain lebes. While Furtwängler originally suggested a mid-fifth century date, Courby thought it belonged to the fourth century. In the more recent study of vases decorated with plastic applications, Züchner stated his view that such vases began to be made only in the mid-fourth century or later<sup>156</sup> and he included the column krater among the three usual shapes used for such decoration, without specifically mentioning this krater in Berlin.<sup>157</sup>

Among the material he was able to examine, Züchner recognized two Corinthian

<sup>152</sup> Cf. Sieveking, *Sammlung Loeb. Bronzen, Terrakotten, Vasen*, Munich, 1930, pl. 7, 2.

<sup>153</sup> Richter, *Greek, Etruscan and Roman Bronzes*, New York, 1915, p. 192, No. 505.

<sup>154</sup> Furtwängler, *Die Sammlung Sabouloff*, Berlin, 1883-87, pl. LXXIV, 3; *Beschr. d. Vasensamml. Berlin*, No. 2882; Courby, *Vases grecs à reliefs*, pp. 195-197, fig. 31.

<sup>155</sup> It has been impossible thus far to have the vase re-examined or to get photographs, for it is still in storage. Only such a re-examination will be decisive in determining the place of origin.

<sup>156</sup> *Jahrb.*, LXV-LXVI, 1950-51, p. 183.

<sup>157</sup> While the column krater is the one form of krater which lost popularity in the last quarter of the fifth century and was rare in the fourth century as a medium of red-figured vase painting (Richter, *Shapes and Names*, p. 7), it, like the amphoras decorated with plastic applications, seems to have a separate development in the fourth century with the new form of plastic decoration (Züchner, *op. cit.*, p. 184).

vases, a fragment in Munich<sup>158</sup> and a hydria in Würzburg (Pls. 32, b; 33, a),<sup>159</sup> both of Corinthian clay covered with a brown glaze.<sup>160</sup> The Würzburg vase was dated by Langlotz in the third century B. C., but Züchner now suggests instead a date in the second half of the fourth century.<sup>161</sup> It is interesting to find that among its plastic decorations is a dionysiac group (Pl. 33, a) which was widely used on early Megarian bowls of the late fourth and early third century,<sup>162</sup> and which also occurs on small terracotta altars (like that from Würzburg shown on Pl. 33, b), one of which comes from Corinth itself.<sup>163</sup> The mask at the base of the vertical handle of the hydria, while similar to that on the oinochoe from Corinth (Pl. 32, c), is clearly of later style. Also Corinthian is a lump of clay with a trial impression of a stamp used to decorate such vases; the piece, in a private collection, was found at Corinth and Züchner compares the fabric with that of fourth century Corinthian terracottas.<sup>164</sup> It shows a figure of Hera (Pl. 33, c; which is an impression from the mould), the style of which is late fifth century. The identical figure was used on Corinthian relief vases, of clay and glaze similar to that of the vases in Munich and Würzburg; one of these is in Bonn (Pl. 33, e) and the other at Corinth itself (Pl. 33, d).<sup>165</sup> In addition to the Hera relief, the Corinth vase shows a figure of Athena; both vases have acanthus leaves on the lower part of the bowl and on both there are satyr masks in high relief which serve as feet. A large bowl with similar feet was found in one of the South Stoa wells at Corinth;<sup>166</sup> both the wells at Corinth in which this type of vase was found were filled in the early second century B. C. and the vases were probably made not earlier than the third century. Thus the tradition of decorating vases with plastic heads is seen to continue into the Hellenistic period and the practice of decorating vases with applied figures or scenes in relief, begun in the fourth century, became the stock-in-trade of Hellenistic potters. Corinth clearly seems to have been one of the centers of the production of such relief vases in the fourth century, as it certainly was in Hellenistic times.

Thus, to the well known classes of Corinthian painted pottery there must now be added a new class of vases decorated with geometric, floral or representational

<sup>158</sup> *Griechische Klappspiegel*, Berlin, 1942, pp. 188 f., fig. 92.

<sup>159</sup> Langlotz, *Griechische Vasen*, Munich, 1932, p. 162, No. 908, pl. 221.

<sup>160</sup> *Jahrb.*, LXV-LXVI, 1950-51, p. 185, note 2.

