

<sup>1</sup>Additional grants were made by the Norfolk and Norwich Archæological Society and the Norfolk Research Committee.

<sup>2</sup>This compares with a live weight for the Norfolk Horn sheep of about a hundred and ten pounds.

Four ram's horn cores were found in pit 44a, a period I phase 2 feature dating probably from the end of the ninth century. These rams were definitely not the primitive short-tailed Soay type, but of the modern duplex black-faced type, exemplified by the now nearly extinct Norfolk Horn and the modern Scottish black-face. This type of sheep was known in the Roman and Late Roman world (second century bronze from Syracuse and a sixth-century mosaic from Aquileia), but it has not previously been described in any early deposit in this country.

<sup>3</sup>Bones of the following birds have so far been identified from the Period I refuse deposits: Domestic Goose, White-fronted Goose, Pink-footed Goose, Brent Goose, Mallard, Domestic Duck, Wigeon, Teal, Red Kite, Sparrow Hawk, Domestic Fowl, Common Crane, Golden Plover, Curlew, Wood Pigeon.

## *An Inventory and a Counter Table*

BY T. H. MCK. CLOUGH, M.A. AND BARBARA GREEN, B.SC., A.M.A.

OUR colleague Miss P. Clabburn has drawn our attention to the inventory of a certain Jeffrey Cobb of Norwich, gent., dated 15 November 1591, and proved in the following year.<sup>1</sup> This long and interesting inventory fills eight pages with details of "all and Singuler the Cattel goodes and Chattalls" which were his property. Amongst these, in the great chamber, is listed a counter table with two leaves, valued at 13s. 4d.

It is not unusual to find counter tables mentioned in sixteenth-century inventories, for it was not until the seventeenth century in England that the practice of writing and therefore of reckoning accounts in roman numerals fell into disuse. Arithmetical or monetary calculations cannot be performed in roman numerals without the use of manual aids, whereas problems have only to be written down when arabic numerals are used. With the general adoption of arabic numerals, it was no longer essential for anyone keeping accounts to use an abacus, a counter table or a counter cloth. However, it was the presence of the counter table in this inventory that emphasised the way in which the values of the items had been added together. The clerk has noted the total value of the items on each page in the bottom right-hand corner. These totals are expressed in a series of groups of dots whose positions correspond to those of the jettons or counters used on the counting board. Although other examples of this are known, it does not seem to be a common practice.

Many different systems of counting with jettons were used at various times. The one found here is the Auditors' Form, in which the type of reckoning-board known as the chequer was used. Barnard explains fully how addition and subtraction, but not multiplication or division, could be carried out by this method.<sup>2</sup> The board was divided into a number of columns, each representing a specific monetary unit, such as £20, £1, or shillings or pence. The amounts to be added were placed in rows in these columns, using jettons. As Barnard puts it, "space and jettons were economised by what we may term condensation by position; for in the pence column room was left for a jetton to be set above the rest to represent 6d. Similarly in the remaining columns such an upper jetton, if placed above the right-hand end of the unit row, or rows, was equivalent to five, while one placed above the left-hand end was equivalent to ten".

The Auditors' Form differs from the Exchequer Table only in the representation of 6d. by a single jetton. In common with other methods of reckoning, the Auditors' Form makes no provision for fractions of the penny, which are counted in farthings and set aside in the empty space to the right of the chequer.

The figures recorded by the accountant on Cobb's inventory are shown on the chart (Fig. 1) to illustrate the working of the Auditors' Form. It is clear from this, and even more so from the inventory itself with its hand-written totals, that the careless misplacing of dots could result in a misreading of the totals and thus in subsequent errors. In Cobb's inventory, although most of the totals are well written, it would be possible to read the total for page 2 as £12 10s. 2d. rather than £12 15s. 2d. This is certainly one of the reasons why total values, given in many inventories but lacking in this one, are very often incorrect. Of the eight page totals in Cobb's inventory, only five are correct. The total for page 4 should be £14 8s. 5d., not £13 9s. 8d., an error of 18s. 9d. which is difficult to account for. One can only point out that the accountant has had at least three attempts at adding this page, arriving at a different total each time. The different answers are very difficult to read because they have been so furiously crossed out; it is however possible that one of them was £8 12s. 8d. It is perhaps tactless to mention that this is the page on which the counter table itself is listed. The total on page 6 is also wrong, reading £16 12s. 3d. instead of £16 9s. 11d., an error of 2s. 4d. This suggests that confusion has arisen because of the three consecutive entries of 1s. 2d. against three square tablecloths each one ell long; the sum of 1s. 2d. has evidently been entered five instead of three times on the board. A more serious error is found on page 8, where the total given reads £20 3s. 7½d. instead of £23 7s. 3½d., an error of £3 3s. 8d. In this case the entry for five gold rings, the gold valued at 52s. an ounce, has been omitted. On the other hand, below the inventory entries on this page there is a further note of a debt of £40 due to Jeffry Cobb from Edmund Cobbe of Somerton, gent., of which £23 is entered here. Below this entry the amount of £46 7s. 3½d., which is in fact the correct sum of £23 from the debt and £23 7s. 3½d. from the items above, is written in arabic numerals. Arabic numerals are not used elsewhere in the inventory, except for the date at the head and, in a different hand, the date of its proving at the foot. It is therefore difficult to be sure what has happened here, whether the correct total for the page was arrived at before the inventory was proved, or whether a later hand has picked up the omission of £3 3s. 8d. No total for the whole inventory is given, but it will be seen that the effect of these mistakes, including that on page 8, is to make the accountant's total £123 2s. 6½d. instead of £127 2s. 7½d., an error of £4 0s. 6d. Only on the last page do fractions of the penny appear, with the valuation of a cup at 33s. 1½d. This halfpenny is not found in the page total, although it is accounted for in the arabic sum of £46 7s. 3½d.

