

Metal Vessels found on Shapwick Heath, Somerset

BY H. ST. GEORGE GRAY, F.S.A.

SHAPWICK HEATH, Somerset, is well on the map from an archæological point-of-view. In May 1936 a hoard of 120 Roman *siliquæ* (small silver coins of the late Roman empire) was found in association with an earthenware pot and three vessels of pewter.¹ At a distance of only 6 ft. (s.e.) another hoard of 125 *siliquæ* was found under similar circumstances in June 1937²—the coins contained in a pottery vessel, the whole deposited in a pewter jug. In June of the following year, at a distance of 10 ft. from Hoard ii, a third group of Roman coins was discovered in a damaged pewter canister (not yet described); it contained some 1,100 bronze coins, mostly of the reign of Valentinian I. Mr. J. W. E. Pearce, F.S.A., estimates that the hoard was buried c. A.D. 388.³ All these hoards were found at a depth of about 2 ft. below the surface.

At a distance of 30 ft. E. of the find-spot of Hoard iii, William Russell, of Meare, a peat digger and merchant, in the progress of his work on 19 July 1938, removed from the peat, at a depth of 3 ft.,⁴ the bronze bowl described below (Plate XXII, 2).⁵ On 16 February 1939, he had the further good fortune to discover at 2 ft. W. of the bronze bowl and at a

¹ *Proc. Som. Arch. Soc.*, lxxxii, 163–170.

² *Op. cit.*, lxxxiii, 148–152.

³ *Numis. Chron.*, 5th ser., xix, 138–142.

⁴ This measurement was obtained on the spot by Dr. A. Bulleid, F.S.A.

⁵ Below the bowl, at a depth of 5 ft., a hammerstone pebble was found; it showed signs of having been worked at both ends.

depth of 3.85 ft.⁶ the tankard and pedestalled bowl figured in Plates XX, XXII (fig. 1), and XXIII; they were 4 in. apart.⁷ All these specimens are now preserved in the Somerset County Museum at Taunton Castle.

Professor F. J. Haverfield, in his prefatory pages to 'Romano-British Somerset' in the *Victoria County History*, remarked that 'elsewhere, and not least in Somerset, we meet single specimens, usually of metal work, which are Late-Celtic in style but occur with remains of the Roman period; but these are sporadic, and their definite association with Roman objects is not always well attested'.

Here is a case in point, in which a tankard has been found in association with a pewter bowl apparently of the late Roman period. The tankard was made presumably at a date later than the latest phase of the Early Iron Age and when Celtic art continued to survive in the south and west but was beginning to show clear signs of degeneration.^{7a}

The Shapwick tankard, therefore, is probably an example of a survival of La Tène tradition into the Roman period. The handle has lost the quality of La Tène art at its highest, and the design has become more formal, due to Romanizing influences^{7b}; and in that fact its great interest centres.

⁶ It is difficult to determine what was the exact surface level of the peat at Shapwick in late Roman times; but it must be borne in mind that the coin hoards were found at a depth of 2 ft. As the vessels here described were discovered at a depth of from 3 to 3.8 ft., it is obvious that at the time of their deposit a fairly deep hole must have been made to receive them.

⁷ The find-spot is about 7 furlongs S.E. of Shapwick railway-station.

^{7a} It must be borne in mind that although the tankard was probably made many years before the pewter bowl (with which it was found associated), there is no reason why the former vessel should not have been carefully cared for and handed down in a family for generations before it found its resting-place at the bottom of the peat of Shapwick Heath.

^{7b} The same might be said of the bronze tankard-handle found at Greenhill, Weymouth (British Museum); also of the decoration on some of the objects found in the Seven Sisters hoard (p. 195), which is of characteristic Roman type.

It might be noted here that the hoard of metal found at Santon Downham has been regarded as having been deposited probably a few years after the arrival of Claudius—about the middle of the first century A.D. (*Proc. Camb. Antiq. Soc.*, xiii, 146-163).



TANKARD, SHAPWICK HEATH, SOM.

From a Photograph by Mr. H. St. George Gray, F.S.A.

