

## TECHNIQUES OF POTTERY MANUFACTURE IN EAST YORKSHIRE AND NORTH LINCOLNSHIRE

Colin Hayfield

This essay will attempt to summarise the available evidence for the construction of medieval pottery in the Humberside region of East Yorkshire and North Lincolnshire. It will consider both the methods of constructing the bodies of vessels and secondly the way in which handles and bases developed. These observations are based on a simple visual inspection of the sherds discussed.

### Techniques of body construction

It has recently been suggested that wheel-throwing techniques were re-introduced to this region after the ninth century, and that with certain exceptions it was to remain the standard method of pottery production throughout the medieval period (Hurst 1976:285). Recent examination of pottery from a number of sites in this region, however, may cast doubts on this general interpretation. The sections of numerous sherds show an alignment of the grains and particles of tempering to form a pattern of wavy lines as is illustrated in Fig. no. 2. It is one of the purposes of this essay to consider whether such marks could be coil marks as a result of the vessel having been constructed by a coiling process. Such a technique could either involve the use of a continuous coil, or the build up of individual rings to form the body of a vessel.

Apart from vessels with evidence of finger pulls and marks, these vessels are often associated with surfaces which have concentric 'throwing rings'. It is suggested that these could have been produced by the vessels having been finished on a wheel or turntable.<sup>1</sup> These throwing rings could either be turning marks or the remains of coils. It is possible that coil marks of this kind could have been induced by the very action of wheel-throwing, however the balance of the evidence presented below would make this seem unlikely.

In this essay the term 'wheel-thrown' will refer to vessels thrown from the 'lump' on a revolving wheel head. Wheel-finishing describes those vessels either placed on, or constructed on, a flat base which was then rotated to produce smoother, more evenly finished surfaces. The terms 'slow wheel' and 'fast wheel' should not be considered synonymous with these definitions.<sup>2</sup>

From the eighth century until the end of the fourteenth century, cooking vessels within this region have either shell or coarse sand-tempered fabrics. Vessel forms consisted largely of cooking-pots with a smaller proportion of bowls and occasionally more specialised forms such as pitchers, curfews or lamps.

Shell-tempered vessels of the eighth and early ninth centuries were usually coil-built and hand-finished (Fig. no. 1) (Hayfield forthcoming 1). However, by the ninth century an increasing proportion of vessels, cooking-pots in particular, were wheel-finished. The basal angles of these vessels had often been knife-trimmed and were finished to a very high standard (Fig. , no. 2). From the tenth century virtually all vessels in this fabric type were coil-built and wheel-finished although the knife-trimming of the basal angle was largely discontinued by the eleventh century (Hayfield forthcoming 1).

Excavations within the city of Lincoln at Broadgate (Adams 1977), Flaxengate (Coppack 1973) and Saltergate (Coppack 1980:136) have produced examples of late Saxon, shell-tempered vessels constructed in this manner. Examination of some of the late Saxon products of the Lincoln, Silver Street kiln, excavated by John Wachter, suggests the use

of similar techniques. Further afield, excavations at Goltho Manor, Lincolnshire have provided a sequence of wheel-finished vessels commencing as early as the late eighth century (Coppack 1980:115). This method of manufacture and finish continued to be used throughout the currency of this fabric type being used to construct the fourteenth-century Potter Hanworth products (Le Patourel 1968:124).

Throughout the Saxon period sand-tempered vessels were common in East Yorkshire. The range of middle Saxon fabrics, including the seventh and eighth-century 'Whitby types' from Wharram Percy, were largely hand-finished although some of the later vessels of this type showed evidence of wheel-finishing (Le Patourel *et al.* 1979:77-79). Recent evidence from excavations at Highgate, Beverley (Hayfield and Watkins forthcoming) suggests that by the late tenth century a new series of sand-tempered fabrics had emerged in East Yorkshire. These early vessels are characterised by the presence of small quantities of finely crushed chalk amongst the inclusions. Vessels in these new fabrics were largely wheel-finished often with applied rims (Fig. 1 , no. 5) although some hand-finished examples also occurred in these groups (Fig. 1 , no. 4).

The earliest examples of wheel-finishing on sand-tempered vessels in North Lincolnshire occurred on Ipswich-type pitchers (Hurst 1976:299-303). Examples have been recognised from excavations at St Chads, Barrow-upon-Humber (Hayfield forthcoming I) (Fig. 1 , no. 6), Humberston Abbey (Addyman and Whitwell 1970), and from surface scatters at Flixborough, by Scunthorpe (Scunthorpe Museum FXAB). Present evidence would suggest that they were not produced within the region. These vessels were largely hand-finished with some knife-trimming as well as minimal amounts of wheel-finishing to the rims and shoulders.

Torksey or Torksey-type products have now been recognised at Goltho Manor from the late eighth or early ninth century (Coppack 1980:115). These vessels were either wheel-thrown or wheel-finished to a very high standard, coil marks were only visible in a few vessels and in these cases only in the thicker parts of the vessel such as the basal angle. Lower body surfaces were usually knife-trimmed. A ninth-century Torksey-type cooking-pot from St Chads, Barrow (Hayfield forthcoming I) (Fig. 1 , no. 7) was coil-built with hand-finished surfaces. However an earlier example from the same site, associated with the Ipswich-type pitcher (Fig. 1 , no. 6), was wheel-finished (Fig. 1 , no. 8).

A second late-Saxon, sand-tempered fabric has long been recognised at Lincoln. Described by Hurst as 'Lincoln-type ware G' (Hurst 1976:328), these vessels are thought to have originated from a production site within the city. Like the Torksey products, vessels in this fabric were fired quite hard and coil marks are only rarely visible (Fig. 1 , no. 9). It is possible that all traces of their original construction were obliterated by a combination of the high firing temperature and a high standard of wheel-finishing. Many of these Lincoln grey wares, however, appear to have been fully wheel-thrown. This would suggest the use of more advanced potting techniques than have been encountered elsewhere in the region during this period. Lauren Adams suggests that this fabric type had developed out of close connections with contemporary late Carolingian production centres (*pers. comm.*). The suggestion of continental influence for the resurgence of English wheel-throwing techniques is not a new one (Hurst 1959:28; Jope 1952:87). However it remains a problem why wheel-throwing techniques were not more widely employed amongst the regions neighbouring production centres during this period.

