## A Medieval Pottery Kiln at Audlem, Cheshire

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The discovery of a medieval potter's kiln at Audlem in south Cheshire (FIGS. 36-7) in September, 1948, was made by a building contractor laying a drain in the garden of Mr. Northern, the butcher. The architect for the work under construction, Mr. Matthews of Nantwich, recognized the ancient character of the pottery being excavated and reported it to me. Arrangements were subsequently made with Mr. Northern for the kiln to be excavated and he generously donated all the pottery to the Grosvenor Museum, where it is now housed.\* Unfortunately although about six hundredweights of sherds were recovered, it was found that only about a dozen vessels could be even partially restored. The labourers in excavating for the drain must have removed and scattered the pottery over a much greater area than it was possible to excavate.

THE KILN (FIG. 38)

The drain trench had cut exactly through the middle of the kiln on its longer axis. The structure consisted of an oval clay-lined hole, 5 ft. 10 in. by 3 ft. 9 in., with a maximum height of wall of 1 ft. 11 in. There were two pits, one at each end. The westerly one was 4 ft. 6 in. by 3 ft. and the easterly, roughly circular in shape, was about 3 ft. 9 in. in diameter. Both these pits had charcoal in them but only the larger, westerly one had signs of burning. The sides of the kiln had been baked to a hard crust but the bottom showed little evidence of great heat and consisted of layers of charcoal, sand and waste fragments. There was a general fall in level of 4 in. from west to east. Although a careful search was made on the site and among the debris there was no indication of a raised platform or central support on which vessels might have been placed. It was most unfortunate that the drainage trench had removed the vital points in the centre where the flues entered the kiln, but on the evidence preserved it would appear that the fire was placed in the westerly of the pits. The hot gases passed horizontally through the kiln, presumably by a forced draught, towards the

<sup>\*</sup> The excavation was carried out in December, 1948, with the help of the Rev. M. Ridgway, Mr. G. B. Leach, Mr. C. Blair, and Miss S. Cregeen. Mr. G. B. Leach washed and sorted, repaired and restored as many vessels as was possible. I am grateful to Mr. G. C. Dunning for part II of this paper which relates the Audlem pottery to a wider context.

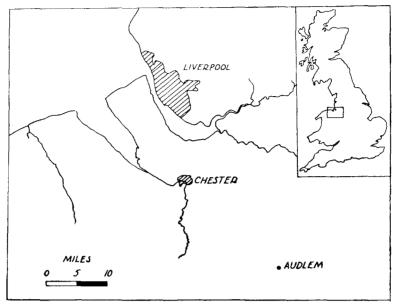


FIG. 36
Maps showing position of Audlem, Cheshire

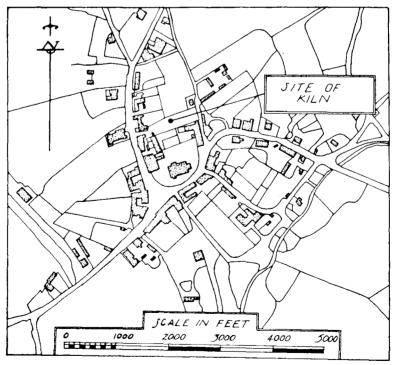


FIG. 37 Site of Pottery Kiln, Audlem

easterly pit (which would thus be the chimney), losing sufficient heat in the process to fail to scorch the clay surface at this end.

Medieval pottery kilns, like their Roman counterparts, vary very considerably and it could be said that every one is in some way different. This

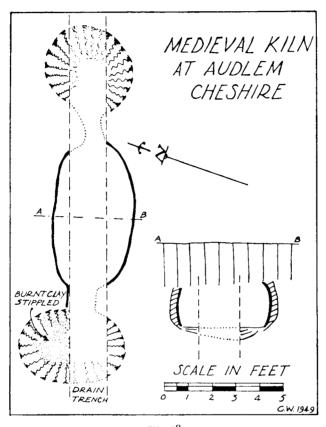


FIG. 38
Plan and section of pottery kiln

factor, and the very puzzling internal arrangements sometimes found, makes classification somewhat difficult. It is particularly unfortunate that there was no evidence for or against a central support. The kiln might have been an open one like the example of the fifteenth century at St. Germans, Cornwall.<sup>2</sup> On the other hand there may have been a narrow central ridge like the Nettleton example near Hemel Hempstead.<sup>3</sup>

- <sup>1</sup> Archaeol. J., CXIV (1957), 10-27.
- <sup>2</sup> Information kindly supplied by Mrs. E. M. Minter, the excavator.
- <sup>3</sup> This kiln was excavated in 1923 by Mr. C. H. Quermull: information, plan and photographs kindly supplied by Mr. G. C. Dunning.

