PROVENANCED LEADEN CLOTH SEALS

by

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ABSTRACT

This thesis considers the leaden seals which were attached to textiles from the late 14th- to the early 19th century in England as part of a system of industrial regulation and taxation. Almost all of the 1,345 seals and related items which are described here individually were recovered from the ground. This total comprises all the English seals examined which refer to their place of origin in the legends (many of these are alnage seals), all the known English seals of medieval date, and the English matrices for the cloth seals. The unsorted information about each item is presented, just as recorded, in Appendix 1. The historical context and development of cloth sealing in this country are discussed, and a chronological framework for the various stamped devices and forms of seal is proposed. Following a more detailed account of the known medieval seals are brief summaries of the main aspects of local textile industries and a synthesized description of the recorded seals county by county. A concluding section assesses the information provided by the known seals, and the degree of correspondence with data from historical sources. Directions for future studies are suggested. Further appendices provide statistical tables and maps of documentary-based information on levels of textile production at different periods, detailed discussions of the provenances and findspots of the recorded seals, an account of the largest known group of English seals, and documentary evidence for the dating of some of the seals from Norfolk.

For the first time information has been presented systematically, and assessed in detail, both on the extent of survival and on the potential academic value of cloth seals found during excavations.
The cloth trade is ... the axis of the commonwealth, whereon all other trades ... do seem to turn, and have their revolution.

Edward Misselden, 1623
- cited in Supple, page 6

...choice textiles plumbed with the arms of the cities....

William Morris,
The Well at the World's End,
Kelmescott (1895) 201

Caption for fig. 1: (see preceding page)
The examination of a newly-woven cloth by the searchers, and (left) the stamping of a seal to show that it is of adequate quality for sale. Sculptured panel from a frieze of c. 1640 on the facade of the Lakenhal (Wool Hall) at Leiden in the Netherlands. (Executed by Bartholomeus Drijffhout and Pieter Arjinsen't Hooft) For further details of the sculpture, see Ponting (1974) 136, 137 fig. 6 & 139, & cf. 129 fig.1. (photograph Leiden Lakenhal Museum; scale not given)
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- The evolution of textile sealing
- The system in operation
- The seals

## Medieval Seals:
- Seals with a king's head
- Seals with a leopard's head
- Seals with a crown over sun, fleur de lis & rose
- Seals with a crown over a rose
- Seals with a crown over a fleur de lis
- Seals with a crown over sun & rose dimidiated & conjoined
- Seals with other crowned devices
- Seals with a crown as the central device
- Incomplete seals with the arms of England
- Seals with an ornate 'F', for faulty cloths
- Seals depicting a king enthroned

## Possible 1553 County Group

## Crown-over-Portcullis Series of County Seals

## Crown-over-Thistle, & 1610-1611 Series of Seals

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- Seal

## Buckinghamshire: Historical Background
- Seals

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- Seal
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INTRODUCTION

This thesis deals primarily with the leaden seals put on individual textiles as part of a system of quality control in the cloth industry. The study is restricted to English seals (including those found abroad), and some matrices, which indicate the provenance*. All the appropriate recorded seals from the 14th to the 19th century are discussed. The great majority of the seals included were issued in connection with the alnage** system of governmental taxation and quality monitoring, particularly from the late 15th to the early 18th centuries. All the seals included have been recovered from the ground (with the exception of one found in the ceiling of a building).

The recording of seals and related objects continues. At the time of writing (March 1986) details of over 7,500 seals and other items examined at first hand have been recorded on individual cards held by the writer (Egan 1976 onwards; see Appendix 10). Of this total, only the seals in relevant categories from the first 5,000 (i.e. those recorded between 1976 and January 1983) are included here, along with a further 122 selected seals from those recorded subsequently because they add significantly to the discussion. 1,345 seals and related items (of which 1,223 are from nos. 1 - 5,000: just under a quarter of all those recorded up to the beginning of 1983) including all the known English medieval seals, are discussed in the thesis. All these items were examined at first hand.

* Provenance here means the place of origin of the textile, as indicated by information on the seal. It is thus differentiated from the findspot of the seal.

** Also spelled 'aulnage' or 'ulnage'. The Oxford English Dictionary prefers 'alnage'.
Items known from secondary sources are not numbered. It has been thought advisable to draw a distinction in this way between the items recorded at first hand, and those known from the interpretations of others (for which the source of the information is given), since it has been found that unfamiliarity with the subject has in the past frequently led to serious misinterpretations of the stamps in print, as well as in records and correspondence. This widespread lack of familiarity with the seals indicates the need for a detailed synthesis, which, it is hoped, the present work will go some way towards providing. A great number of unprovenanced alnagers', searchers', clothiers', dyers', packers', and other seals are not included, and none of the seals from textiles imported into Britain is considered here*.

The marginal reference numbers for the seals described are not continuous (see Appendix 1); they represent only the order in which the items were recorded. A few numbers include more than one seal of the same type recorded at the same time; these are designated (number) A, B, etc. About 75 seals from those numbered between 1 and 5,000 are designated in this way. Marginal numbers preceded by (?) refer to seals with incomplete stamps, which probably, but not definitely, belong to the group under discussion.