<sup>161</sup> In a letter of December 30, 1952. Prof. Züchner has most generously sent a whole set of new photographs of this vase and obtained permission to publish those used here. He has also furnished the photographs for Plate 33, b, c and e, and the permission to publish them.

<sup>162</sup> Schwabacher (*A.J.A.*, XLV, 1941, pp. 185-188) gives the fullest list of occurrences, mentioning that there are forty-five on Megarian bowls of this early date, and discusses the motive most completely.

<sup>163</sup> Davidson, *Corinth*, XII, p. 131, No. 889, pl. 65.

<sup>164</sup> *Jahrb.*, LXV-LXVI, 1950-51, p. 193.

<sup>165</sup> *Ibid.*, p. 194, figs. 30-33; *Hesperia*, XVIII, 1949, p. 149, pl. 14, 4.

<sup>166</sup> *Ibid.*, p. 149.

motives, either by impressing them into the clay with stamps, roulettes or cylindrical matrices or by applying plastic reliefs to the surface of the vase. To summarize, then, the various impressed designs began as early as the mid-seventh century, if not earlier, with representational designs in the Protocorinthian figure style among the earliest examples. While some stamped plaques may have been made at Corinth as early as the late eighth century, the earliest matrices seem to be Cretan and possibly they indicate the source of the inspiration for the new technique at Corinth. Certainly the first vases so decorated at Corinth, as well as the contemporary plaques of the mid-seventh century and later, are in distinctly Corinthian style, and they remain so for the life of the figured style. While the material is still scant, there is a coincidence in the disappearance in the mid-sixth century of the figured style both in painting and relief and in the ascendance of floral and geometric patterns for the rest of the century. But the Corinthian figured relief style had already made a strong and lasting impression in Sicily, where the popular basins on stands, probably braziers, decorated with continuous repeating relief patterns about the rim, derive from Corinthian prototypes. Either directly, or possibly indirectly through Magna Graecia, the Etruscan stamped or rolled relief designs are also under Corinthian influence. The use of applied plastic heads was part of the Corinthian decorative scheme from the Protocorinthian period on, and after the disappearance of the painted style it continued in the late sixth and fifth centuries, later to become part of the Hellenistic tradition. Already in the fifth century, if not earlier, this was part of the conscious imitation of metal vases by the Corinthian potters, a trend handsomely illustrated by the two lebetes and the oinochoe from Corinth published here, which are identified with the famous products of Therikles. When, in the fourth century, the vase makers went farther in this imitation and applied clay reliefs of figures or groups to the sides of vases, they supplied the second important element for the establishment of the Hellenistic style.

SAUL S. WEINBERG

UNIVERSITY OF MISSOURI



a



b



d

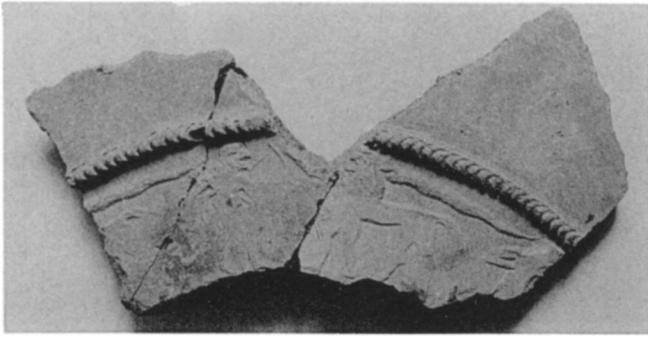


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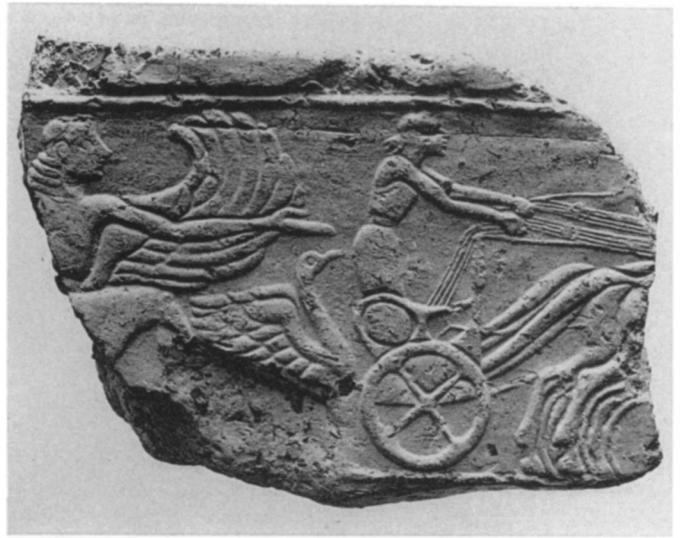