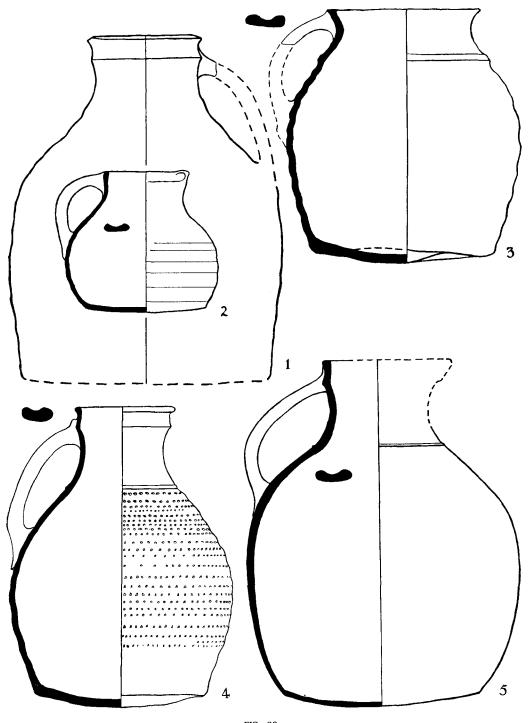


FIG. 39
AUDLEM, CHESHIRE
Jugs from the kiln (p. 113). Sc. ‡

THE POTTERY (FIGS. 39-43)

All the pottery illustrated came from the kiln and its flues and is therefore reasonably certain to be contemporary with its period of operation. It is for the most part a soft, rather sandy, fabric with the colour ranging from light red to cream. The glazed wares have a surface colour of a purplish-red tint, while the glaze itself, which is thin and irregularly spread, is a rather indeterminate dark green which may be the result of overfiring, since some have an orange tinge.

Unfortunately very little pottery from stratified groups has been published from the area so that parallels have been introduced from distant sites which may

later be found to have little relationship to these wares.

(1) The jugs vary considerably in size and shape. There were several 'pint size' varieties (no. 2), some of medium capacity (nos. 3, 4, 8 and 10) and others much larger (nos. 1 and 5). While some are shapely vessels (e.g. no. 5), others are cylindrical (no. 1); several exhibit characteristics of the baluster type (nos. 8 and 10). Decoration is sparse. Most are quite plain, one is rouletted, one fragment has an applied strip (no. 6b), another what may be a horseshoe (no. 6c), and a third a human figure (no. 6a).

(2) Of the large *cooking-pots* four examples have been selected for illustration. Two of these (nos. 28 and 29) have short necked rims with a concave seating on the top, in the case of no. 29 formed by an inner beading. The other two examples have recurved rims which have been squared on the outer edge and in one case (no. 27) decorated with finger-tip impressions on the top. These vessels are typical of the thirteenth century. They bear little resemblance to the thirteenth-century types so fully illustrated from White and Grosmont castles (Antiq. J., xv (1935), p. 331 f. figs. 4 and 5) but demonstrate the tendency towards a thickening and increased angularity of the rim section (London Museum, Medieval Cat., p. 221). A vessel from Walthamstow (ibid., fig. 72) of a rather later form has been dated at not earlier than c. 1300.

(3) Bowls or pans vary in size and tend to be wide-mouthed with splayed sides. Some have a simple bead rim, others finger tip (no. 22) and 'pie crust' decoration (no. 23). This type of deep pan appears in the Oxford region by the end of the twelfth century (Oxoniensia, xv (1950), fig. 18, no. 11), and it is probable that their simple shapes persisted for a long time.

(4) The jars are small globular vessels with rounded, recurved and everted rims and no decoration.

(5) Pipkin handles. The kiln produced several pipkin handles, but no vessels were found to which they might obviously have fitted, the most likely example being no. 11. Pipkins appear to have been produced from the thirteenth to fifteenth centuries (see brief discussion by G. C. Dunning, Archaeologia, LXXXVIII (1938), 221) but the full story of their development remains to be studied.