For details of the method of attachment of the seals to cloths, see Appendix 8.

* For interim statements on these categories, see Endrei & Egan 1982 (Appendix 9 in this thesis), and Egan 1985 (Appendix 8 in this thesis).
Conventions used in the descriptions are as follows:

The type of seal is defined by the number of parts it has on which devices can be stamped or (less-frequently) are cast. Parts can be of any of a variety of shapes, by far the most common being the disc. The order in which the parts are described takes that with the rivet on the back first, and the adjacent part next, and so on along the line in the case of a four-part seal, as indicated in figs. 2A and B.

(fig. 2A) terminology for two-disc seals

(fig. 2B) terminology for four-disc seals

(drawings N Griffiths)

// indicates next part
/
- indicates no stamp
( ) indicates probable legend etc. which cannot be established for certain.

A series of dots indicates that part of a legend cannot be read,
.. for one character,
... for two or more.
The thesis comprises a discussion of the development of the sealing of cloths in England, followed by a detailed synthesized description of medieval-style seals (generally those predating the 17th century), and synthesized discussions of the textile industry and of known seals county by county. The sections dealing with the historical background are derived almost entirely from secondary sources; they are intended to provide a basic historical context against which both the seals discussed in this thesis, and others (including subsequent finds), may be more fully understood. Although there are already several good accounts of local textile industries, these sections present the evidence with the different emphasis necessary for the present purposes. A concluding section considers the value of the information provided by the seals, and assesses how this archaeological evidence corresponds with the textile trade as known from historical sources. Possible directions for future work are considered. Appendix 1 is a detailed catalogue of the numbered seals, listing the information as recorded from each one (i.e. the data, in unsorted form, from which the synthesized discussions are derived), and the findspot and collection. Appendices 2 & 3 provide overviews, respectively in tables and in map form, of national cloth production in the late medieval and the early post-medieval periods. Appendix 4 is a discussion of the provenances and findspots of the recorded seals. Appendix 5 assesses the significance of a large group of seals from a 17th-century shipwreck. Appendix 6 provides documentary evidence which identifies some of the initials on Norfolk seals. Appendix 7 is a glossary of some technical terms. Appendix 8 reproduces a Datasheet (Egan, 1985), and Appendix 9 reproduces a jointly-written seminal article (Endreff & Egan 1982), both of which provide basic information on cloth seals in general. Appendix 10 gives examples of seal record cards.
Some stamps can only be reconstructed from several incompletely-registered seals; others are still unknown in their entirety. It has not proved possible to furnish illustrations of every stamp described, the time and expense involved being prohibitive. It is hoped that the illustrations selected for inclusion will be an adequate complement to the descriptions and to illustrations published elsewhere. Many of the seals not figured here are in public collections (see Appendix 1), and photographs of a large number in private collections are held at the Museum of London.

The writer is only too aware of how easily the soft medium of lead can become distorted, so as to render information on the stamps illegible or misleading. Hopefully the uniformity of approach brought by one researcher to a neglected subject will compensate for any personal blind spots, and the thesis will both serve as a work of reference, and prove to be a basis for future work. The subject matter is unusual in archaeological terms, in that the seals were documents, in most cases with a message intended to be readily understood at the place of application to the product and elsewhere in the course of trading. Other forms of documents and labels are well known from archaeological sources (Grace 1961, passim, dealing with stamps on amphorae, has several points of general correspondence, for example). It could, nevertheless, be claimed that there is no other category of find in this country that provides as extensive and detailed a picture of an industry of major importance, as do these leaden seals.

Note: All references to counties are to pre-1974 areas. No attempt has been made to incorporate earlier minor changes to county boundaries.

Cross references to numbered seals or groups may be followed up most easily by consulting Appendix I for pages on which each seal appears, or the Contents on pages 4-7 for major groups. Cross references to figures may be followed up by consulting the List of Figures on pages 8-9. All figures are at 1:1 unless stated.
The Sealing of Textiles in England

The evolution of textile sealing:

The manufacture of textiles in Britain in the Roman period is well attested (Salway 1984, 655-6; J.P. Wild 1970, 123-40 passim), but there is no evidence that any of the leaden seals from the period (e.g. Salway 531) has any connection with this industry (cf. Endrei & Egan 1982, 47).

It has been suggested that Charlemagne's complaint to King Offa in 795 that saga (usually for this date translated 'cloaks') traded from England had recently been shorter than was customary, here refers to cloths (the later meaning of saga), implying that some kind of standard dimension was already established (Grierson 1972, 7), but no evidence for marking in this context has been located.

The origin of the sealing of textiles with lead for trading purposes has been traced provisionally by Endrei to the Byzantine Empire's leaden custom seals of the 9th to the 11th centuries (Endrei & Egan 1982, 49-51, fig. 2). Though it is at present not certain that any of the known Byzantine seals were for textiles rather than for documents, those used by the vestiarion (the imperial storehouse in the 9th to 10th centuries of costly garments and cloths, among other items - Guillaud 1971, XVIII, 415) and by other institutions (cf. Lopez 1945, pl. IX, opp. p. 13), could perhaps include some attached to traded fabrics. A seal of 685-695 (now in the Dumbarton Oaks collection) used by a kommerkiarios - an overseer of merchandise in the warehouse at Constantinople - is one of several which have an impression on the back from a rather coarse fabric (Oikonomides 1985, 8, fig. 15, & 25). The imprints on these early single-disc seals are plausibly interpreted as coming from the sacking in which the goods were wrapped, rather than from traded textiles.