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SAUL S. WEINBERG: CORINTHIAN RELIEF WARE: PRE-HELLENISTIC PERIOD



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f



b



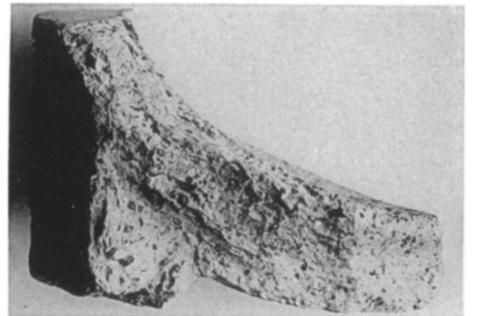
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SAUL S. WEINBERG: CORINTHIAN RELIEF WARE: PREHELLENISTIC PERIOD



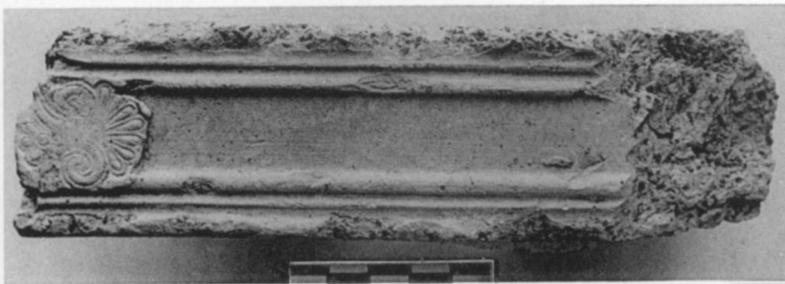
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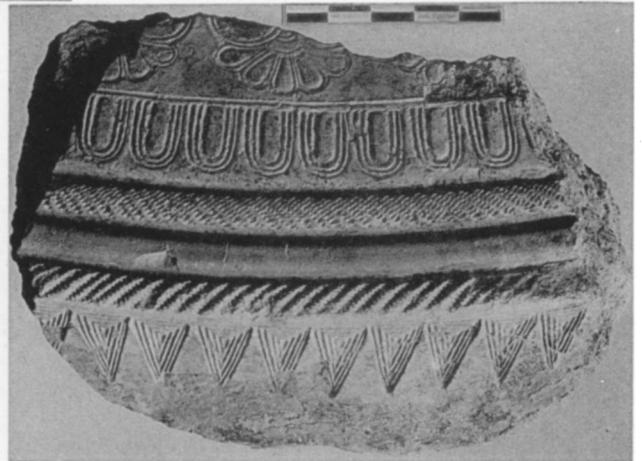
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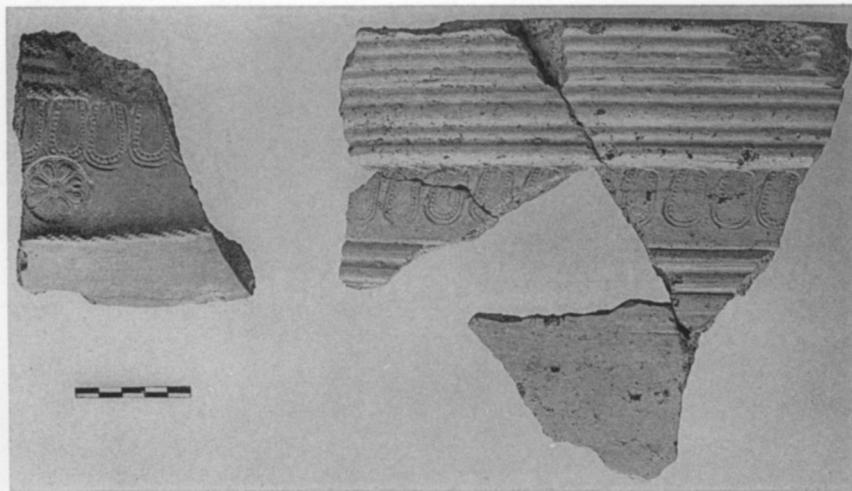
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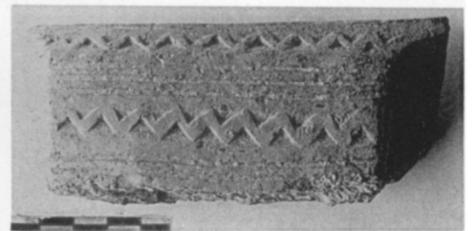