To the south of this region a further group of sand-tempered cooking vessels of the late Saxon period have been recovered from excavations at Horncastle (Hayfield forthcoming 2). These vessels follow the Thetford ware traditions and traces of coil-construction and wheel-finishing were clearly visible on several examples.

From the eleventh century the region saw the development of a group of sand-tempered cooking-vessel fabrics comparable with the hitherto better known products of the Staxton and Potter Brompton kilns in the Vale of Pickering (Brewster 1958). These fabrics continued in production until the late fourteenth or early fifteenth centuries and some of the later examples occur in East Yorkshire at Bolton, Fangfoss (Coppack 1978:136:138). The majority of vessels in these fabrics appear to have been coil-built and wheel-finished. One of the most extensive sequences available for study came from excavations at the Medieval port of Hedon which was almost certainly one of the production centres for this fabric type (Hayfield forthcoming 3). Figure 1, no. 10 has minimal wheel-finishing which is restricted to the rim and shoulder while the rest of the vessel is hand-finished with some knife-trimming; similarly the same technique was found on Figure 1, no. 11 with a far greater degree of wheel-finishing. Both of these vessels were found in an early to mid-twelfth-century deposit at Hedon.

The medieval sand-tempered cooking-pots from this region differed from the contemporary shell-tempered vessels in that they usually had applied rims added to their coil-built bodies either at or just before the wheel-finishing process. The earliest vessel, so far, to show the applied rim technique was figure 1, no. 5 from a late tenth-century context at Highgate, Beverley (Hayfield and Watkins forthcoming). By the late eleventh or early twelfth-century it would appear to have become standard practise on vessels of this fabric type within the region. Figure 2, no. 12 from a late twelfth-century context at Hedon was apparently decorated with a series of shoulder thumbings the position of which corresponds to the base of the presumed join of the applied rim. Figure 2, no. 13, dating to the same period from Hedon, shows the turning marks of the wheel-finishing running over these shoulder thumbings. This would suggest that they may have been deliberately added in order to strengthen the rim join. To confirm the use of the applied rim technique, figure 2, nos. 14, 15, 16 and 17 show the scars of applied rims which survived obliteration during the wheel-finishing process. However occasional smaller cooking-pots such as figure 2 no. 21 have rims coil-built as part of the whole vessel. A few examples, such as figure 2, no. 18 of twelfth-century date, were finished in a more primitive manner having a simple knife-trimmed rim. Bowls (fig. 2, no. 19) and peat-pots (fig. 2, no. 20) of the same period were also usually coil-built with applied rims, however during the thirteenth and fourteenth centuries a greater proportion of bowl forms were entirely coil-built.

From the late thirteenth century a new fabric type was emerging in the region which was to become the dominant fabric type by the fifteenth century. It is commonly referred to as the 'Humber Wares' (Le Patourel 1962-4). Although primarily comprising finewares, the small number of cooking-pots to be produced in these fabrics warrant inclusion in this discussion. These fabrics although sand-tempered were finer and harder-fired than either of the preceding sand or shell-tempered types. So far there has been no indication of coil-building on any of these cooking-vessels. Perhaps examples such as figure 2, no. 22 may have been the first fully wheel-thrown cooking-pots to have been produced on any scale within the region.

### Finewares

The first glazed vessels produced in the region were jugs made during the eleventh or early twelfth centuries (Hayfield forthcoming 1). These were seemingly derived from late Saxon pitcher forms such as figure 2, no. 23, and occur in two principle fabric types. The first were the splashed-glazed, sand-tempered fabrics while the second type were the smooth, virtually untempered red fabrics with more highly developed galena glazes reminiscent of contemporary Stamford wares.

A late eleventh or early twelfth century sand-tempered jug from St Chads, Barrow (Hayfield forthcoming 1) (fig. 2, no. 24) shows full coil construction with a high degree of wheel-finishing. At Hedon (Hayfield forthcoming 3) (fig. 3, no. 25) and Grayingham by Kirton Lindsey (Harmen and Samuels 1978:76-77) (fig. 3, no. 26) contemporary jugs are often too thin walled (often as little as 3 mm thick) to give any indication as to whether they were coil-built or wheel-thrown. However some larger examples with thicker walls show coil marks and these vessels are often associated with knife-trimming of the internal surface of the lower body (fig. 3, nos. 27 and 28). Contemporary jugs in the smooth red fabrics such as figure 3, no. 29 have produced very little evidence of coil-construction. Again their thin walls combined with their fine fabric would make such features very difficult to detect.

By the late twelfth and early thirteenth centuries evidence for coil-construction in jugs is scarce. The majority such as figure 3, no. 30 have all the appearances of being fully wheel-thrown. Examples such as figure 4, nos. 31 and 32 from Hedon were exceptional although it is interesting that both these vessels appeared slightly under-fired in comparison with most other products in their fabric (Hayfield forthcoming 3).

During the thirteenth century a new pottery centre began production in the area around Glandford Brigg.<sup>3</sup> It enjoyed its peak of popularity during the fourteenth century although lasting into the fifteenth century. Its fabric was unusual in showing no distinction between coarse and fine wares, all being produced in a thick-walled, heavily sand-tempered fabric. The products of this centre close to Glandford Brigg were not so heavily fired as other contemporary fabrics. Almost all the cooking-pots and bowls showed coil marks and extensive wheel-finishing (fig. 4, no. 33). More importantly a large proportion of jug forms (fig. 4, nos. 34 and 35) and other finewares appear to have been constructed in a similar manner. All vessels were competently made, often reaching a very high standard. This raises the possibility that many, if not all, contemporary finewares of the thirteenth and fourteenth centuries could still have been coil-built, their fine quality finish and thin walls owing more to the perfection of wheel-finishing techniques than to the large scale adoption of wheel-throwing.

With the introduction and dominance of the 'Humber Wares' the majority of the earlier fabrics, including the Glandford Brigg fabric, ceased production by the fifteenth century. However the growth in popularity of these hard, sand-tempered Humber wares coincided with an apparent decline in potting standards (Hayfield forthcoming 4). Their bodies were thicker walled while less attention was paid to the quality of surface finish, and to basal angles which were often left untrimmed. Both the quality and occurrence of jug decoration declined. No vessel in this fabric has yet produced any evidence of coil-construction and, with the exception of applied bases (see below), they all appear to be fully wheel-thrown (fig. 4, nos. 36 and 37). Indeed it is tempting to speculate that the Humber wares may have been the first to be fully wheel-thrown in the region. On this assumption it could be argued that their success owed more to their speed and ease of production (and possibly their commensurate cheapness) than to their aesthetic qualities.