KILN PROPS (FIG. 42, nos. 30 and 31)

A number of examples of rough cylindrical vessels were found with a wellmade base and square rim. They are all about 4 in. in diameter but vary in height from  $3\frac{1}{2}$  in. to 9 in. The functions of similar vessels found elsewhere have been a matter of speculation. At Canterbury an incomplete example from the Tyler Hill kiln4 was queried as a butter pot, on the analogy of a similar vessel from the kilns at Rye.<sup>5</sup> Small examples have been illustrated from London<sup>6</sup> and taller

<sup>4</sup> Archaeol. Cantiana, LV (1942), fig. 2, no. 20.

<sup>5</sup> Sussex Archaeol. Coll., LXXIV (1933), 59, pl. xi, 1.

<sup>6</sup> Cf. London Museum, Medieval Cat., fig. 54, no. 7.

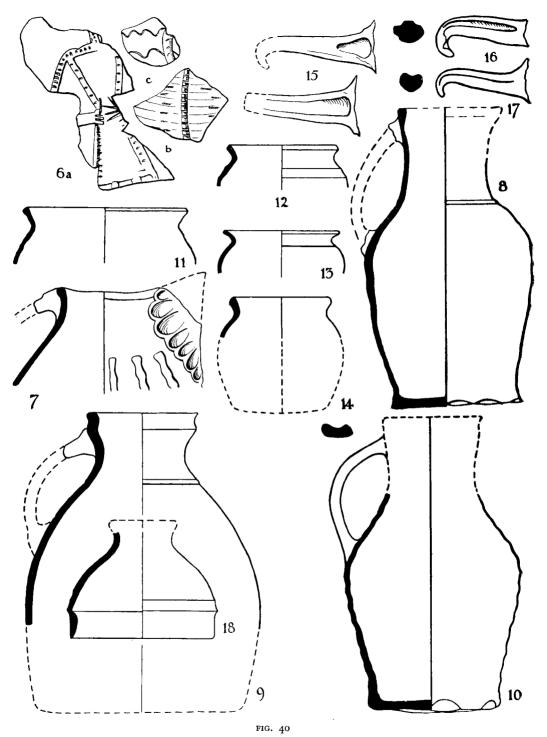
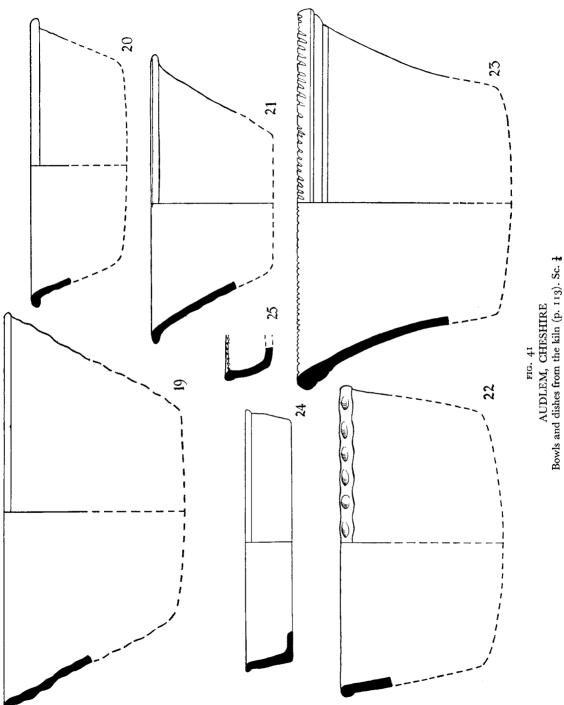
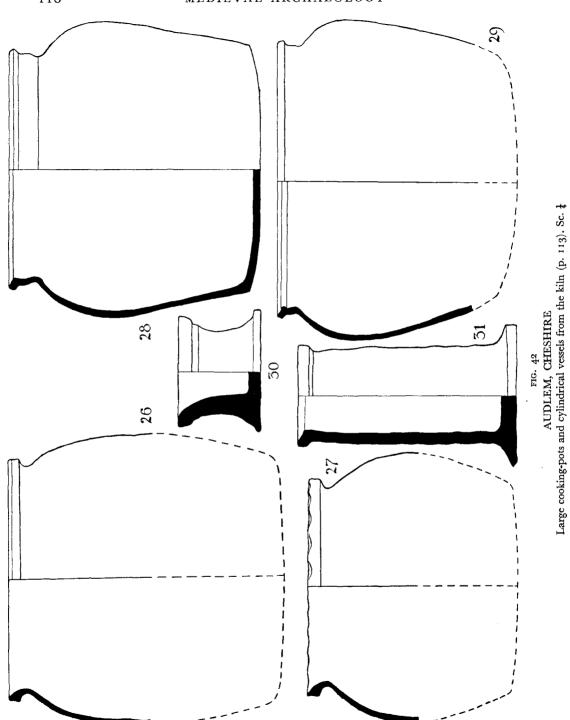