Examples of the jettons which were used in conjunction with reckoning in roman numerals are often found today. The most common types are those made in quantity in Nuremberg in the latter part of the sixteenth and the earlier seventeenth centuries. They are commonly inscribed with the name of the

page	£1000	£100	£20	£	s	d	arabic
1				••••	••	•	£ 9.12s.2d.
2				••	••••	•	£12.15s.2d.
3				••••	••		£ 9.12s.0d.
4				••••	••••	••	£13.9s.8d.
5				••	••••	••	£16.18s.8d.
6				••	••	••	£16.12s.3d.
7			•	••••	••••		£23.19s.0d.
8			•		••••	••	£20.3s.7d.
total		•	•	••••	••	••••	£123.2s.6d.

Fig. 1. The eight page totals from Jeffry Cobb's inventory arranged to illustrate the layout of the Auditors' Form. The right-hand column translates them into arabic numerals, and the bottom line represents the total for the whole inventory as it might have appeared.

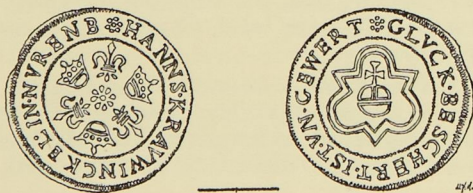


Fig. 2. Jetton by Hans Krauwinkel of Nuremberg. Scale 1/1; drawn by W. F. Milligan.

manufacturer and the town where he worked. Members of the Schultes, Lauffer and Krauwinkel families between them produced a high proportion of the jettons in use at this date; Hans Krauwinkel, working between about 1580 and 1610, seems to have been particularly prolific and a drawing of one of his jettons is reproduced here (Fig. 2).<sup>3</sup> Further details about jettons and casting counters can be found in Barnard's book on the subject, and short articles on them appear from time to time in popular coin magazines.

<sup>1</sup>Norfolk and Norwich Record Office, Inventory 8/45; we are grateful to the Record Office for permission to publish these details, and to Miss Kennedy and Mr. Rutledge for their assistance.

<sup>2</sup>F. P. Barnard, *The Casting Counter and the Counting Board* (Oxford 1916) 264 ff.

<sup>3</sup>op. cit., 69f.

### *Mayor-Making at Norwich, 1706*

BY DAVID H. KENNETT

**D**URING the final years of the seventeenth century and in the opening two decades of the eighteenth, a member of the Harvey family of Ickwell Bury, Northill, Bedfordshire, made a number of journeys in England and abroad.<sup>1</sup> In 1698-99 he was in Holland where he travelled extensively using Leiden as a base.<sup>2</sup> Between 1709 and 1714 he appears to have been in Italy, witnessing processions in Florence in 1709, in Naples in 1712, and in Genoa in 1714,<sup>3</sup> and it is possible he was in Rome in 1710.<sup>4</sup> From the handwriting it is reasonable to assume that all these journals were by the same man, who also composed at least one literary piece, a justification of the meaning of confirmation in the Church of England, written in 1704.<sup>5</sup> The same man in 1706 was evidently in Norwich and witnessed the mayor-making ceremonies of which he left an account.<sup>6</sup> This is written on two sheets of paper, folded and sewn to give a book of eight leaves. The front sheet is headed:

Installation of Mayor at Norwich, 1706.

The second and eighth sides are blank and on the other five is contained the following account:

Ceremonies observed when the Mayor of Norwich enters on his office.

The Mayor is sworn for his office or mayoralty the Tuesday before mid-summer day and until that time is called "Newlex", i.e. new-elect. In the morning of the day on which the Newlex enters his office all the Aldermen and the old mayor with the councilmen, etc. are invited to the Newlex's house wherewith they are treated to bread and wine. About 10 o'clock the same company is invited to breakfast at the old mayor's house where they have a feast and plenty of wine. Between 12 and one the whole company proceeds on foot from the said house to the Town Hall where the solemnity begins.

First march inferior officers with black staves in black gowns and flat round caps like those of the Yeoman of the Guard. Then the standard which is square and white with a red cross affixed to a lance borne by a man in a red silk coat