These methods of constructing both coarse and fineware vessels could have implications for the vexed question of the development of the potter's wheel in the Saxon and Medieval periods (Hodges 1964). Both the quality and quantity of pottery produced from a particular centre would depend on (a): the potter's experience and natural ability and (b): the standard of equipment that he could afford or which was available to him. A degree of wheel-finishing could be achieved on a primitive turntable by the pot being revolved on a platter resting on a flat bed lubricated with slurry. It can be presumed that a far more advanced, and more expensive form of wheel or turntable would be required by a pottery in order to throw a vessel from 'the lump'. It would be dangerous to assume that contemporary

potters at any given time within this region possessed similar standards of equipment for producing their wares.

### Techniques of applying handles and bases

The principle vessel form to be considered here will be the jug. Methods of applying jug handles in this region show a definite typological development which can be supported chronologically from a number of stratified assemblages. The earliest method used would appear to have evolved from the late Saxon pitcher forms (fig. 2, no. 23). These strap handles were applied to the top of the rim and then bent downwards into position and smoothed onto the middle of the body of the vessel as illustrated in figure 5, no. 38 a vessel from contexts of the early twelfth century at Hedon (Hayfield forthcoming 3). Similar types have been found on jugs from St Chads, Barrow (fig. 2, no. 24) and Grayingham (fig. 4, no. 36). By the middle to late twelfth century at Hedon the handles were more commonly attached to the side of the rim (fig. 5, no. 39). From the late twelfth century a position on the neck immediately below the rim was adopted (fig. 5, no. 40). These strap handles were simply smoothed on; slightly later vessels developed two pairs of thumbings to improve their handle adhesion (fig. 3, no. 30).

Strap handles remained in common use at Hedon until the late twelfth century although they survived at the Hallgate kilns at Doncaster throughout the thirteenth century (Buckland *et al.* 1979). Across the Humber at Thornholme Priory, Appleby, the form had been largely superseded by rod handles by the middle of the twelfth century.<sup>3</sup> These rod handles were also attached to the neck, usually smoothed on with, the by now standard, two upper and two lower thumbings (fig. 3, no. 30). During the late thirteenth and fourteenth centuries at Hedon the two lower handle thumbings were often supplemented by a third, deeper, central thumbing (fig. 5, no. 41). Such rod handle attachments usually involved the use of extra pieces or fillets of clay for support. As figure 5, no. 42 shows, the flattened end of the rod handle was attached to the neck, the handle bent into position and smoothed down. A small fillet of clay was then added to the top of the upper attachment and smoothed onto both neck and handle. The lower attachment had a second fillet of clay wedged down in between the body and the back of the handle (fig. 5, nos. 43 and 44). It was only after these fillets of clay had been added that the supporting handle thumbings were made. The large number of handles recovered from excavations which had broken off from their bodies at these joints indicates the weakness of these attachments.

By the late thirteenth century a new development was being increasingly adopted on rod handles, this was the use of 'plugging' to strengthen the upper attachment (fig. 5, no. 43). A small hole, usually about 2 cm diameter, was cut into the neck of the vessel; the upper part of the handle was tapered, inserted through the hole in the neck and then smoothed down onto the inner surface of the vessel. This can often be recognised by the slightly harsher texture to the neck at this point owing to the higher proportion of tempering used in the clay for the handles. The binding fillet of clay for the neck joint was increased in length and wrapped all the way around the outer handle-neck join and then thumbed down in the usual way.

Initially the lower attachments of these plugged handles were smoothed down in the same manner as earlier examples. By the later medieval period, there became a growing tendency for the potter to push the wall of the vessel deeply into the lower handle at its point of attachment (fig. 5, nos. 43 and 44). This technique was widely adopted on Humber ware vessels. Sometimes the resulting cavity was filled with a small piece of clay especially where the body wall had been pierced, but more usually they were left open. These last two techniques were generally restricted to the medium and larger sized jugs. Drinking-mugs and smaller jugs, such as figure 5, nos. 45 and 46, continued to have their handles simply smoothed on as before.

Two common characteristics of medieval jug bases in this region were the use of thumbing to the basal angle in groups of one or more and the use of knife-trimming. The usual explanation for basal thumbing is that they were designed to counteract the slight sag that was usual on the bases of most jug forms enabling them to stand more upright. Knife-trimming is explained by the desire to trim off any excess thickness of clay at the basal angle both reducing clay wastage and lessening the chances of distortion during firing. It is hoped to show that there may have been other reasons to account for the almost standard use of both techniques during the medieval period.

Knife-trimming often accentuates the sag of the base, a process necessarily carried out before basal thumbings are added and these thumbings are rarely of sufficient depth to stabilise the vessel. Again drinking-mugs and the smaller jugs (fig. 5, nos. 45 and 46) differed in usually having their basal angles left untrimmed and unthumbed. This was also a feature of some larger jugs with small basal diameters from Yorkshire (Buckland *et al.* 1979:32, no. 127) and the East Midlands (Coppack 1972:62, no. 199). If aesthetic considerations, clay wastage or problems of firing distortion were reasons for knife-trimming it is difficult to understand why these smaller vessels should have been exempt. Perhaps there was another functional purpose for this process that was not considered necessary on these smaller vessels.

It is possible that both knife-trimming and basal thumbing were related to the use of two types of applied bases which occurred on jugs of this region.

Type 1 in which the wall of the vessel rested on top of the base as in figure 5, nos. 47 and 48. No. 47, from Goxhill, North Lincolnshire, is one of the clearest examples from the region. This vessel also serves to illustrate an important point: the large basal angle sherd had on one side the horizontal fracture with the wall spalling off the base. On its other side the sherd had the more common vertical fracture across the basal angle, this fracture gave no indication that the vessel had an applied base.<sup>4</sup>

Type 2 is a more commonly found method where the base was fitted inside the lower wall of the vessel (fig. 5, nos. 49, 50 and 51). When fitted the base was then smoothed down both internally and externally. No. 49 shows the body wall of the jug with its turning marks and the scar of an applied base resting over the turning marks. This may explain some of the numerous instances of seemingly wheel-thrown jugs with finger marks and pulls internally around the base.