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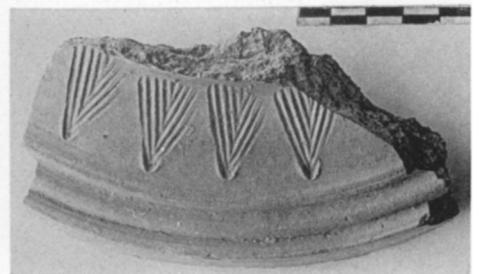


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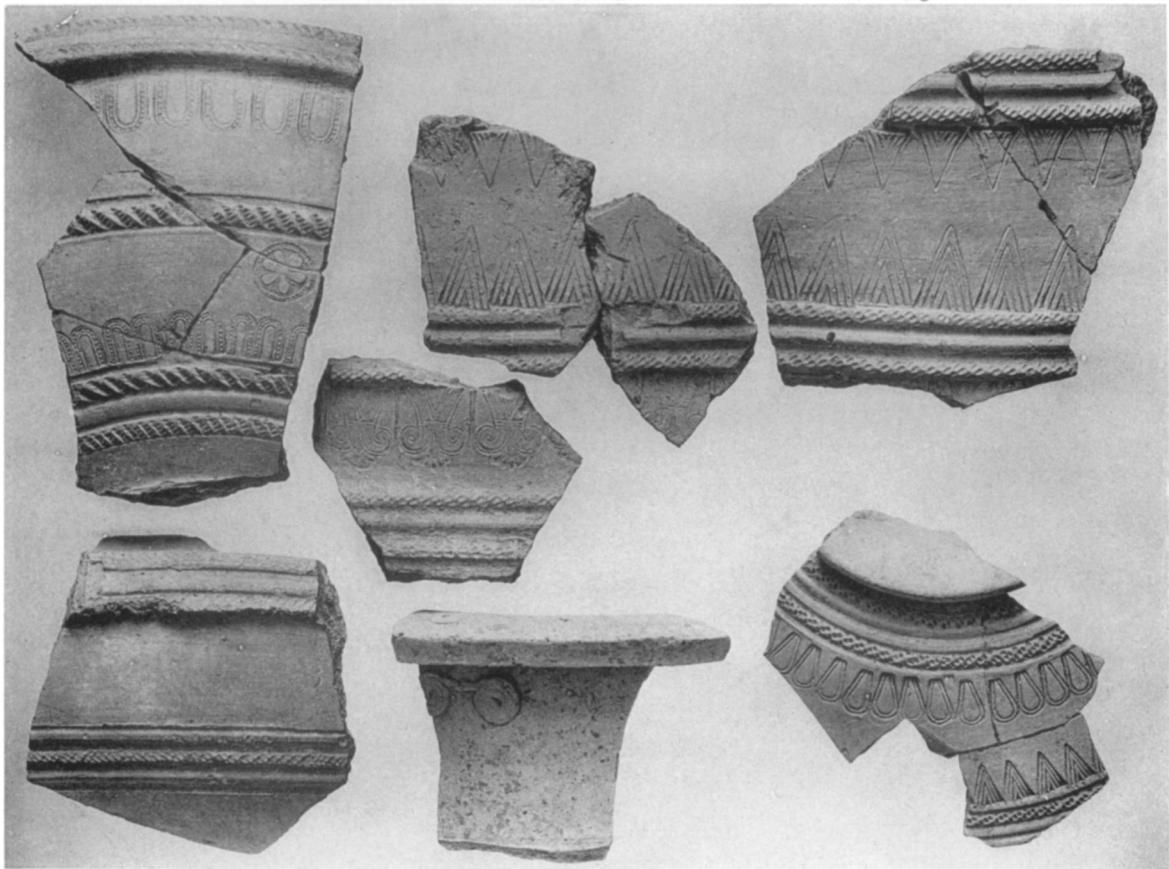
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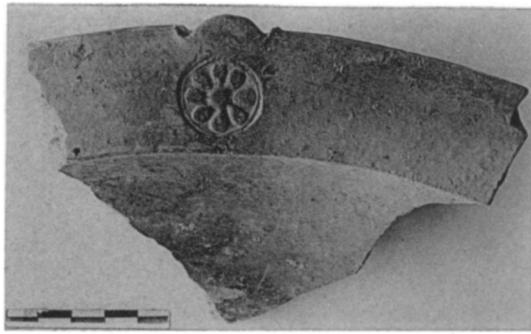
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SAUL S. WEINBERG: CORINTHIAN RELIEF WARE: PRE-HELLENISTIC PERIOD