I. THE TANKARD (Plates XX and XXI, fig. 1)

The Shapwick tankard is constructed of wooden staves, while the outer surface and the lip are covered with a bronze casing which is quite plain. The decorative elements are supplied entirely by the bronze handle and the lathe-turned concentric circles incised on the flat wooden base. This specimen, therefore, is of the same type as the well-known tankard, of craftsmanship of La Tène survival, which was found in a turbarry at Trawsfynydd, 'not far from the Roman remains at Tomen-y-Mur', in Merionethshire, but the handle of the latter, one of the most charming examples of the art it represents,⁸ is much superior to the comparatively plain although finely modelled handle attached to the Shapwick specimen. They vary but slightly in height, for the Somerset example is 137 mm. ($5\frac{7}{16}$ in.), whereas the Trawsfynydd tankard is 140 mm. ($5\frac{9}{16}$ in.). In the latter the concavity of the sides is much more pronounced than in the later discovery, in which the incurving is very slight.

The Shapwick specimen is 155 mm. ($6\frac{1}{8}$ in.) in diameter (including the bronze casing) at the base⁹; at the rim it is 151

⁸ Probably the last illustration of this tankard to be published appeared in *Guide, Prehistory of Wales* (Nat. Mus. of Wales), by W. F. Grimes, F.S.A., 1939, Plate VIII, and pp. 118-9. It has also been figured and described by E. Thurlow Leeds, F.S.A., in *Celtic Ornament in the British Isles*, 1933, pp. 53-54, and fig. 20a. Sir Arthur Evans gave a brief description of the tankard in his Aylesford paper in *Archæologia*, lii, 360. Yet another reference is 'The Trawsfynydd Tankard', by J. Romilly Allen, *Arch. Cambr.*, 5th ser., xiii (1896), pp. 212-219, with three plates, including photograph of the wooden base, similar to our illustration in Plate XXI. Attention also might be called to the illustration and descriptive matter in *Trans. Hist. Soc. of Lancs. and Cheshire*, 3rd ser., vii (1878-9), 116-7 and Plate XII, 4. Again the handle is illustrated in *Manuel d'Archéologie Préhistorique Celtique et Gallo-Romaine*, by J. Déchelette, ii, pt. 3 (1914), p. 1526.

The tankard is also figured on a large scale in *Prehistoric and Roman Wales*, 1925, p. 208; and it is thus described by Dr. R. E. M. Wheeler, F.S.A.: This handle 'has been compared with the flamboyant tracery of late medieval architecture, but with all its vigour and freshness it shows a restraint and even a severity which such a comparison is liable to obscure. The flowing eccentric curves of which the design is composed are encompassed by a strong and restful outline, and the design ranks amongst the highest achievements of one of the most brilliant phases in the history of purely decorative art'.

⁹ The maximum diameter of the Trawsfynydd tankard at the base is 185 mm. ($7\frac{5}{16}$ in.). This tankard is exhibited in the Mayer Collection at Liverpool.

mm. (6 in.). Its circumference at the top is approximately 483 mm. (19 in.), at the bottom 486 mm. (19½ in.).¹⁰ The casing reaches the bottom of the wooden base of the tankard, but is not turned under. At the rim there is a thin binding or bordering of bronze which extends over the outer surface to a depth of barely 5 mm., and over the inner surface to a depth of 16 mm., where it is secured to the much bevelled wooden sides by a few small rivets, some 76 mm. (3 in.) apart.

The wooden sides of the tankard are apparently made up of thirteen staves of varying width (the maximum width is about 51 mm.). The sides are 12 mm. (½ in.) in thickness at the bottom, and judging from the sharp angle of the bronze binding at the mouth of the vessel, the staves must taper to a thickness of little more than 1 mm.—most of the tapering being in the upper 38 mm. (1½ in.).

The casing and binding are damaged in only one place to any appreciable extent: here there is a vertical cut extending downwards 44 mm. (1¾ in.), but this incision does not penetrate the wooden core of the tankard.¹¹ The casing appears to be in one piece; the junction is no doubt secured by the handle-plate.