The finger marks and pulls mentioned above may also be explained by the need to work the clay of the base when throwing the vessel. One of the necessities in wheel-throwing a pot is to align the clay particles along an axis in order for it to retain its form during drying and firing. The base can be left comparatively unworked during throwing producing a characteristic 'S' shaped crack after firing. These internal finger marks could represent efforts by the potter to work the clay of the base to lessen the risk of such damage. It has also been suggested that these marks may indicate efforts by the potter to pull out the base into a convex form (Jope 1956:102).

In addition to the two types of applied bases, examples occur where an additional strip of clay had been added internally to the base of a vessel as a form of strengthening or repair. This may have been required when the wheel-throwing reduced the thickness of the basal angle to a point where distortion could have occurred during firing. Such features could be mistaken for type 2 bases although they sometimes occur together (Coppack 1972, 50, no. 51).

So far only a handful of type 1 bases have been recognised and a few dozen type 2 in relation to the many thousands of bases examined. It is difficult to assess whether applied bases

were ever a standard potting technique or alternatively, merely a method of repairing either badly thrown vessels or those damaged when cut from the turntable or wheel. Certainly if applied bases were common practice it could give another explanation for basal thumbing; for the securing of a new base. Knife-trimming would also serve to tidy the join. The evidence from figure 5 , no. 47 suggests that many more type 1 bases could pass unnoticed because of the high quality of finishing.

However it is difficult to understand why it should ever be common practise to throw the wall of a jug and then add a separate base. It is possible that it may have been an attempt to overcome the problems of working the clay of the base as described above by adding a suitably worked base. However the limited number of convincing examples must lead us to conclude, at present, that the techniques were not standard. By comparison it is interesting that in John Samuels study of the Roman vessels in this region, he has also recognised the use of both types of applied bases (pers. comm.).

Examples of vessels which show constructional details are rare. This discussion has accordingly centred on the two commoner medieval ceramic forms. However constructional details do exist for a number of more specialised vessel forms such as pipkins (fig. 5 no. 52) and chafing-dishes (fig. 5 , no. 53), but these are discussed in more detail in the pottery reports of the various sites cited in this paper.

### Summary

Evidence for vessel construction has been recognised from other sites across the country noticeably amongst the work of Professor Jope (especially 1952, 1956) and Stephen Moorhouse (e.g. Moorhouse 1971). It is hoped that further examination of kiln waster material will provide evidence for the extent to which the techniques outlined in this paper were used in other areas. Within this region it is hoped that further work on constructional techniques will help to establish distinctions between the wares of contemporary potters within the same fabric traditions from different centres across the region.

### Acknowledgements

Finally I would like to thank Lauren Adams, Bob Alvey, Glyn Coppack, Philip Dixon, Stephen Moorhouse and Gareth Watkins for their help and advice in the preparation of this essay.

### NOTES

1. The precise definitions of the forms of potters wheels or turntables are specifically not undertaken in this essay.
2. The terms 'slow' and 'fast' wheel are considered confusing as they have no relevance to either the type of wheel or turntable used or to the methods of vessel construction. The most primitive forms of turntable and the most advanced kickwheels are capable of varying speeds to suit both the needs and ability of individual potters. The most important factor was the degree to which the potter could achieve a regular and consistent speed.
3. Excavations at the Augustinian Priory of St. Mary of Thornholme, Appleby, Lincolnshire, have produced several major stratified sequences of medieval pottery dating

from the middle of the twelfth century until the early sixteenth. The study of these groups has been the principal task undertaken by this writer over the last five years. Publication awaits completion of excavations during 1980.

4. The material from Goxhill is one of a large number of unstratified assemblages collected by Mr. and Mrs Russell of Barton on Humber, and is currently lodged in the Baysgarth Museum at Barton.

#### REFERENCES

- Adams, L., 1977. Medieval Pottery from Broadgate East Lincoln 1973. Lincoln Archaeological Trust Monograph Series Vol. XVII-I.
- Addyman, P. V. and Whitwell, J. B., 1970. Some Middle-Saxon pottery types in Lincolnshire. Antiquaries Journal 50 :96-102.
- Brewster, T. C. M., 1958. Staxton ware—an interim report. Yorkshire Archaeological Journal XXXIX:445-6.
- Buckland, P. C. et al., 1979. The Medieval Pottery Industry at Hallgate Doncaster. A Doncaster Museums and Arts Service Publication.
- Coppack, G., 1972. Medieval and Post-Medieval Pottery in R. Hall and G. Coppack, Excavations at Full Street, Derby, 1972. The Derbyshire Archaeological Journal XCII :44-76.
- Coppack, G., 1973. The Excavation of a Roman and Medieval Site at Flaxengate, Lincoln. Lincolnshire History and Archaeology 8 :73-114.
- Coppack, G., 1978. An Excavation at Chapel Garth, Bolton, Fangfoss, Humberside. Yorkshire Archaeological Journal, 50 :93-150.
- Coppack, G., 1980. The Medieval Pottery of Lincoln, Nottingham and Derby. Unpublished PhD. Thesis, University of Nottingham, 1980.
- Harman, M. and Samuels, J., 1978. Human Bones and Pottery from Grayingham. Lincolnshire History and Archaeology 13 :76-77.
- Hayfield, C. forthcoming 1. The Pottery in J. Boden and J. B. Whitwell, Excavations at St Chads, Barrow-upon-Humber, South Humberside. Lincolnshire History and Archaeology forthcoming.
- Hayfield, C. forthcoming 2. The Pottery Report in N. Fields, Excavations at Horncastle, Lincolnshire, Lincolnshire History and Archaeology forthcoming.
- Hayfield, C. forthcoming 3. The Pottery in R. H. Williams, Excavations at Hedon: a Medieval Planned Town, East Riding Archaeology, forthcoming.
- Hayfield, C. forthcoming 4. Report on the Pottery in P. Mayes and C. Hayfield, A Late Medieval Kiln at Holme-upon-Spalding-Moor, North Humberside, East Riding Archaeology, forthcoming.
- Hayfield, C. and Watkins, J. G. The Pottery in R. H. Williams, An Excavation at Highgate, Beverley 1977, East Riding Archaeology, forthcoming.
- Hodges, H., 1964. Artifacts. London.
- Hurst, J. G., 1959. III. Middle-Saxon pottery, in Anglo-Saxon pottery: a symposium. Medieval Archaeology III :13-31.