FIG. 40
AUDLEM, CHESHIRE
Jugs, jars, pipkin handles and lid from the kiln (p. 113). Sc. ½





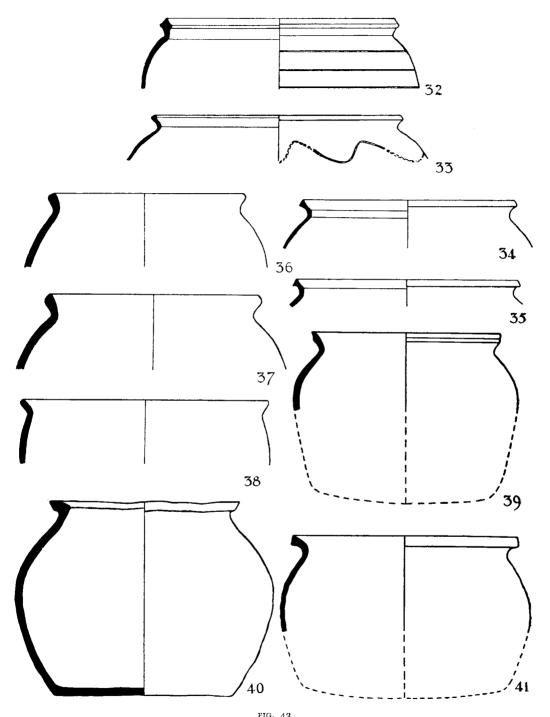


FIG. 43
AUDLEM, CHESHIRE
Cooking-pots from the kiln (p. 113). Sc. ½

ones, 8 in. high, from Baginton castle, near Coventry.7 This considerable variation in size surely argues against the idea that they were butter pots where a standard measure would be expected.<sup>8</sup> It has been suggested to me that they were cressets or torch holders. This seems unlikely in view of the development of the wellknown medieval pottery lamp based on Oxford examples.9 There is nothing in the shape of the Audlem examples suggestive of this function. My suggestion is that these vessels may be kiln props made to different sizes according to need. In stacking large globular jugs on the restricted floor of the kiln, two layers could be obtained only by the use of such props which would prevent the vessels from touching and would provide a firm stand. There is evidence from the way the glaze has run down the vessels that some were stacked upside down and this would have been an economical method of dealing with the upper layer if the rims had been securely placed on these props. They were hollowed out for the simple reason that the unequal rate of drying in a solid column of clay 4 in. thick would have caused an explosion inside the kiln during firing. The traces of glaze found on them could then have run down from the vessels they supported, and those from Baginton are said to have 'a crude glaze especially on the base'. All the examples of this type of vessel known to me have been found in association with kilns. Apart from the above example, others have been found at Week Street, Maidstone<sup>10</sup> and Yearsley, Yorks.<sup>11</sup>

#### LOCAL PARALLELS

The most difficult factor in the study of medieval pottery in the area is that there are so few dated deposits available for comparison. Although the city of Chester has yielded many fragments of pottery of this period, very few have been associated with dating evidence.

The most important group is undoubtedly that from the Ashton kiln.<sup>12</sup> This consists of a fine series of jugs, most of them decorated with stamps, incised lines and applied strips. The Audlem jugs are not so well shaped or so extensively decorated on the body, but in general appearance they are quite similar. Only one of the Ashton cooking-pots is illustrated.<sup>13</sup> This has a thick, everted rim and a coating of glaze on the inner base. Several pipkin handles are also illustrated.<sup>14</sup> The problem here is whether the two kilns are contemporary, the differences being that of potters of dissimilar standards, or whether Audlem is of later date and the vessels show the changes which were taking place in the fourteenth century. The Ashton kiln was dated by its excavators to the fourteenth century, but I feel that in view of the decorative treatment and analogies with the Rye series, it may well be earlier.<sup>15</sup>