The bronze plate, which is in one piece with the handle, occupies the whole height of the tankard except in the position of the rim-binding, but here there is attached to the aforesaid plate a tongue of thin bronze (maximum width 21 mm.—⅞ in.) which is bent over the rim and the inner band of casing to a depth of 35 mm. (1½ in.) below the level of the rim.

The handle-plate, which has a convex surface, is secured to the tankard by means of two circular boss-rivets,¹² one above and one below the handle proper. The heads stand out prominently and are 8 mm. (⅝ in.) in diameter, but the points of the rivets do not show on the inner side of the vessel. The handle-plate has concave sides, diminishing from 48 mm. (1¾

¹⁰ Owing to slight defects it was difficult to measure the top.

¹¹ There is a slight repair close to the upper part of the handle-plate; this is seen in the illustration (Plate xx). In the same view a few oblique indentations are seen on the bronze casing.

¹² One is reminded of the 'boss' decoration alluded to by E. T. Leeds in *Celtic Ornament in the British Isles*, 54.

in.) in width at the top and bottom to 16 mm. ($\frac{5}{8}$ in.) in the middle. Along the top are two transverse incised lines surmounted by a narrow band of oblique hatching (as seen in Plate XX); at the bottom there are two incised lines only.

The handle proper occupies a vertical height of 73 mm. (about 3 in.). The manner of attachment to the plate is not quite clear, but there appear to be two little tongues (one at each end) which with the 'supports' of the handle may have been soldered or brazed to the plate. The handle is lozenge-shaped with a raised 'lip' device extending its length; the width of the lozenge, including two rounded protuberances, is 31.5 mm. ($1\frac{1}{4}$ in.). This handle is therefore quite different from the typical tankard handles of the period, most of which are of openwork or perforated designs, notably those found in the well-known hoard at Seven Sisters in the Vale of Neath, Glamorgan, some 9 m. N.W. of Ogmore Down (Nat. Museum of Wales, Cardiff).¹³ A plain tankard-handle of similar type to those from Seven Sisters seems to have been found in association with Roman pottery in hut-circles at Porth Dafarch in Holyhead Island,¹⁴ but the most elaborate example of its kind is the handle of the famous tankard from Trawsfynydd.¹⁵

The bottom of the Shapwick vessel is composed entirely of wood, in one piece, and is a fine example of the turner's art.¹⁶

¹³ *Guide, Prehistory of Wales*, National Museum, by W. F. Grimes, 1939, 118, fig. 40, nos. 6-9. Also figured and described in *Arch. Cambr.*, 6th ser., vol. v, pp. 136, 139, 140.

Three of these handles are better figured ($\frac{3}{4}$ linear) in *Prehistoric and Roman Wales*, by Dr. R. E. M. Wheeler, 1925, p. 207, fig. 84.

¹⁴ *Arch. Cambr.*, 4th ser., vol. ix, plate, p. 35. This is in the form of an arch of conjoined rings.

¹⁵ No attempt is being made here to compile a list of tankard-handles of this period, but a note might be made of some Dorset specimens, notably two which were found at Hod Hill (*B.M. Guide, Iron Age*, 1925, p. 134; *Archæologia*, lxi, 22, also lxix, 22-24, where other handles are mentioned), and another from Stoke Abbot—to be seen in the little museum at Bridport.

The specimen found at Castor, Northants, is figured in *The Durobrivæ of Antoninus*, by E. T. Artis (1828), Plate xxxvi, fig. 10.

¹⁶ The wood is remarkably well preserved. It was recovered in a much saturated condition. It has been dried very slowly, extending over several months, and has been properly 'fed' by Mrs. St. George Gray. We have not been able to determine the wood, and we hesitate to cut any portion of it for close examination.

The internal surface is plain and slightly convex ; the internal depth of the tankard in the middle is $4\frac{1}{8}$ in., at the margin $4\frac{7}{8}$ in. The maximum external height has already been given as $5\frac{7}{8}$ in., and as the bottom is recessed to the extent of $\frac{5}{16}$ in., the depth to the *flat* bottom from the rim is $5\frac{1}{8}$ in. This proves that the turned bottom is $\frac{1}{4}$ in. thick at the margin, increasing to $\frac{7}{16}$ in. in the middle.