On present evidence, therefore, a distinction should be drawn between the fabric imprints on Byzantine seals, and those on the English multiple-disc seals.
as described in this thesis, since the marks on the latter definitely come from the individual cloth to which each seal was attached.

The tradition of regulation which led in England to the sealing of cloths probably began with the Assize of Measures of 1196 (Grierson 1972, 10-11), by which cloths were required to conform to a specified width, and to be of uniformly good quality throughout. In 1278 the earliest known fixed length for cloths was established, and in the next year two officers of the Crown were appointed to check by measuring that all cloths at fairs and markets conformed with the Assize before they could be sold (Heaton 1965, 126-7; Ramsay 1965, 52). These officials may not have been known as 'alnagers' until 1315 but their duties were very similar (see Hall 1930, 52-3 no. 23, cf. Endrei & Egan 1982, 55). The early emphasis on examining imported textiles gave way to concentration almost entirely on English products as the native industry developed during the 14th century. Cloths of inadequate standard were sometimes publicly destroyed at this time, as was the case with blankets made with cattle hair, which were burned at Cornhill in London in 1342 (Riley 1868, 212). For over four centuries, until 1724, when the alnage system ended (cf. Statute 11 & 12 Gul. III c. 20 (1700); Plummer 1934, 266), the alnagers were responsible for enforcing the current Assize of Cloth, and from at least 1353 (Statute 27 Ed. III st. 1 c. 4), for seeing that a subsidy at the rate of 4d per whole broadcloth ('cloth of Assize') or the equivalent, was paid by the weaver or clothier to the Crown (Bridbury 1982, 47-8; Perry 1945, 55). The 'marking' in some way of cloths by the alnager is mentioned as early as 1328 ('soient ričes' - Statute 2 Ed. III c. 14), and also in 1350-1 ('le seal Launeoy soit mys' - Statute 25 Ed. III st. 3 c. 1). The 1353 statute required the use of marks which showed the dimensions of the cloths, since specific dimensions were now abolished - 'les ričes quel riče home purra coinoistre combien le drap contient', and also to be sealed officially by the subsidy collector ('ensealez du seal du Coillour du subsid'). The marks giving dimensions could
perhaps have been of ink - there is no indication of a range of matrices, which would have been necessary to cater for different figures. The earliest seals for which matrices (no. 45A, cf. nos. 15 & 34) are known, may have been of wax (see below, on Medieval Seals), but lead ('seal du plumb') was used in London from at least 1380 (Sharpe 1907, 145-6). As well as alnage seals, weavers, clothworkers and fullers were to put their 'signes' on cloths to accord with Statute 13 Ric. II st. 1 c. 11 (1389-90) - again these could have been inked, or even sewn marks.

The most obvious records to be concerned with the workings of sealing are the alnage accounts. The medieval accounts have been criticized for their extreme inaccuracy - 'works of art rather than transcripts of fact', according to the researcher whose masterful exposure of extensive repetitions of the same data in some lists, and of other inaccuracies on the grand scale there, left these records beyond the pale of academic respectability for half a century (Carus-Wilson 1967, 279-91). The alnager Richard More, whose figures are demonstrably bogus, was responsible for subsidy collection and alnage in upwards of a dozen counties at various times in the late 15th century. The records actually exposed as greatly unreliable relate principally to the south and west of England, and to Yorkshire. It has recently been claimed that, while not giving specific figures credence, the surviving medieval alnage accounts can provide a useful general indication of where cloth manufacture was concentrated (Bridbury 1982, 48-52). The references to alnage records in the Historical Background sections of this thesis should be read in the light of these points.

The system in operation:

Cloths could apparently sometimes be sealed in centres other than where they were woven (Bridbury 1982, 73-4). Examination might take place before or after finishing. It was noted in the 1570s that a seal already attached to a cloth could produce holes during fulling (Lowe 1972, 92), while 'tickets' (?)seals)
on Kent cloths in the early 17th century indicated for the benefit of the customer the number of holes found in each - presumably after fulling (van Ufford 1983, 74). There were three searches for Colchester's cloths at this time - after weaving, after fulling, and after shearing or raising the nap; these searches added an extra 10d to the price of a 40/- cloth, but this degree of attention seems to have been exceptional (May 1971, 7 & 49). Cloths from many counties were taken white (i.e. undyed), with alnage and other seals attached, to London for dyeing, especially from the late 16th century to the early 18th century.

Narrow cloths and kersies were not included in the alnage system until 1393-4 (Statute 17 Ric. II c. 2), and some cheap cloths made for the poor were excluded until much later (Bridbury 1982, 53; Heaton 1965, 69). Legislation concerning textile manufacture was frequent in the period from the reigns of Edward IV to James I (Heaton 1965, 132), gradually bringing more kinds of textiles under the alnager's control, with modifications to existing laws and more-detailed specifications as the system developed. Statute 5 & 6 Ed. VI c. 6 of 1551-2 is particularly notable in this respect, giving the required lengths, breadths and weights of 22 types of woollen cloths, some woven only in particular counties, or towns and other areas, and others manufactured more widely. Several kinds of cloth which had not been mentioned in previous legislation were included (ibid. 135-6).