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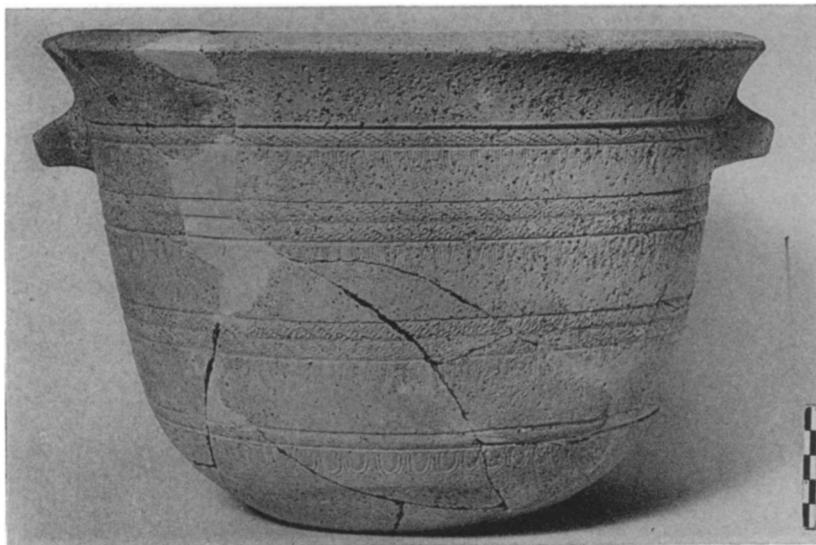
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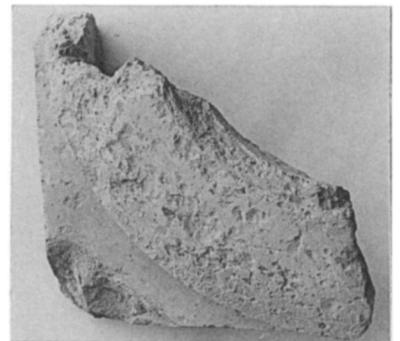
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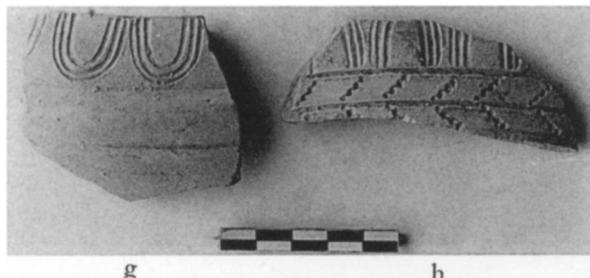
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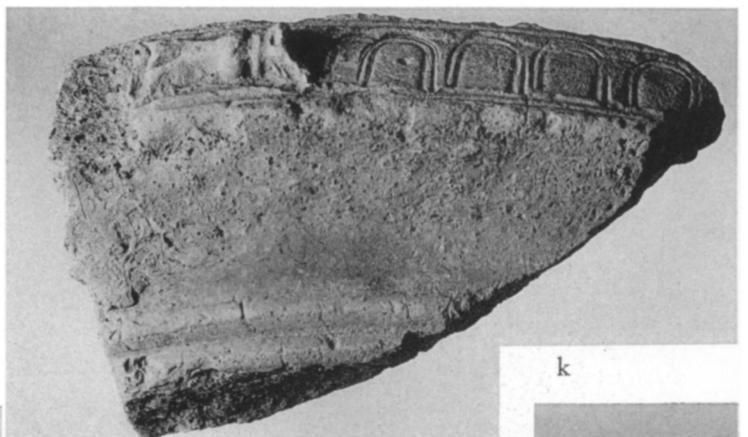