The staves of the tankard are in all probability grooved to receive the bottom ; however the exposed turned surface is just 5 in. in diameter.¹⁷ The central hole is clearly seen and the concentric arrangement is best studied by reference to Plate XXI, fig. 1. The three series of narrow dividing bands are sharp and in comparatively high relief ; the intervening spaces, or zones, have decidedly convex surfaces which renders the design very effective.

The writer does not know of any other tankard of the period having an ornamented bottom, except the Trawsfynydd specimen, which has a recessed wooden base,¹⁸ flat but not lathe-turned. The diameter of the exposed outer surface of the vessel is 6 in.¹⁹

On reference to Plate XXI, fig. 2, it will be seen that the concentric rings are irregular ; they are simply incised on the flat surface and the intervening zones are not convex.²⁰ The centre of the base is covered with a small bronze plate fastened by a bronze rivet with a spherical head.

In this connection it should be recalled that many of the pottery vessels found in the Somerset Lake Villages are ornamented on the bottom, generally with bisecting arcs and other

¹⁷ The diameter of the base inside the cup is precisely the same. In the case of the Trawsfynydd tankard it is said that the bottom of the staves were left 'large and broad, forming a ledge upon which rests the bottom of the cup'. (See also *Arch. Cambr.*, 5th ser., xiii, 214).

¹⁸ The wood of the tankard is said to be the indigenous Durmast Oak, cut on the straight from a plank.

¹⁹ The writer is grateful for this and other information to Miss E. Tankard, Keeper of Archaeology in the Free Public Museums, Liverpool.

My thanks are also due to her and to the Director of the Liverpool Museums for providing the photograph (Plate XXI, 2), with permission to use it for this paper.

²⁰ Described thus by J. Romilly Allen in *Arch. Cambr.*, 5th ser., xiii, 214 : 'The bottom is ornamented with two pairs of concentric circles incised.'

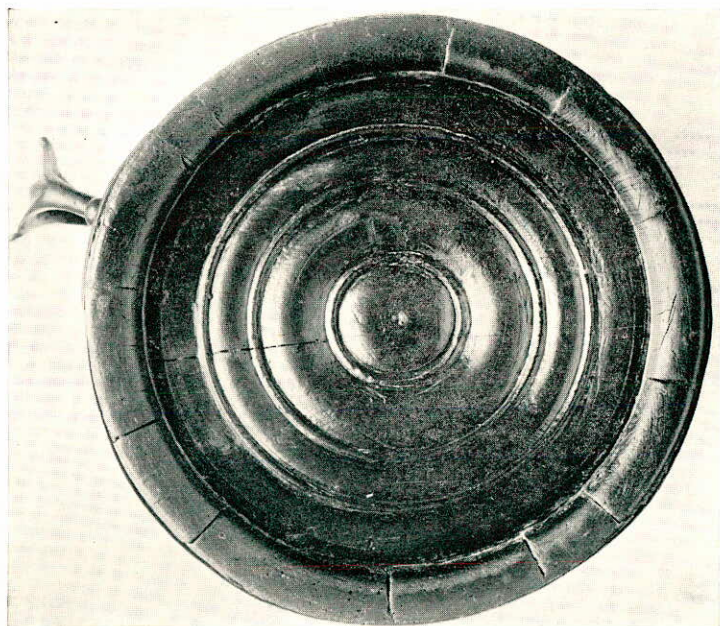


Fig. 1. Shapwick Heath, Som.