The new draperies were absorbed into the alnage system from the late 16th century (cf. N.J. Williams 1951-2, 353-8), though there was in some instances a time lag while the appropriateness of including particular newly-devised mixed fabrics was debated. The alnage was primarily concerned with woollens, and later with half woollens too, but most kinds of textiles were sealed for at least some time during the 15th to 18th centuries. Coarse hempen sailcloths (V.C.H. Suffolk 1907, 271), silks (Cross 1898, 239 & 241), fustians (Rememberancia 1878, 75, no. V 105 (1621); V.C.H. Lancashire
1908, 380), and even cloths-of-gold and other imported luxury fabrics (Statutes 12 Ed. IV c. 3 of 1472, and 4 Hen. VIII c. 6 of 1512) were sealed. Linen cloths do not seem always to have been marked in this way, though an official apparently sealed linens at Nottingham from 1511 (V.C.H. Nottinghamshire 1910, 346) and there is a hint in 1613 that others than alnage officers were at least examining the dimensions of these textiles (May 1971, 14).

The Royal Commission on the Clothing Industry in 1640 recommended that corporations in 60 towns in cloth-producing areas should undertake the quality monitoring of textiles, based on the system at Colchester (Thirsk & Cooper 1972, 246-52), but very little seems to have come about directly from these proposals (Plummer 1934, 12).

The alnage was neglected in some areas during the Interregnum, but was reassigned in 1664 to the Duke of Lennox (whose family had held the right to the farm since 1605) and passed to his widow on his death in 1672 (Heaton 1965, 178 & 242). In the last years of the 17th century, the system fell deeply into disrepute (cf. The Weavers Case on the Statute of Alnage; Endrei & Egan 1982, 72, note 121) under the corrupt administration of the agents of the Duchess, whose advisers had clearly combed the records, and were prepared to pursue every claim that could possibly be argued from historical precedent. In 1706, it was said that 'the attendance of the alnage officers is now become a nuisance and an oppression' (Plummer 1934, 265; cf. Endrei & Egan 1982, 57-8). Sealing was apparently abandoned at Norwich in 1705 (Corfield 1972, 282-4); in Yorkshire it was transferred to fulling mill owners and searchers in 1708 (Statute 7 Anne c. 13). In other places, such as at Witney, sealing seems to have lasted up the end of the alnage in 1724, though the London warehousemen ('packers') employed by the Witney blanket makers used seals as general trade labels for textiles (probably without any particular relevance to quality control) through much of the rest of the 18th century.
In Yorkshire regulation passed to Justices of the Peace and to searchers, the latest legislation to require sealing there being Statute 5 Geo. III c.51 in 1765. Similar arrangements were made elsewhere after the alnage ended. Seals were apparently still in use in the 1830s (Cuming 1862, 279), though State control, which was ultimately responsible for most of the seals considered in this thesis, had by then transferred its main concern in the textile industry from the quality of the product to the quality of life of the labour force (Heaton 1965, 124-5). Sealing was abolished by Statute 52 & 53 Vic. c. 24 (1889), which rescinded several Acts that were no longer effective.

Evasion and fraud were perennial problems for the alnage, and some of the officials could be over-zealous in their duties - not infrequently through greed for the fees. Some incidents which illustrate the kinds of difficulties the alnage system might face are given in the Historical Background sections (see below). The effectiveness of searching and sealing probably depended on the individual officers' inclinations and ability throughout the period of regulation, and perhaps particularly so in the later part, when State involvement was growing less marked. The observation that 'the alnage collectors appeared and disappeared in a totally unpredictable way' (Thirsk 1978, 63), was probably quite widely applicable (cf. Endrei & Egan 1982, 56). The contemporary critical accounts of the alnage system, with recommendations for improvements, by the alnagers John Leake in 1577 and John May in 1613 (see Tawney & Power III 1924, 210-25 & May 1971, passim), give details of widespread sharp practices and deceits on the part of the manufacturers. Even with the Bristol Book of Alnage from the 1480s (Carus-Wilson 1967, 290; G.D. Ramsay, pers comm.; not examined at first hand) and the description of sealing sailcloths in the late 16th century (V.C.H. Suffolk 1907, 271 - see Suffolk, Historical Background), there seems to be nothing like a detailed contemporary account of the day-to-day work of the alnager.
The searching and sealing system emphasised different aspects at different periods. Quality control was always at least a nominal consideration up to the end of the alnage, though collection of the subsidy seems to have become more important to the officers and their masters during the 16th and 17th centuries.