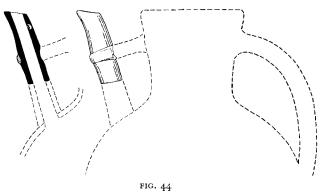
- 7 Trans. Birmingham Archaeol. Soc., LXIX (1951), 48.
- 8 The Staffordshire butter pots had to contain 14 lbs., ibid.
- 9 Oxoniensia, xv (1950), fig. 21.
- <sup>10</sup> In 1923, vessels 14 in. high, unpublished—information from Mr. A. Warhurst, of Bristol Museum.
- <sup>11</sup> Yorks. Archaeol. J., XXXVII (1951), 437, pl. ii, and example of the small type, cf. no. 30.
- 12 Liverpool Annals of Archaeol. and Anthrop., XXI (1933), 5.
- 13 Ibid., pl. iv. no. 10.
- 14 Ibid., pl. iii. nos. 5-8.
- 15 Sussex Archaeol. Coll., LXXIV (1933), 44.

# II. THE WIDER AFFINITIES AND DATING OF THE AUDLEM POTTERY

By G. C. DUNNING

T may be suggested that the assemblage of pottery from Audlem is typically that required to supply the needs of a rural community. This would explain many features that at first sight appear to be puzzling and even contradictory. The following brief analysis of the types of jug, cooking-pot, and bowl and their decoration should help to place the Audlem pottery in its regional setting and also in a more general context.

Some of the better-shaped jugs with distinct necks (nos. 8 and 10), still have broad bases thumbed round the edge. There is a tendency, well shown on no. 8, for the edge of the base to be splayed outwards. These jugs may be compared and contrasted with the technically superior jugs of tall, slender shape, waisted at the



AUDLEM, CHESHIRE
Tubular spout of jug from the kiln (p. 119). Sc. \(\frac{1}{4}\)

foot, with the bases spreading and sometimes moulded at the edge, which belong to the late thirteenth and early fourteenth centuries. This is one of the leading types in the large towns in the midlands, for example at Coventry, <sup>16</sup> Leicester, <sup>17</sup> and Nottingham. <sup>18</sup> In a slightly devolved form, but still with a splayed flat base, the type is well represented at the Ashton kiln. <sup>19</sup> A further stage of devolution is shown by the slackening of the profile and the broad, thumbed bases of the Audlem jugs.

A fragment from Audlem (Fig. 44), accidentally omitted from Mr. Webster's set of drawings, would belong to a jug of the above type. This is a tubular or cylindrical spout, now  $3\frac{1}{4}$  in. long but broken at the lower end, and just under 1 in. in diameter, with aperture just under  $\frac{1}{2}$  in. diameter. Near the upper end is the

<sup>&</sup>lt;sup>16</sup> K. M. Kenyon, Excavations at the Jewry Wall Site, Leicester (Res. Report Soc. Antiq., xv (1948), p. 241, fig. 74.

<sup>&</sup>lt;sup>17</sup> Ibid., pp. 236 ff., figs. 69, 71 and 76.

<sup>&</sup>lt;sup>18</sup> Trans. Thoroton Soc., xxxvi (1932), 79 ff., pls. ii-iii.

<sup>19</sup> Liverpool Annals of Archaeol. and Anthrop., XXI (1933), 15 ff. and pl. iv.

mark of attachment of a strut that passed round it in a shallow groove, and held it to the neck of the jug. The spout is made of red sandy ware, covered by green glaze tinged brown by the fabric as background. Jugs with long tubular spouts springing from the upper part of the body are a well recognized type<sup>20</sup> widely distributed in Britain. They are most numerous in Yorkshire and the midlands, but the extreme range is from Kent to south-west Scotland.<sup>21</sup> In date jugs with tubular spouts belong to the latter part of the thirteenth century.

The bulk of the jugs from the Audlem kiln have broad ovoid bodies with little change in profile at the neck, and plain sagging bases (nos. 1-5, 7 and 9). One of these jugs, no. 7, which has a large bridge-spout, thumb-pressed at the junction with the neck of the pot, and is decorated with applied finger-pressed strips on the body, has an exact parallel at Dyserth Castle, Flintshire, occupied for a very short period, from 1241 to 1263.<sup>22</sup> Indeed, the two jugs are so alike as to form a pair, strongly suggesting that the Dyserth jug was actually made at Audlem. The ovoid type of jug was produced at Ashton<sup>23</sup> as well as at Audlem, so that it may be accepted as a leading regional type in the north-west midlands, at and soon after the middle of the thirteenth century.