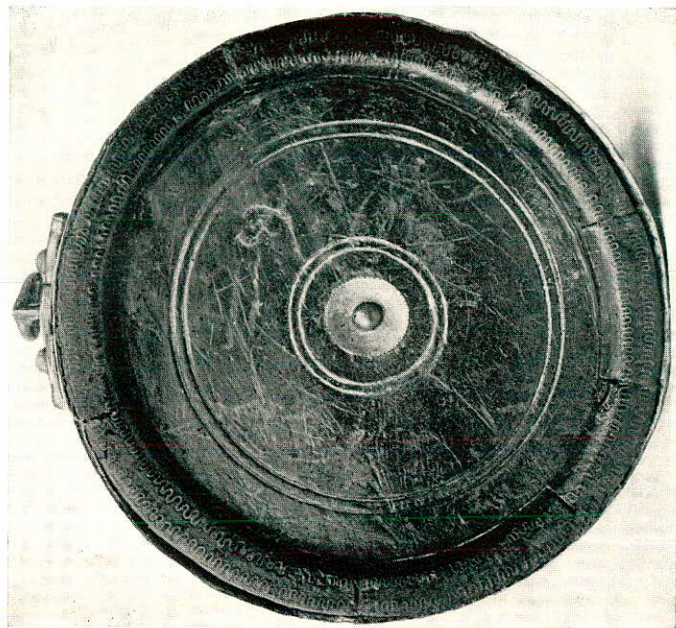


Fig. 2. Trawsfynydd, Merionethshire

WOODEN BASES OF TANKARDS

designs, some of which were probably described by means of compasses.²¹

For comparative purposes allusion must here be made to the two-handled tankard found in a fragmentary condition at Aylesford, Kent,—regarded as dating from the first century B.C. It was about 8 in. in diameter at the top, and was built up of staves of wood about 1.1 in. in breadth. The wood was ‘covered with two or more thin bronze plates’. Each of the pair of handles possessed four terminal stud-sockets. Sir Arthur Evans figured the vessel, half size, in its restored condition, in *Archaeologia*, lii, 358, and one of the handles is shown full size (exhibited in British Museum).

A near parallel to the Aylesford tankard is illustrated on the following page (359). It is that discovered at Elveden in Suffolk. This was built up of wooden staves covered with thin bronze plates. The middle bronze band is ornamented with *repoussé* medallions containing triquetral designs in the most characteristic Late Celtic style. The handles are plain. The tankard is 6 in. in height, $6\frac{3}{4}$ in. in diameter.²²

Of similar workmanship is the bronze-plated pail or *situla*, also from Aylesford (British Museum). Like the tankard it consists of a framework of wooden staves, bound by three metal bands with interspaces of plain wood left between. The total height of this bucket is about 10 in. (diameter 10.6 in.). The iron handle is cased in bronze, and the upper bronze band is adorned with ‘*repoussé* work reliefs of fantastic animals and decorative scrolls’.²³

Allusion must also be made to the tankard found at Welwyn, Herts., in the second vault, in November 1906. The restored wooden vessel showing the ornate bronze handle has been figured.²⁴ It was made up of wooden staves (the widest 2 in. across), but owing to its condition its height could not be de-

²¹ *Glastonbury Lake Village*, ii, 513, fig. 166, and Plates LXXIV, LXXVIII, LXXIX, LXXXI and LXXXVI.

²² Full references will be found in *Arch. Journ.*, xevi, 107; but the most accessible illustration of the Elveden tankard, for Somerset archaeologists, is to be seen in *V.C.H. Som.*, i, 210.

²³ *Archæologia*, lii, 360 ff.; see also *B.M. Guide, Iron Age*, 1925, pp. 125, 128; E. T. Leeds, *Celtic Ornament*, 39, fig. 16.

²⁴ *Archæologia*, lxiii, fig. 21, p. 21.

terminated. 'It is evident that the Welwyn handle was attached by pairs of slender bronze pins to the tankard, not soldered to the bronze plating.'

Nor must the tankard found in the Thames at Kew (Layton Coll., Brentford Public Library) be forgotten. The wooden staves appear to have been clamped together by means of little diamond-shaped pieces of hard wood let into their sides. The wood is covered by three horizontal bronze bands, each 2 in. in width. The height of the vessel is 6 in., diameter at mouth $6\frac{3}{4}$ in., increasing to 7 in. at the base. 'The bottom, which fits into notches cut in the staves, rises in the middle within $5\frac{1}{2}$ in. of the rim.' The handle of bronze consists of two loops or eyes joined by an intervening band. It has been figured and described.²⁵