The weight of the cloths (i.e. the thickness of the fabric) was particularly emphasised in Statute 5 & 6 Ed. VI c. 6 of 1551-2 (Heaton 1965, 135-6; cf. the requirement that the weight should be put on seals in accordance with Statute 8 Eliz. 1 c. 12 of 1566). By the end of the 16th century the alnage was primarily fiscal in intent, with less attention beginning to be paid to the dimensions than previously (Heaton 1965, 177-8). Legislation concerning textiles subsequent to Statute 21 Jac. I c. 18 (1623-4) rarely included set dimensions (cf. Ramsay 1965, 101). The halfpenny fee for the alnager was also gradually falling into abeyance (Heaton 1965, 179). At the end of the 17th century, the subsidy and alnage rates were set according to the market value of the textiles (H.M.C. 1894, 43); this was governed for each cloth by the length. The seals were still useful 'to give [the cloths] a reputation abroad' and to act as tax receipts (ibid. 36-9). Stockings were sealed at this time according to the weight of the packs, not singly. The same was probably true for caps and other knitted wares liable at this time to the alnage (ibid. 36, 38 & 43; Thirsk 1973, 61-3; V.C.H. Yorkshire 1912, 413). The sealing of packs of 'all commodities' (sc. textiles) at Norwich in 1571 (Moens 1887, 257-8) and of bundles of blankets in Witney in the middle of the 17th century (Plummer 1934, 9), was also probably because these wares were individually too small to carry sufficient subsidy to warrant a seal each. In the reign of James I one exported cloth in five could be counted for customs purposes as a wrapper for the other four (Heaton 1965, 170-1). In these senses packs might be sealed, but since the seals were for textiles in every case, the term 'bale seal', which is occasionally used in archaeological circles for these objects, is highly misleading and probably erroneous (cf. Endrei & Egan 1982, 73, note 154; Egan 1985, 4).
Even when cloths had been properly sealed, the seals could simply drop off. This seems to have been particularly true for the flimsy fabrics of Norwich. An instance in which 1000 seals were claimed to have dropped off in a shop was cited in the late 17th century (H.M.C. 1894, 37-8). It is suspected that a large portion of the seals found in the Thames at London (see Appendices 1 & 4) may have dropped off textiles accidently during the finishing processes of shearing, dyeing, and possibly fulling, in riverside workshops.

The minute individual scrutiny and attendant cumbersome bureaucracy required for each textile may have worked effectively in most cases when manufacture was on a relatively small scale, but with increased production in the post-medieval period it was found impracticable even to sustain policing of the alnagers and searchers themselves. The full system would in theory have required all of the hundred thousand or more cloths that were marketed in London in some years to have been unpacked, immersed in water for four hours to induce any shrinkage from excessive tentering to occur, then to have been dried, perhaps resealed if there were discrepancies between measurements taken in the capital and any on provincial seals, and finally repacked for export or retail. Many of the pieces were in excess of 30 yards in length, causing severe logistical problems if any such treatment was to be contemplated for large numbers of them (cf. Heaton 1965, 181-2 & 409; Ramsay 1965, 57; and see London, Historical Background). A declaration signed by the clothier attesting the goodness of textiles (particularly if traded over long distances) was sometimes provided in the late 16th century to avoid this kind of problem, but the use of such documents was abolished by Statute 43 Eliz. 1 c. 10 of 1601 (Ramsay 1965, 50).

There are several references to alnagers or their agents simply handing over seals to the weavers or clothiers without examination of the textiles, for the price of the subsidy and alnage. It was then up to the owner to fix the seals on his cloths. While this practice can be attributed to lapses on the part of
individual officers in the 16th and 17th centuries (cf. Moens 1887, 75; Ramsay 1965, 52-3), by the early 18th century it seems to have become absorbed into the system. It was apparently quite acceptable in 1706 for a clothier to purchase thousands of alnage seals at a time (Atkinson 1956, 52, letter 140; Heaton 1965, 242; V.C.H. Yorkshire 1912, 418). The high feeling that could be generated in exchanges between a zealous alnager and unwilling clothiers is illustrated at its extreme by the killing of Thomas Neuton in Somerset in the early 13th century (V.C.H. Somerset 1911, 409), and, with a less serious result, by the ducking of Antony Wither in the River Avon in the 1630s (Ramsay 1965, 92) - both men were alnagers trying to carry out their duties. The other side of the coin was that merchants abroad, trading cloths which they thought were of good quality, could be 'in danger to be slain', if the goods turned out to be inadequate because quality control had failed - this danger was a reality for some traders in the late 14th century, see Statute 13 Ric. II st. 1 c. 11 (1389-90). Direct action was sometimes taken by alnage authorities in pursuit of textiles which were already en route to the customer, if they were suspected not to have been properly sealed (e.g. Thirsk 1973, 61; Lowe 1972, 91-2; Heaton 1965, 180-1; H.M.C. 1894, 38 & 42).

Despite the failings in the system, which documentary evidence tends to emphasise, the recorded seals illustrate the great amount of effort put, during many working lives, into this aspect of quality control of what became the principal traded commodity of the nation for much of the period under discussion.