Many of the Audlem jugs are plain; when decoration is present this, with one exception, is very simple and the techniques used (applied and incised) are common over a wide part of the country. Applied strips are the more favoured motif, forming ribs of varying width (no. 6, b-c), which are notched, or parallel finger-pressed strips on the body (no. 7). One restored jug (no. 4) had a wide zone of rouletting on the body, and a sherd has incised wavy lines combined with an applied strip (no. 6, c). These motifs are of some value for dating pottery in this region, since a similar rouletted zone is on the jug which contained the hoard deposited about 1240 at Eccles, Lancashire, <sup>24</sup> and rouletted lines overlaid by notched strips occur on another jug from Dyserth Castle.

The exceptional sherd is no. 6, a, which is also decorated with applied notched strips, but is more ambitious. This depicts a human figure seen from the front, drawn large enough to cover most of the side of the jug. The figure is built up of narrow strips in straight lines, producing a stiff and triangular style.

This large-scale figural decoration is uncommon, and the few instances known provide another link between Audlem and the large towns. The closest parallels are provided by the figures on two jugs found on the site of the Benedictine priory at Coventry, and now in the Herbert Art Gallery and Museum, Coventry. Both jugs are made of whitish ware and covered overall outside with dark green glaze. On the first jug (FIG. 45) the figure is severely hour-glass-shaped, restricted at the waist by a belt. The arms hang down, sharply flexed at the elbows, and both hands rest flat against the chest. Details are indicated by incised parallel

<sup>&</sup>lt;sup>20</sup> Well illustrated by B. Rackham, *Medieval English Pottery* (1958), pl. 51. This jug, wrongly attributed to London, was found in York.

<sup>&</sup>lt;sup>21</sup> Briefly discussed, with a distribution map, by me in Archaeol. Cantiana, LXIX (1955), 144 and fig. 5, and mapped by E. M. Jope in Trans. Cumb. and Westm. Antiq. Soc., LV (1956), 78, fig. 5.

<sup>&</sup>lt;sup>22</sup> Archaeol. Cambrensis, 1915, p. 47. The finds are in the National Museum of Wales.

<sup>23</sup> Op. cit. in note 19, pls. v-vi.

<sup>&</sup>lt;sup>24</sup> J. D. A. Thompson, Inventory of British Coin Hoards A.D. 600-1500 (1956), p. 57, no. 152, pl. ii, b.

lines filling the dress below the waist, by the belt, and by a fine circular brooch<sup>25</sup> ornamented with seven settings, on the chest between the hands. Below the left elbow is an incised cross. The jug has a strap handle opposite the figure, and at each side were lateral handles, all elaborately grooved and incised in the style frequent at Coventry and its region in the second half of the thirteenth century.<sup>26</sup>

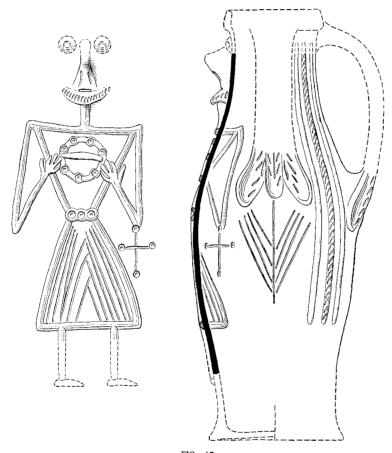
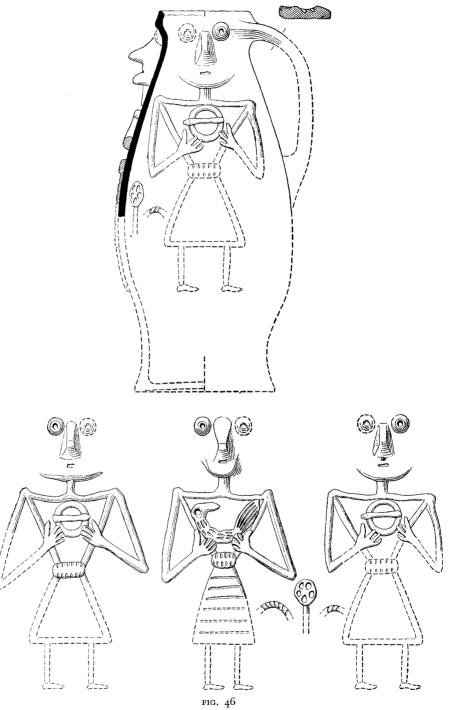