II. BOWL OF PEWTER (Plate XXII, fig. 1; and Plate XXIII)

With the exception of the discovery of Roman pewter at Appleshaw, Hants, in 1897,²⁶ hoards of pewter of this period have rarely been met with. The Appleshaw dinner-service is believed to have been buried about A.D. 350 (or a little later) when the house was abandoned. We are told by Messrs. R. G. Collingwood and J. N. L. Myres that the tin and pewter industry grew up in the third century, replacing the importation of foreign table-silver. These pieces played 'a conspicuous part in domestic life', and 'this state of things lasted down to the end of the Roman occupation to judge from the pewter ingots found in the Thames at London'. In style and taste they regard this pewter as entirely Roman, with nothing Celtic about it.²⁷

Jugs of pewter have turned up rather frequently, and the present writer listed most of them when describing a jug of this metal found with Hoard ii on Shapwick Heath in 1937.²⁸

²⁵ *Archæologia*, lxi, fig. 23, p. 23.

²⁶ *Op. cit.*, lvi, 7-12.

²⁷ *Roman Britain and the English Settlements*, 1936, pp. 227, 231, 235.

²⁸ *Proc. Som. Arch. Soc.*, lxxxiii, 151-2. Since then the writer has noted another jug of pewter, much crumpled up, having at the base of the handle a triangular terminal, which was found in a submerged forest at Goodrington, Torquay (Torquay Museum).

A pewter jug and a plate were found at Caerwent, Mon., in a well in House vii, n. This jug is illustrated in 'The Roman City of Venta Silurum', by F. King and J. Cropper, 1909. It is not mentioned in the description of the house in *Archæologia*, lix, 112.



Fig. 1. Pewter Bowl
For Interior View see Plate XXIII



Fig. 2. Bronze Bowl
METAL BOWLS, SHAPWICK, SOM.

From Photographs by Mr. H. St. George Gray, F.S.A.

Besides the pewter recovered in Hoards i, ii and iii at Shapwick, a large plain dish and a bowl with octagonal flange and pedestal-base were found in 1928 on Meare Heath, and the latter has been figured.²⁹

The bowl (Plates XXII, fig. 1 and XXIII) now to be described was discovered at the same level and 4 in. distant from the tankard recorded in Section I. It was apparently constructed from a piece of pewter of high quality, judging from its smoothness and patination. There is presumably more lead and copper present in its composition than usual, and less antimony. Mr. A. T. Isher, of Cheltenham, who straightened the somewhat dented bowl, cleaned the surface very slightly so that tool-marks might remain and the peculiar hue might be seen (due to the alloy being of different constituents).³⁰

This interesting bowl, which weighs 622.718 grammes, is 74.5 mm. ($2\frac{1}{8}$ in.) in height, including the pedestal, the base of which is 50 mm. (2 in.) in external diameter.³¹ The rim of the vessel (which is about 2 mm. in thickness) has an external diameter of 169 mm. ($6\frac{1}{8}$ in.). The depth of the bowl internally is 45 mm. ($1\frac{7}{8}$ in.).

The vessel has a very slightly hollowed rim, the bottom of which is ornamented with a double band of very faintly incised lines which encircle the bowl. In one place traces presumably of a handle are seen; a part of the attached plate remains, and the lower portion is secured to the vessel by means of a rivet which appears on the inner side, and is seen in the illustration, Plate XXIII. The plate is of an oval form with a triangular point³² extending downwards (seen in the photograph, Plate

²⁹ *Proc. Som. Arch. Soc.*, lxxv, 105-6, and Plate XII. These specimens are in the Somerset County Museum.

Many pewter dishes and other vessels have been found at Mildenhall and Icklingham, and at Coldham Common (Cambs.), and Sutton (Isle of Ely).

³⁰ Mr. Isher thinks that the absence of antimony in any appreciable quantity contributes to the wonderful state of preservation. Antimony was used to harden the alloy, which it did effectively, but it invariably caused the other metals present to disintegrate—a process accelerated by moisture.

³¹ The depth of the hollow base is 23 mm.

³² This reminds one of the triangular termination of the handles of the late Roman pewter jugs.

XXII, fig. 1).³³ Higher up a small rough piece of pewter adheres to the side of the bowl, but is not secured by a rivet.