The seals

The range of information:

It is possible to trace several themes through the recorded seals. There is a gradual increase in information given on the stamps about provenance, specifications, kind of fabric, and date, reaching a high point in the late 16th and 17th centuries, and then a decrease from perhaps the 1680s onwards. This
trend is apparent in the use of similar stamps in which only the placename changes (the 'county series') in the late medieval period, and the subsequent diversity in shapes and types of seals, and in designs for the stamps, during the 17th century. There is a close correspondence between some of the designs for alnage seal stamps and those for contemporary coins. The imprints from fabrics on the inside surfaces of the seals indicate relatively coarse plain-woven woollen fabrics (cf. fig. 32) in the late medieval period and through most of the 16th century, and subsequently a greater diversity in fineness and type of weave, as cheap, mixed fabrics ('new draperies') were developed in the post-medieval period. There are hints of deceit from apparent counterfeit seals, and from others with designs seemingly based on those for fabrics which had won good reputations. Special seals began to be used for sub-standard cloths from the end of the medieval period. Large-sized seals and other types new in England were introduced by immigrants in the late 16th century, and subsequently some of these innovations were diffused among the native English.

Chronological developments:

What follows is a highly condensed account of the development of the seals and their stamps, based on the examples included in this thesis. A much fuller treatment is given in the following sections on medieval and county seals, and see also Conclusions section.

The late 13th- or probably 14th-century matrices, which provide the earliest known designs for alnage seals (fig. 3A & B), have a facing king's head and read simply 'seal of subsidy of cloths' without giving a provenance; as on virtually all medieval seals the legend is in abbreviated Latin. The design appears to be based on that of coins of the time. The diameters of the matrices are c. 27 mm.
All known late medieval seals are of the two-disc type, usually with disc diameters of c. 20 to 25 mm and with one rivet (fig. 2A). The legends are almost all in Lombardic lettering. Apart from seals for London (the devices for which seem always to have differed markedly from those for elsewhere), late medieval seals had stamps with the same (or very similar) main devices for several different counties; only the place-name was changed in the usual legend 'seal of alnage/subsidy of saleable cloths in the county of ...'. The most common devices are a crown over an ornately-shaped shield with the arms of the realm on one side, and a leopard's head, or crowned sun, rose or fleur de lis (alone or in combinations) on the other side (figs. 4-9, 56 & 59). So far, only the series with a rose & sun dimidiated and conjoined (from the late 15th century) seems closely datable. A secure chronological framework is still needed for the 15th and early 16th centuries.

London seals are the most reliably-dated for the early period. Late 14th-century city seals (the only identified English ones from earlier than the 15th century) have the haloed head of St. Paul, and no legend (fig. 38). They are apparently alone among medieval seals from this country in having diameters of c. 15 mm, and two rivets. London seals of the early 15th century have the head of St. Paul together with a sword on one stamp, and a crown on the other, with legends in Roman lettering (fig. 39A & B). Those of slightly later date (perhaps in use into the early 16th century) have more elaborate versions of the same devices, with Lombardic lettering, and omit the sword (fig. 40A-C). Seals with the arms of Bristol are the only others of medieval date known which are specifically for a city or town.

Seals with an elaborate, bulbous Lombardic-letter 'F' were used from 1464 for faulty cloths (fig. 10A). Slightly different versions, with a thinner, crowned 'F', are probably of early 16th-century date (fig. 10B); these apparently omit any reference to place of origin.
The provenance of seals with a king enthroned on one stamp, and the arms of England on the other, and which include 'Henricus' (for Henry VII or VIII) in the legend (fig. 11), is unknown.

County seals in the early Tudor period may have continued to use the stamps described above, though a few have a plainer-shaped shield. Kent seals attributable to the reign of Henry VIII have only one stamp, with a crown over rose (fig. 31A). The design is similar to that on coins of this reign (fig. 31B). This seems to be the only instance from earlier than the 17th century of a separate design for a particular county. A probable county series of seals with the crowned arms of England and ER (for Edward VI), together with the date 1553 on one stamp, and a county name around a central letter or letters on the other, are the earliest dated group on which Roman lettering appears (figs. 12 & 51).

The most common later 16th-century county stamps have a crown over a portcullis, with Lombardic- or Roman-letter legends (fig. 13A & B). The other side sometimes has Roman numerals for the weight in pounds of the cloth, or an alnage-officer's privy mark. The portcullis stamp often appears alone. This series may well have originated in the early 16th century, but its precise relationship with the 1553 seals has still to be determined.

Probably from the late 16th century are seals with Latin legends, in Roman letter, for towns; stamps for Guildford (fig. 55), Ipswich (fig. 54), Tiverton (fig. 17), and perhaps Bridgewater (no. 1298) and Coventry (no. 3175) are known. London seals with dates in the 1560s and 1570s have the city arms on one side, and the arms of England on the other (fig. 42A). Early Stuart seals for the capital are similar, but have the arms of Britain in place of those of England.

Corporation seals with two discs, sometimes over 60 mm in diameter, and usually with two rivets, and one-part seals of round or of rectangular shape, were used by communities of immigrants from the Low Countries on their 'new
draperies' in Essex, Norwich and Sandwich from the late 16th century onwards. A large variety of such seals used by the Dutch community at Colchester has been recorded (figs. 23-27). Large-diameter seals may have continued in use here into the early 18th century. In the 17th century the native English community at Colchester and individual clothiers in the other north Essex towns followed the immigrants in using seals with large-diameter discs (fig. 28A & B). Taunton clothiers also used large-diameter two-disc seals for their serges during the 17th century, but there is no obvious direct link between these and the large seals used by the immigrant communities elsewhere.