FIG. 45
Jug from site of Benedictine priory, Coventry (p. 120). Sc. 1

The other jug from Coventry (FIG. 46) is decorated with a series of three similar figures. Those on each side are like the figure on the first jug, but the ring brooches are plain. The central figure, on the front of the jug, has the lower part of the dress in flat relief and crossed by incised lines, and the hands clasp a fine bird with long tail feathers, evidently a hen. Between this figure and that on the

<sup>&</sup>lt;sup>25</sup> For brooches on medieval pottery see report on the Kirkcudbright castle pottery by E. M. Jope and G. C. Dunning in *Proc. Soc. Antiq. Scot.*, xci (1957-58), 129, 133, fig. 4, 13. On medieval brooches see *London Museum Medieval Catalogue* (1940), pp. 273 ff., pls. lxxvii-lxxviii.

<sup>&</sup>lt;sup>26</sup> Trans. Birmingham Archaeol. Soc., LXXIII (1955), 74, fig. 8 and p. 85, fig. 1.



Jug from site of Benedictine priory, Coventry, and extended drawing of the decoration (p. 121). Sc. 1

right is an object like a staff with a circular head, flanked by curved notched strips; the meaning of this group, incomplete below, is unknown.

The meaning to be given to these figures is not easy to determine. They appear to be holding the objects, brooches and a hen, in front of the body as though offering or presenting them for inspection or sale. The style is peculiar to Coventry, and might indicate that the figures are pedlars or merchants at a fair. The association of brooches and a bird appears to have some significance, as both occur on the side of a jug found in Parliament Street, Nottingham.<sup>27</sup> On this example the brooch is large and ornamented with six settings, and the bird has long slender legs, as though intended for a crane or stork.

Only one other instance of this figural style has come to notice away from the midlands. This is on the front of a slender green-glazed jug of grey ware found on the site of the Bank of England, London and now preserved at the Bank (FIG. 47). Here the figure is more robust that those at Coventry, and the dress is indicated by incised marks on the arms and body. To the right arm is attached a straight strip ending in ring-and dot-stamps, and the left hand grasps a curved object with pointed end, possibly a whip; the significance of these appendages is not clear.

The last example is more elaborate, and depicts a series of large figures in a frieze round the body of a green-glazed jug found in Cardiff and now in the National Museum of Wales (PL. XXIII). The figures, highly stylized, are evidently women who hold hands as they dance. Artistic subtleties are shown by incised lines parallel to the legs to suggest movement, and by similar lines linking the heads and arms, and in a feather pattern below the clasped hands, to indicate the unity and rhythm of the dance. The stylized face-marks decorating the rim of the Cardiff jug, and repeating the faces of the dancers, relate it to a west-country style described by E. M. Jope.<sup>28</sup> For this reason it is very likely that the jug found at Cardiff reached there from Bristol in the course of coastal trade to south Wales, for which there is independent evidence. This source for the Cardiff jug is now confirmed by the finding of jugs decorated in figural style in a pottery kiln at Ham Green, Pill, near Bristol, kindly shown to me by Mr. K. J. Barton.

It is suggested that the figural style was developed in and distinctive of the midlands, and imitated in other regions. This explanation would account for the consistency in the treatment of the four figures on the jugs at Coventry, for the fairly close copy made at Audlem, and for the less distinctive design of the London figure. The derivative figures lack the character and detail of the original models, and are smaller. The economic and stylistic prestige enjoyed by Nottingham made jugs, with elaborate plastic decoration of knights and animals, is proved by their discovery at Cambridge, <sup>29</sup> London, <sup>30</sup> and Dartford. <sup>31</sup> In another direction the influence exerted by the midlands is evident in the dancers on the Cardiff jug;

<sup>&</sup>lt;sup>27</sup> Trans. Thoroton Soc., VIII (1904), 55, pl. ii.

<sup>&</sup>lt;sup>28</sup> Proc. Somerset Archaeol. Soc., XCVI (1951), 140, and distribution map, fig. 5.

<sup>&</sup>lt;sup>29</sup> G. C. Dunning, 'The decorated jug from the Moot Hall at Nottingham', Ann. Report, Peverel Archaeol. Group, 1955, pp. 18-23.