It is not improbable that the foot and handle of this bowl were added at a later date. Close examination strongly suggests that originally the bowl had no such accessories. The shape of the foot of this vessel is very similar to that of the bowl found with the silver treasure from Carthage to be seen in the British Museum, dated c. A.D. 400, and figured by O. M. Dalton, F.S.A.³⁴

The incised ornamental device on the base of the interior of the bowl is 63 mm. ($2\frac{1}{2}$ in.) in diameter. Outside this there is a very faint plain impressed circle, diameter 76 mm. (3 in.), with traces of concentric rings within—the result of turning.

The encircling wave pattern is similar to that in the same position on the circular dish no. 2 found at Appleshaw.³⁵ Outside the wave there is a circle of small closely punched marks, and outside that again a ring of conjoined half-circles, deeply punched.

Within, is a somewhat crude, squared, interlaced pattern, also the result of punched work.³⁶ Although the design is artistic and pleasing in general effect, it lacks the symmetry and vigour of the best Celtic craftsmanship.

III. BOWL OF THIN BRONZE (Plate XXII, fig. 2)

This plain bowl, which was beaten out of thin sheet bronze, weighs only 528.176 grammes³⁷; and its mean height is 105

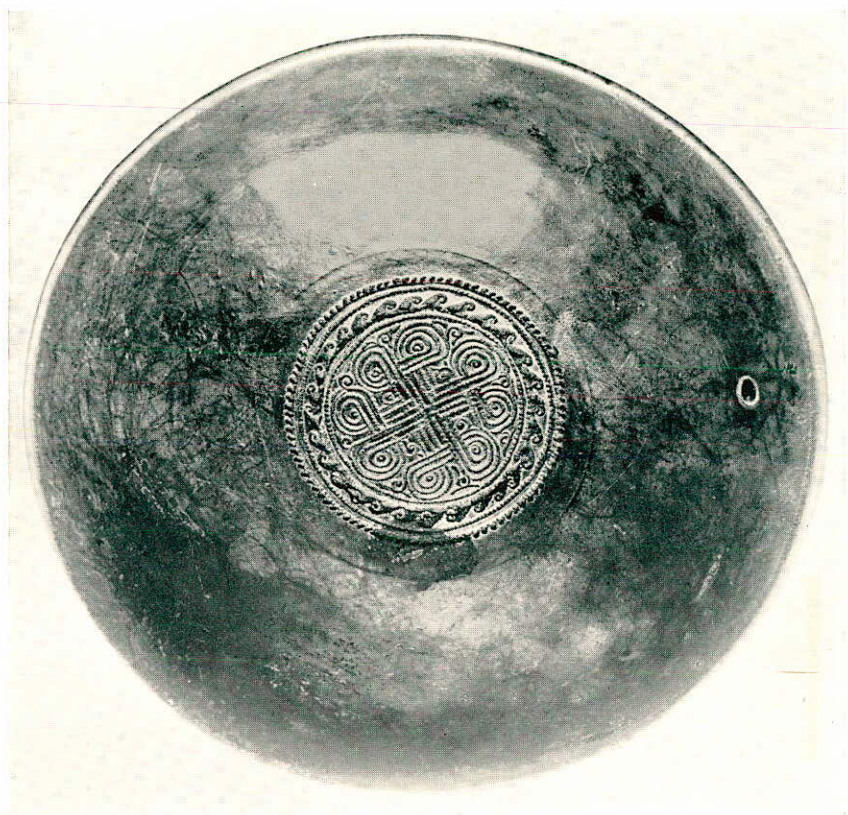
³³ The plate may perhaps be the attachment for a ring-handle, used to hang up the bowl and so drain out any remaining liquid.

³⁴ *Catalogue of Early Christian Antiquities in the British Museum* (1901), nos. 361–2.

³⁵ *Archæologia*, lvi, 9, fig. 1.

³⁶ The nearest parallel to this design was kindly shown the writer at the British Museum by Mr. Ernst Kitzinger in *The Coptic Textiles in the Museum of Decorative Arts in Athens*, by A. Apostolaki (in Greek), Athens, 1932, p. 93, fig. 57. Reference might also be made to a work dealing with the relationship between Coptic and Western European interlaced ornament during the fourth and fifth centuries (W. Holmquist, *Kunstprobleme der Merovingerzeit*, Stockholm, 1939, *passim*).