- Hurst, J. G., 1976. The Pottery in D. M. Wilson (ed.), The Archaeology of Anglo-Saxon England, London :283-348.
- Joep, E. M., 1952. Late Saxon Pits Under Oxford Castle Mound, Oxoniensia, XVII :77-111.
- Joep, E. M., 1956. The Technique of Pottery-Making, as seen on the Carlisle Pottery in E. M. Joep and H. W. M. Hodges, The Medieval Pottery from Castle Street, Excavations in Carlisle 1953, Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society, LV :102-105.
- Le Patourel, H. E. J., 1962-4. Appendix B, the pottery in C. V. Bellamy, Pontefract Priory excavations 1957-61, Publications of the Thoresby Society XLIX :113-115.
- Le Patourel, H. E. J., 1968. Documentary Evidence and the Medieval Pottery Industry Medieval Archaeology, XII :101-126.
- Le Patourel, H. E. J. et al. 1979. Medieval Pottery in J. G. Hurst (ed.), Wharram A Study of Settlement on the Yorkshire Wolds Vol. I London 8 :74-107.
- Moorhouse, S., 1971. The Pottery in C. F. Tebbutt, G. T. Rudd and S. Moorhouse, Excavation of a Moated Site at Ellington, Huntingdonshire, Proceedings of the Cambridge Antiquarian Society LXIII :49-66.

Ce papier a été conçu afin d'étudier les caractéristiques susceptibles de nous aider à comprendre les techniques employées pour la réalisation des formes les plus courantes que l'on retrouve dans la poterie des époques 'late Saxon' et médiévale du Yorkshire de l'est et du nord du Lincolnshire. On s'intéressera à la possibilité de la continuation du modelage au colombin en tant que technique de base utilisée localement jusqu'au XV<sup>e</sup> siècle lorsqu'il se peut qu'un changement des techniques de production ait eu lieu.

On présentera aussi l'évolution chronologique de la forme et du style des anses des cruches ainsi que les méthodes utilisées pour leur pose. On se penchera enfin sur le fait qu'on trouve deux types de bases appliquées sur les cruches et on essaiera d'expliquer l'utilisation de cette méthode et son importance.

Dieser Aufsatz wurde entworfen, um die verfügbaren, sichtbaren Zeugnisse für Konstruktionstechniken zu erforschen an den allgemeineren Gefäßformen der spätangelsächsischen und mittelalterlichen Töpferware-Gruppen aus Ost- "Yorkshire" und Nord- "Lincolnshire". Er untersucht die Möglichkeit einer Weiterführung der Rollekonstruktion als eine Grundmethode für die Herstellung der Gefäße bei mehreren lokalen Fabrikaten bis zum fünfzehnten Jahrhundert, als eine Änderung der Produktionstechniken hätte vorkommen können.

Gezeigt wird, dass die Gestalt und Form der Kruggriffe und die Methoden sie anzuwenden, sich chronologisch entwickelten. Die Benutzung von zwei Typen von Boden angewendet auf Krugformen wird erörtert und ein Versuch wird gemacht, den Umfang und die Gründe für die Anwendung dieser Technik zu erklären.

## The Drawings

Straight lines indicate wheel-finishing, wavy or broken lines show hand-finishing. Coil marks that were visible have been drawn in the sections; solid sections indicate only that coils were not visible and need not imply a wheel-thrown product. Pairs of slanting lines on the lower portions of vessels indicate areas of knife-trimming. Glaze margins are shown by dotted lines. Hatched sections indicate those parts added to the main body of the vessel.

Fig. 1 Nos. 1-3, 6-8 St Chads, Barrow-upon-Humber.  
Nos. 4-5 Highgate, Beverley.  
No. 9 Unstratified, East Halton Skitter.  
Nos. 10-11 Middle Lane, Hedon.

Fig. 2 Nos. 12-21 Middle Lane, Hedon.  
No. 22 Holme-upon-Spalding-Moor kiln.  
No. 23 Unstratified, East Halton Skitter.  
No. 24 St Chads, Barrow-upon-Humber.

Fig. 3 Nos. 25, 27-29 Middle Lane, Hedon.  
No. 26 Unstratified, Grayingham.  
No. 30 Thornholme Priory, Appleby.

Fig. 4 Nos. 31-32 Middle Lane, Hedon.  
Nos. 33-35 Thornholme Priory, Appleby.  
No. 36 Holme-upon-Spalding-Moor kiln.  
No. 37 Epworth Manor House, Epworth.

Fig. 5 Nos. 38-41, 52 Middle Lane, Hedon.  
No. 42 Unstratified, Barton-on-Humber.  
Nos. 43, 45, 48, 51 Thornholme Priory, Appleby.  
Nos. 44, 49 Unstratified, Kettleby Thorpe.  
No. 46 Holme-upon-Spalding-Moor kiln.  
No. 47 Unstratified, Goxhill.  
No. 50 Unstratified, Barrow-upon-Humber.  
No. 53 Highgate, Beverley.