From the reign of James I is a county series of seals with a crown-over-thistle design on one side, and often the weight of the cloth in pounds on the other (cf. fig. 36A & B). Like all subsequent seals, the lettering is in Roman style, while the numerals are (apparently for the first time in specifications) in Arabic style.

County-alnage seals became more complicated with a series stamped with a county name and '1611' around a central letter (fig. 14). Accompanying stamps include some with '1610' or '1611' over the arms of Britain, though several other designs are known. The series includes both two-disc seals and the earliest dated and provenanced seals of the four-disc type (cf. fig. 2B). From the 1610s onwards the use of four-part alnage seals was adopted in most counties, though Norfolk and perhaps Lancashire and Worcestershire seem to have retained the two-disc type into the post-Restoration period. Most four-disc alnage seals subsequent to the innovative 1610/1611 series have discs of c. 15 mm in diameter (slightly smaller than is usual for the two-disc type). Four-disc seals of this smaller size were the norm until the end of the alnage in 1724. There is considerable variety in the designs for the stamps and in the shapes of the parts (lozenge, square, scalloped and 'star', as well as round) up to c. 1682. Heraldic devices (frequently, though by no means exclusively
elements of the arms of Britain) rarely have their usual specific significance on four-part seals - thus a harp appears on stamps which are nothing to do with Ireland, a thistle is used on several counties' seals, and fleurs de lis do not indicate a French origin. All three devices appear on Devon seals, for example (see nos. 2644, 239 & 4640). A rose which has nothing to do with the Tudor dynasty appears on several 17th-century seals (e.g. nos. 200 etc. from the same county). A number of inter-county administrative connections are evident in similar designs and in the initials of the same alnager on stamps for more than one county (usually in the same part of the country). There are distinctive series of seals in the west of England (Devon etc.) in the 1670s (fig. 15A-C), and there are connections in the designs of stamps for Essex and Kent in the early 17th century, and Essex and Suffolk later on, for example. Many four-part seals (like a number of the two-part type) have 'searched' (i.e. examined), and figures for pounds weight and sometimes yards length on the outer parts, stamped (in theory) by the local alnage officer after measurement (cf. Egan 1985, 3 fig. 13a & b). The inner parts were probably in most cases stamped in batches at a central office before delivery to the local officers (cf. Thirsk & Cooper 1972, 249, and Endrei & Egan 1982, 63 for four-part seals).

The seals of Norfolk, which were all of the two-disc type up to the 1680s, are extremely complicated, since there were separate series for Dutch and for Walloon immigrants (fig. 49A & B), as well as for different groups among the English. Some of these series had a new stamp each year. Many of the seals have the arms of Norwich (fig. 45) or the city name (fig. 47); seals for the county have an adapted version of Norwich arms. Norfolk seals are often smaller than those of other counties - an expedient to cater for the comparatively flimsy 'Norwich stuffs' (cf. H.M.C. 1894, 37). Seals with stamps reading 'too short' (fig. 46) or 'too narrow' for deficient Norfolk textiles are known in some numbers.
London seals from at least as early as the reign of Charles I have four discs, with the arms of London, and an angel as the integrally-cast main devices on the large-diameter inner discs (fig. 43). The surfaces of these discs are sometimes gilded, probably to make the seals stand out at the market.

The Commonwealth arms appear on some of the four-disc alnage seals of the Interregnum (e.g. Baart 1977, 119 no. 72), and others probably from this period have a cross (? of St. George) alone (fig. 53). Post-Restoration alnage seals often have the head of the reigning monarch - the same, or a closely similar head was apparently used in the reigns of Charles II, James II and William III (the 'Charles II-type head' - cf. Endrei & Egan 1982, 63, fig. 10A, & Egan 1985, 3 fig. 14A). The subsidy tax is often given in pence (frequently in multiples of 1½d) on late 17th-and early 18th-century seals. The amount of tax paid may have begun to be given in the 1640s (e.g. on Gloucestershire seal no. 1777). By the reigns of Anne and George I the only provenanced alnage seals are for Colchester (fig. 22). The depiction of the monarch's head in the 18th century is very close to that on the coinage. After 1724 (when the alnage ended) most seals have stamps on which the legends, in neat, regular letters, are the main devices. Dimensions of cloths are sometimes scratched on unstamped discs - this practice seems to be more frequent on later seals. The great majority of post-alnage seals are of the two-disc type, though four-disc seals are also known. Provenanced examples are mainly from Yorkshire, but seals for Crediton in Devon from the early 19th century have been recorded. Seals of this date for Leeds have the town arms as the device (fig. 61). Other manufacturing towns in addition to those specified on late seals presumably also continued to use this method of marking, but the focus of label information had moved from the location of manufacture to the name of the manufacturer, and very few 19th-century stamps provide a place-name.
Medieval Seals