³⁷ This of course includes the solder repairs.



SHAPWICK HEATH, SOM.
Interior View of the Pewter Bowl
shown in Plate XXII, Fig. 1

From a Photograph by Mr. H. St. George Gray, F.S.A

mm. ($4\frac{1}{2}$ in.).³⁸ The maximum external diameter at the rim varies now from 237 mm. ($9\frac{3}{8}$ in.) to 250 mm. ($9\frac{7}{8}$ in.).³⁹

The cupped base measures 79 mm. ($3\frac{1}{8}$ in.) in diameter ; it is recessed to the extent of about 6 mm. ($\frac{1}{4}$ in.).

The colour of the bronze is in many parts of a dull golden hue ; in other parts it is dark brown and greenish-brown. The glossy patina with its varied coloration is very effective.

The base, viewed internally, is raised and convex, and in the centre there is a dent, diameter about 2.5 mm., which does not quite penetrate the thin metal of which the bowl is composed.⁴⁰ This was caused by the prick of the turn-table or pivot on which it was beaten.⁴¹

On the exterior of the moulded rim the surface is hollowed to a width of 6 mm., as is clearly seen in the photograph, Plate XXII, fig. 2. The actual brim, or lip, is rather sharp and falls slightly, the result of a hammered fold of the metal sheet pressed inwards and downwards.

On the rubbed surfaces of the base there are several holes, the result of wear, and these have been roughly and clumsily repaired with some kind of solder which has not yet been examined by a metallurgist.⁴² Some of this material is seen in the photograph, Plate XXII, fig. 2.

Very closely allied to the Shapwick bowl are some of the vessels found in the Romano-British settlement-site at Irchester (Northampton Museum). Mr. T. D. Kendrick, F.S.A., gives the approximate date of the hoard as A.D. 400, in his paper on 'British Hanging-Bowls'.⁴³ A similar bowl was found on Halker mountain, Flintshire.⁴⁴

³⁸ It varies because of the rough solder repairs at the base of the vessel.

³⁹ The maximum internal diameter at the rim varies from 229 mm. to 242 mm. There is no reason to think that the rim of this bowl was not truly circular when constructed.

⁴⁰ The piercing is so nearly complete that one can feel the bulge in this position on the base of the vessel. In this and other respects it is similar to one of the Wotton (Surrey) bowls, *Proc. Soc. Antiq.*, xxvii, 85, no. 6, fig. 10.

⁴¹ *Antiquity*, vi, 165. The Shapwick bowl is therefore not a 'water-clock'.

⁴² The holes are not all covered with 'solder' at the present time.

⁴³ *Antiquity*, vi, 162 (Plate I, fig. 1); *Assoc. Architect. Societies Reports*, xiii (1875), 88-118 (Plate I of that paper).

⁴⁴ *Archæologia*, xiv, Plate XLIX, fig. 4. For references to other similar bowls, see *Antiquity*, vi, 163 ; and R. A. Smith's paper on thin Bronze Bowls including Water-clocks, *Proc. Soc. Antiq.*, xxvii, 76-95.

It is now the generally accepted opinion that these hanging-bowls of bronze, first made perhaps as early as late prehistoric times, were revived in very similar shape in the later part of the Roman period,⁴⁵ and continued in a more striking and artistic form well into the Saxon period.⁴⁶

There seems to be little doubt that loop- and hook-fittings on the edges of these bowls were intended for suspending chains or swing-handles, and such hanging-attachments were necessary for native Romano-British bronze vessels of the type of the Irchester and Shapwick bowls.

⁴⁵ They may, indeed, have been made throughout the Roman period.

⁴⁶ See 'The Winchester Anglo-Saxon Bowl', by W. J. Andrew and R. A. Smith, *Antiq. Journ.*, xi, 1-13. This bowl is also well illustrated in *Archæology in England*, 1914-1931, by T. D. Kendrick and C. F. C. Hawkes, Plate xxvii. To Mr. Hawkes the writer is indebted for some suggestions he made when shown the photographs of the three vessels described in this paper.