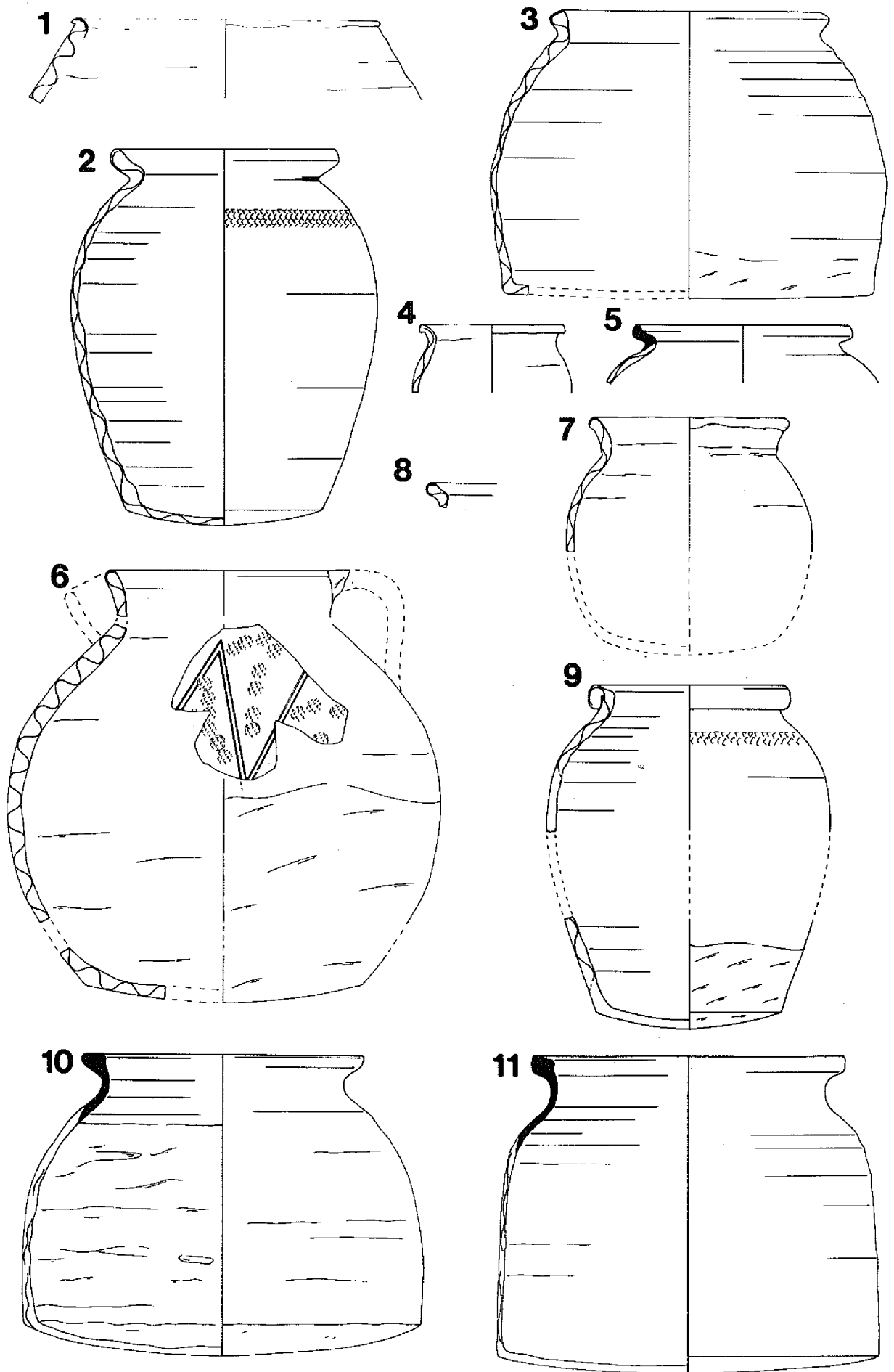


FIG. 1

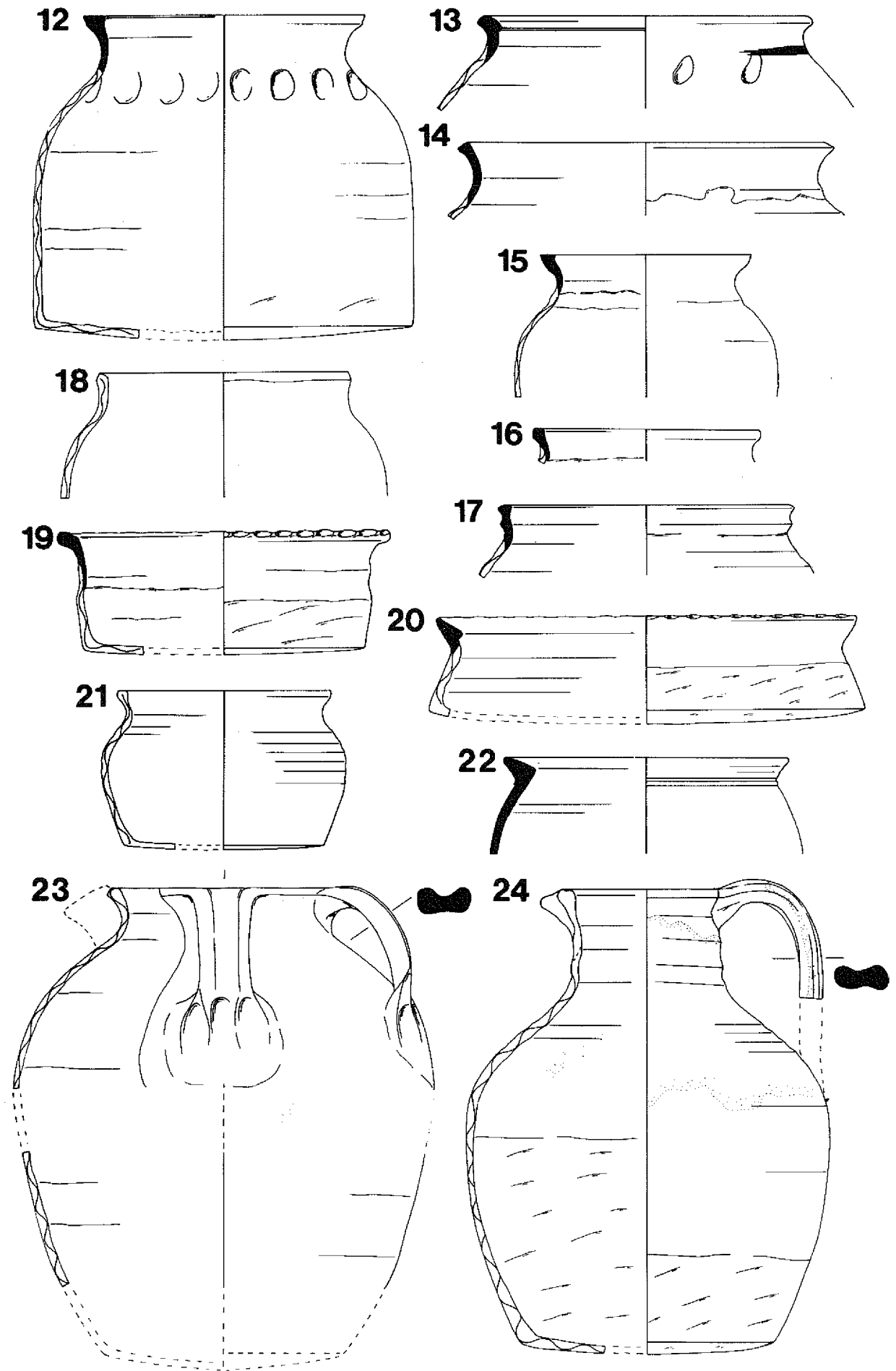