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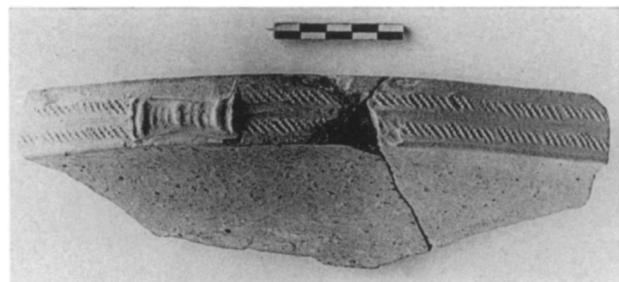
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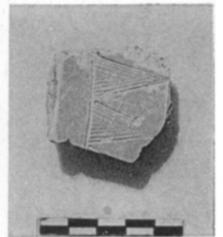
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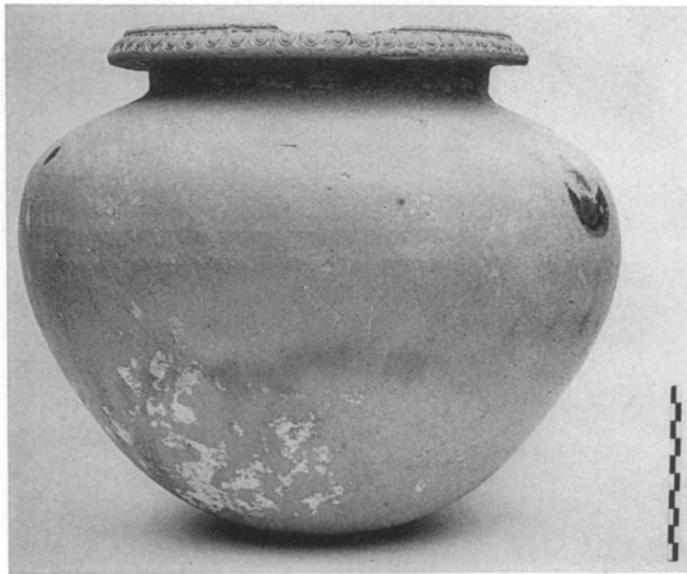