<sup>&</sup>lt;sup>30</sup> Fragment in the Guildhall Museum.

<sup>31</sup> Information from Mr. P. J. Tester.

the prototype is illustrated by a fragment found at Nottingham,<sup>32</sup> which shows one of a series of dancers with upraised arms.

The archaism noted in the shape and character of the ovoid jugs at Audlem is also well marked on the more purely domestic types of cooking-pot and bowl.

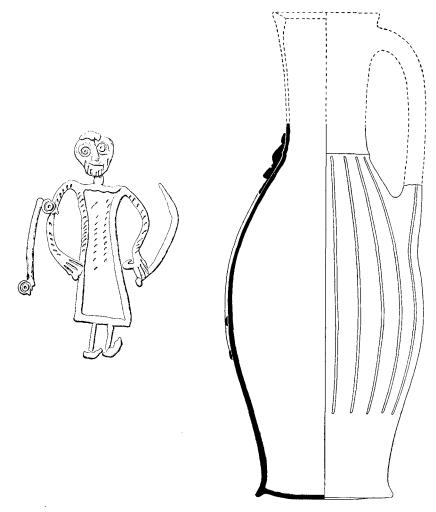


FIG. 47

Jug from site of Bank of England, London (p. 124). Sc. ‡

Several of the cooking-pots illustrated (nos. 36-39, 41) have simple everted rims of twelfth-century character. Here, as elsewhere, the early rim-forms persisted into the thirteenth century, alongside the more developed and moulded rims with internal bevel and beading (nos. 26-29).

The large bowls also have rims of simple character (nos. 19-23), only beaded <sup>32</sup> Op. cit. in note 18, pl. v, 7.

or with narrow flanges, in contrast to the broad flanges usual on the rims of bowls and dishes in the thirteenth century. Some of the Audlem bowls have finger-tip marks (no. 22) or notches on the rim (nos. 23, 25) which, like the finger-tip marks on the rim of a cooking pot (no. 27), are a survival of twelfth-century motifs. In this respect Audlem is by no means an isolated instance, for even in Kent these primitive characteristics persisted into the thirteenth century.<sup>33</sup>

Enough has been said to demonstrate that the Audlem pottery embodies a remarkable duality of traditions existing alongside one another. The stronger element persists directly from the twelfth century, and is expressed in the body-shape and plain sagging bases of the ovoid jugs, and in the undifferentiated rims and simple decoration of many of the cooking-pots and bowls. The other element is revealed in the technically more advanced forms of jug with developed necks, and above all in the decoration of the human figure. These features show that the Audlem potters, and in a rather different way the potters at Ashton,<sup>34</sup> were aware of styles of form and decoration current in the large pottery-making centres in the midlands. The Cheshire potters imitated these more sophisticated styles, and merged them into the local or regional traditions.

The relationships considered above, and the parallels quoted for the Audlem pottery enable its dating to be defined within quite close limits. That the kiln was in fact in use for an appreciable length of time is shown by the comparative material, which is not all of the same date.

The upper limit is fixed by the identity of one of the jugs with one from Dyserth castle, and by close similarities to the decorative motifs both there and at Eccles. These suffice to place the start of the Audlem kiln at about the middle of the thirteenth century.

The lower limits depends on the date assigned to the slender midlands type of jug with waisted foot, and the development of the figural style of decoration. The relevant evidence<sup>35</sup> points to the emergence of this jug-type during the latter part of the thirteenth century, culminating in the distinctive Nottingham type about 1300 or soon after. The dating of the figural style is not known closely. In any case this flat technique appears to precede the full development of the elaborate narrative scenes in three dimensions of knights on horseback hunting stags, which are the speciality of the Nottingham potters,<sup>36</sup> again about 1300 or soon after. So the lower limit of the Audlem pottery is not fixed quite so closely as the upper limit, but need not be later than the end of the thirteenth century.

It is therefore suggested that the Audlem kiln was in operation between about 1250 and 1300. Expressed in other terms, it spanned the lives of two or at most three generations of potters.

<sup>33</sup> Archaeol. Cantiana, LXX (1956), 59 ff.

<sup>&</sup>lt;sup>34</sup> A great variety of individual stamps is known at Ashton, but not one at Audlem: op. cit. in note 19, pl. ii.

<sup>35</sup> Cited in notes 16-18.

<sup>36</sup> Op. cit. in note 29.