FIG. 2

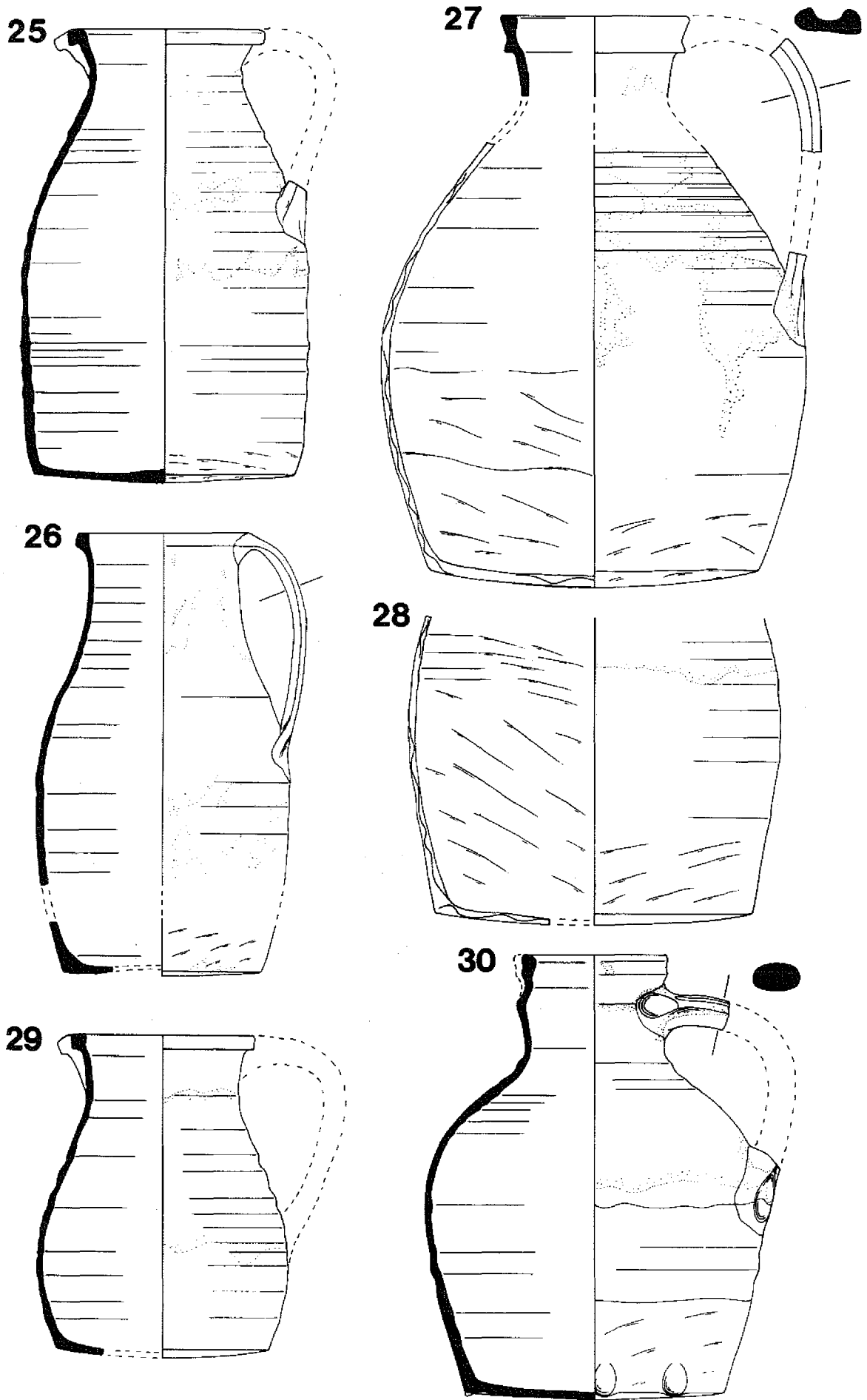


FIG. 3