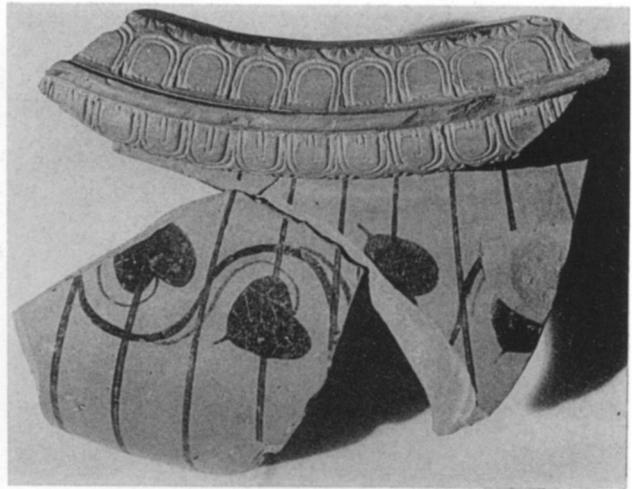
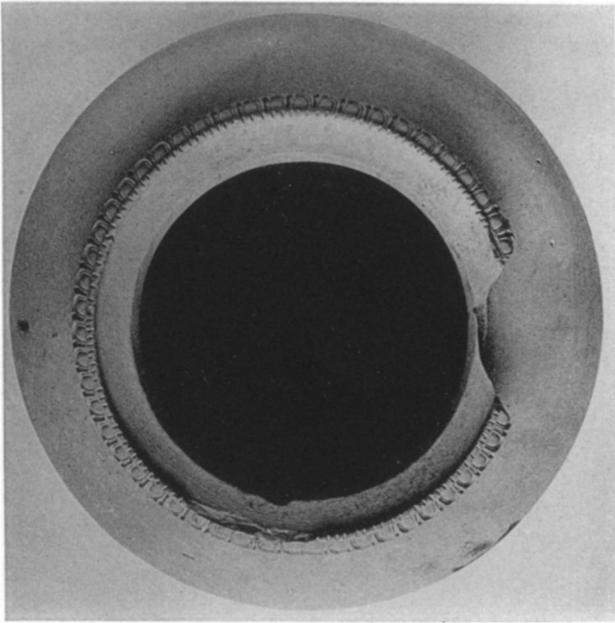
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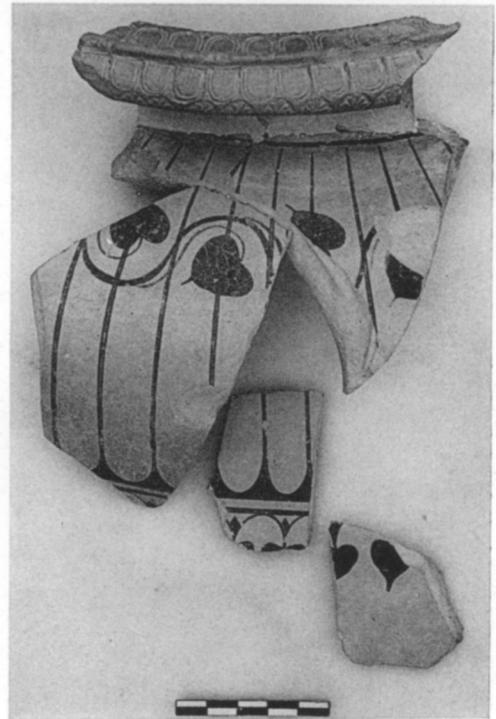
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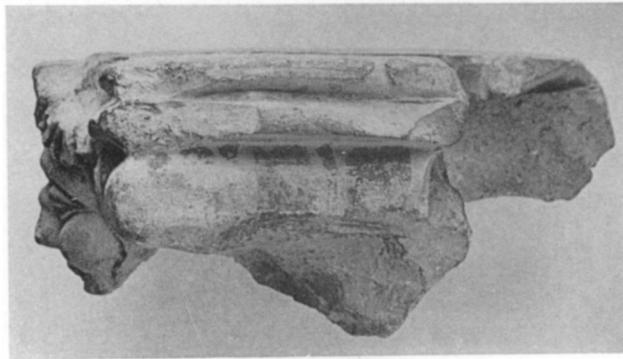
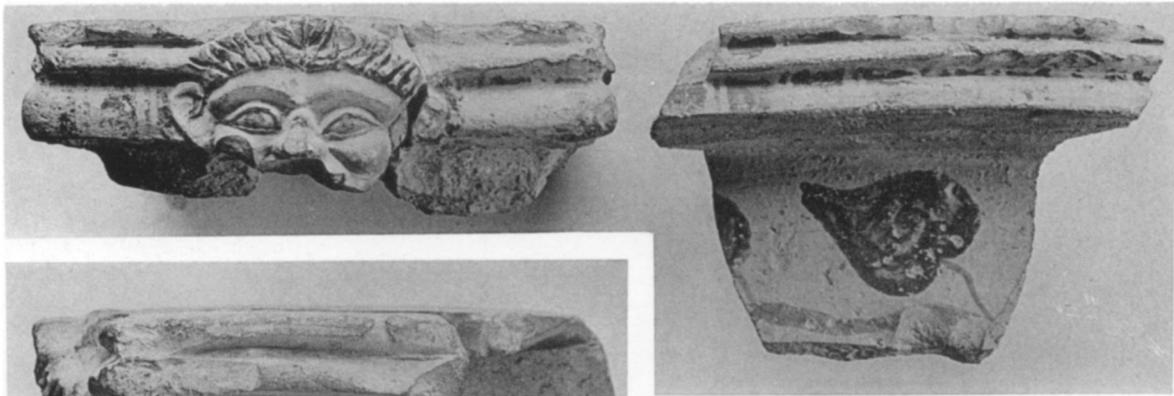