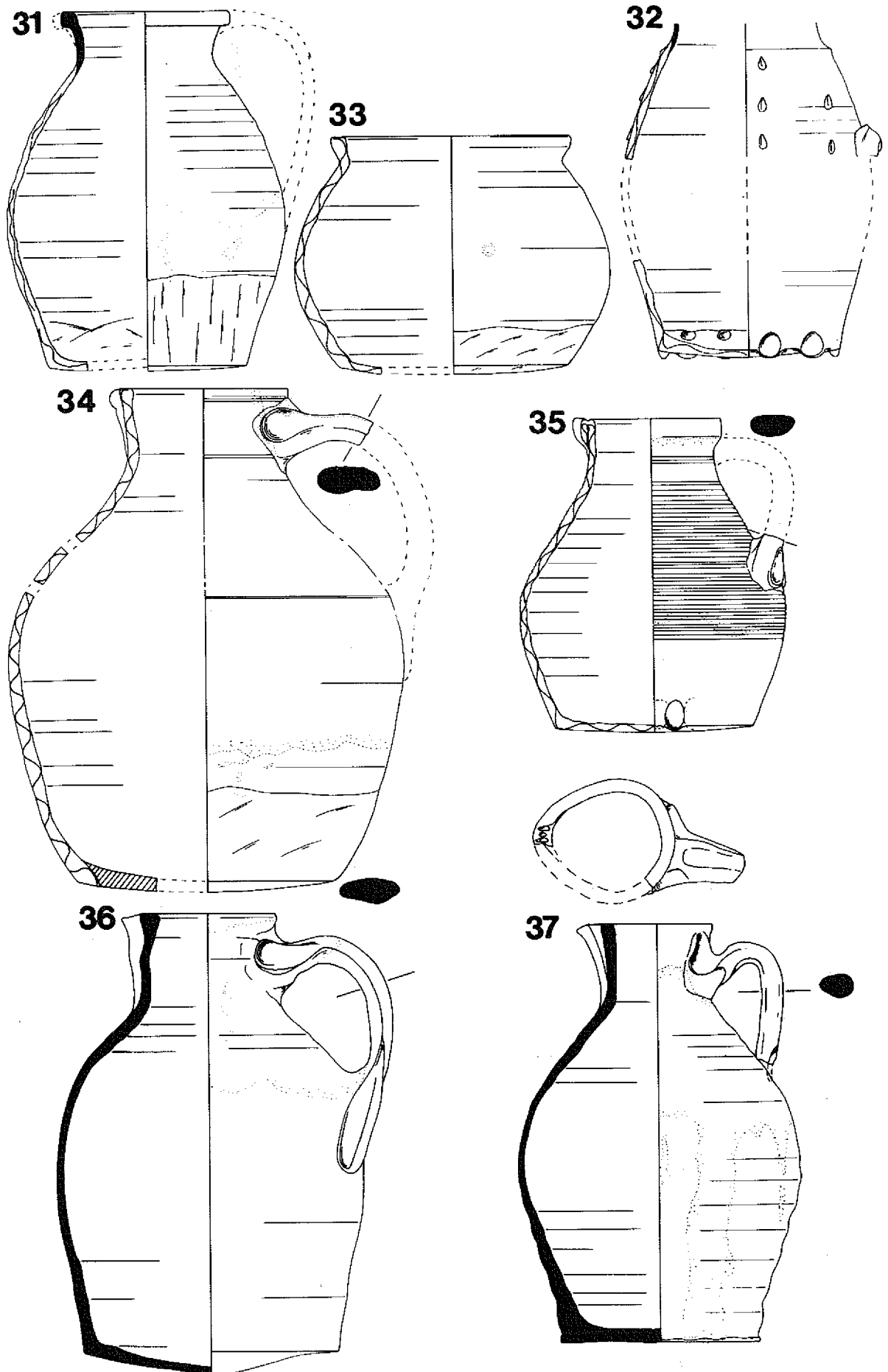


FIG. 4

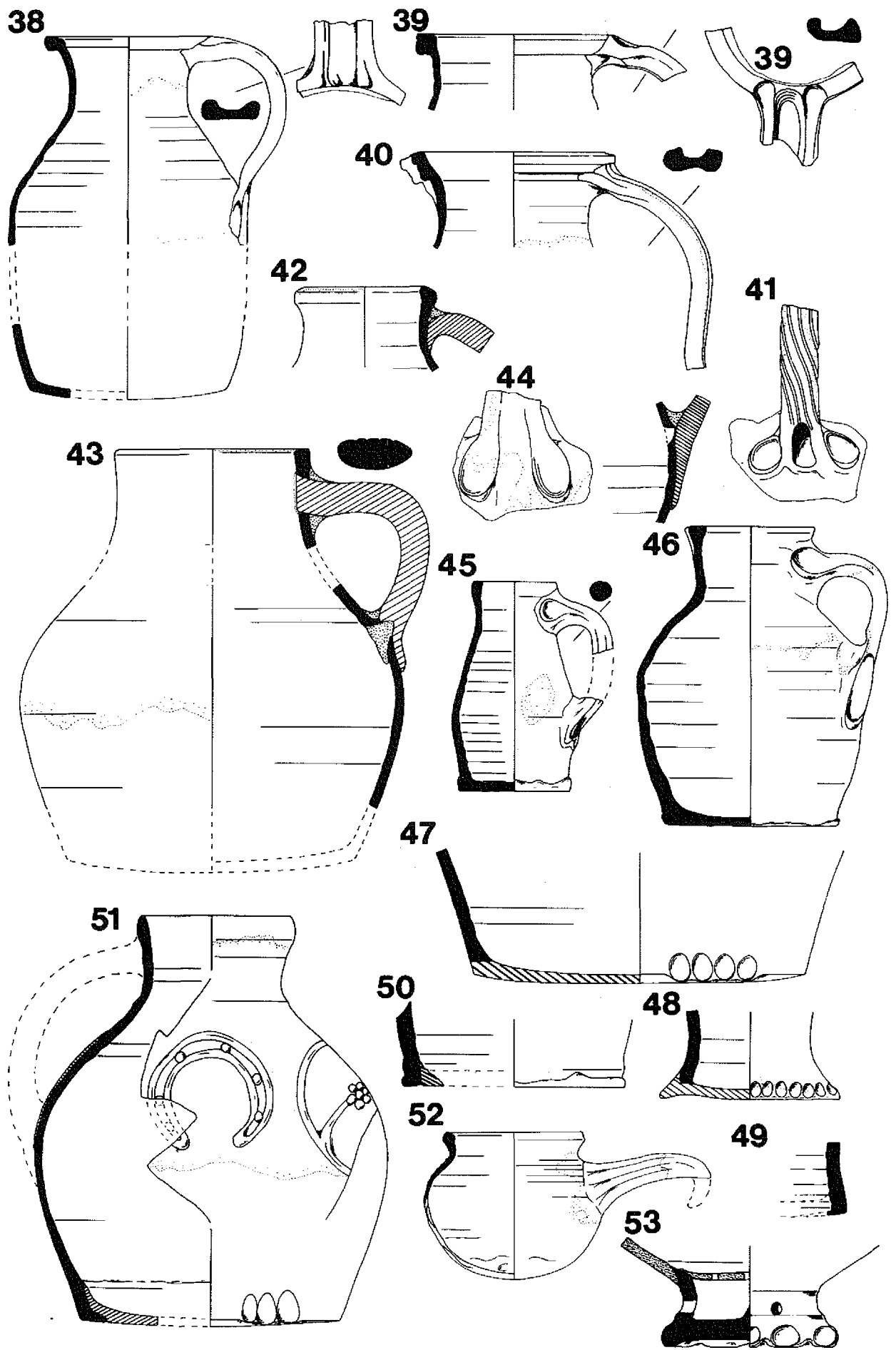


FIG. 5