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c and d Courtesy of Metropolitan Museum of Art

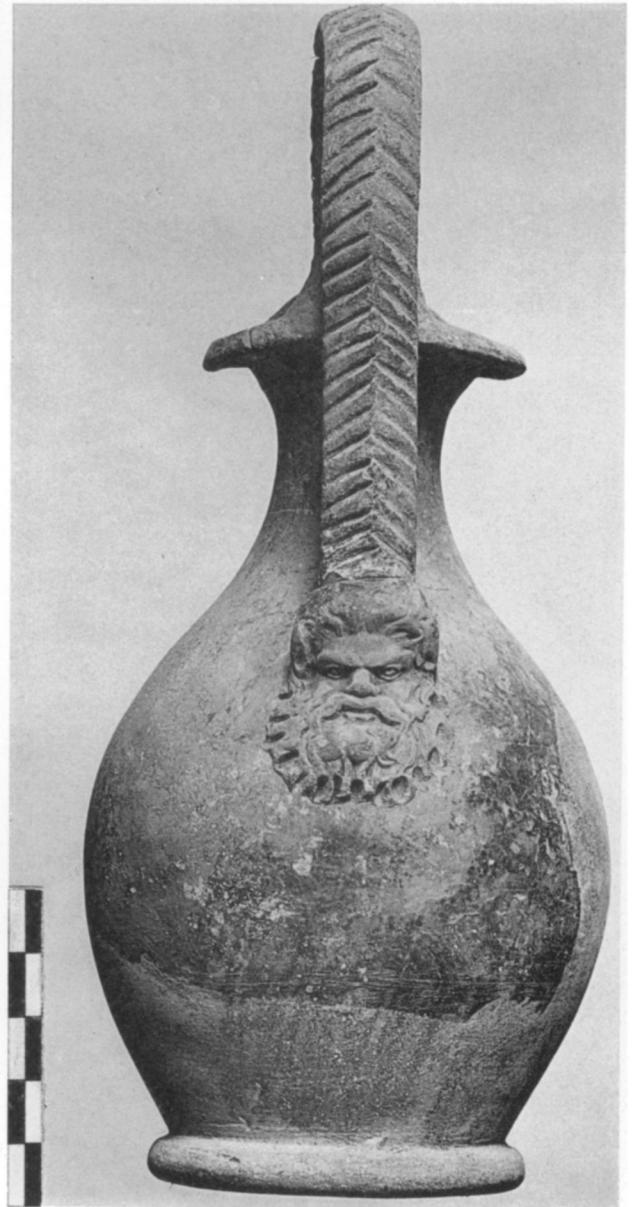
SAUL S. WEINBERG: CORINTHIAN RELIEF WARE: PRE-HELLENISTIC PERIOD



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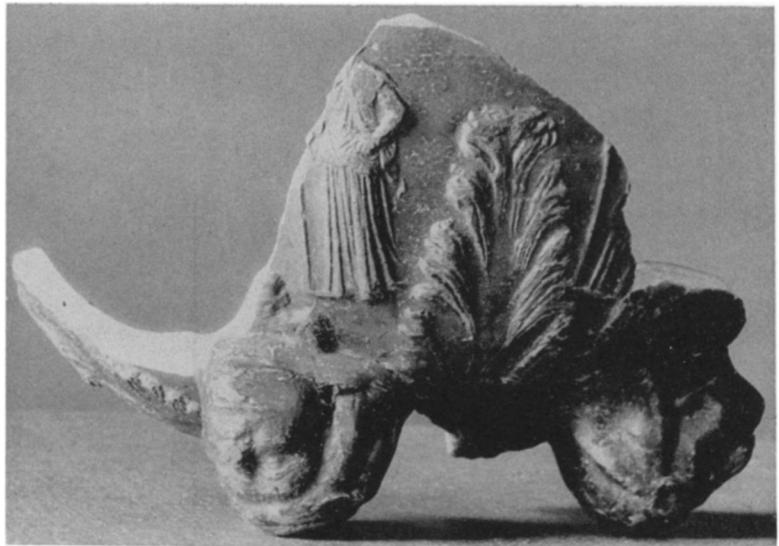
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