Most medieval seals were very incompletely struck, but some matrices, which are fully legible, are also known. With the exception of a few London seals, they all have Lombardic-letter legends, a style which was apparently widely in use until the end of Elizabeth I's reign. Few of these seals or matrices can be dated accurately, but a number of groups and possible groups can be defined. Many of the legends are abbreviated versions of 'sigillum ulnagii/subsidii (or subcidii) pannorum venalium in...' ('seal of alnage/subsidy of saleable cloths in...'). The references to alnage and to subsidy appear on different sides of some seals. The subsidy on cloths apparently began in 1353 (Statute 27 Ed. III c. 4); none of the recorded matrices or seals is definitely earlier than this. The earliest noted documentary reference to sealing in lead is from 1380, for London (Sharpe 1907, 145-6). The crown-over-portcullis series of seals refers in the stamps only to the alnage * - these seals are probably all (or virtually all) of 16th-century date; they include apparently the latest examples having Lombardic-letter legends.

Contemporary medieval references to devices on seal stamps are very few. Statute 11 Hen. IV c. 6 (1409-10) required a 'novel' seal eliant signe & miche diffrentz de launcien seal' when there was a tightening-up of control of the assize in the west of England. It was not clear what the new device was, or whether it was to be used throughout the country, or just in the west.

* There are only a very few references to the subsidy on 17th-century seals, and none from the 18th century.
Dimensions were not explicitly required to be included on seals until the reign of Henry VIII (e.g. Statute 25 Hen. VIII c. 18 of 1533-4), though a probable late 15th - century sun-and-rose dimidiated-and-conjoined seal (no. 3614) has numerals which may be a specification (cf. Statute 8 Ed. IV c. 1 of 1468).

Statute 1 Ric. III c. 8 (1483-4) specified the use of seals with the arms of the town where the cloth was examined to be on one side, and the arms of England on the other side. No seal corresponding precisely to this description is known, but some probable late-medieval Bristol seals, and some early 16th - century London ones *, have the respective cities' arms. These two places had been mentioned together when they were required to retain the use of lead seals (while wax was used elsewhere) by Statute 8 Ed. IV c. 1 (1468).

The seals with a sun and rose dimidiated and conjoined (nos. 1129 etc., below) may, by analogy with the use of this device on coins, date between 1471 and 1490 (cf. North 1975, 74, 79 & 81). It is possible that seals with separate sun-and-rose devices could date from the same period, though this is by no means certain. It has been claimed (Dawson 1979, 61) that a rose (a common motif on seals - see e.g. nos. 3000 and 3049, where it appears to be the main device) indicates a date in the reigns of the Yorkist kings (i.e. 1471-85). It cannot be considered a reliable indicator in this way, since roses appear on many 16th - and 17th - century seals.

* London seals usually had devices which were completely distinct from those of county seals.
Further well-dated examples of virtually all types of medieval seals are required before a reliable chronological framework can be established.

**Seals with a king's head:**

Although no actual English cloth seals can be shown to predate the last quarter of the 14th century, a matrix, and modern and ancient impressions in wax from two others, provide evidence for what is probably an earlier series. The matrices had diameters of c. 26 mm - larger than those of most recorded seals of medieval date.

The devices are:

- **45A** crowned king's head facing, (initial device) S:SVBSIDII PANNORVM (rounded letters, somewhat simpler in style than later Lombardic) around (see fig. 3A, below)

- **45B** Number 45A (from which no. 45B, a modern impression, was taken) is a copper-alloy matrix with a tapering spike for fixture on the back. The initial device here is a star (or sun) with curved rays. The matrix has been published (Tonnochy 1952, 11 & pl. IV, no. 29; cf. Egan 1985, 1 fig. 1).

- **34, 44** Two modern impressions from a lost matrix have an initial device that appears to be a raspberry (?or bunch of grapes) (Birch 1887, 141, nos. 1060 & 1061). These were probably taken from a matrix published in 1740 (Lewis 1740, 6 & frontispiece no. 5); see fig. 3B, below.

- **15** An ancient red wax seal attached to a document which records the transfer of ownership of a property in Monmouth has the
impression of a similar stamp (with an illegible initial device which differs from the other two). The owner of the property, John Brugge, was apparently using the matrix as his personal seal, since he used the standard formula *sigillum meum apposui* in the document. The deed is dated 1380, providing a probable terminus ante quem for the series, since it is highly improbable that an official tax seal would have been used personally while still valid for its original purpose, though Monmouth could have been a centre for sealing cloth at an early date (Jenkins 1969, 100 & 104-5). Tonnochy (1952) dates matrix no. 45A to the reign of Edward I, while Lewis (1740) and Birch (1887) make the same attribution for the matrix for nos. 34 & 44.

(fig. 3)
king's head, S iSVBSIDII: PANNORVM

A) cf. no. 45A (drawing N Griffiths)
B) from Lewis 1740, no. 5. The details of the crown are probably erroneously depicted

There is indeed a close similarity between the king's head of these subsidy seals and those on pennies from the reigns of Edward I issued from 1279 (North 1975, pl. 1), and Edward II from 1307-27 (e.g. Oman 1931, pl. XVIII no. 6). The coins of subsequent monarchs include part of the shoulders with the head, and in this respect differ from the version for the seals. The crown on no. 45A (the only matrix of this group available for examination) and on the modern impressions (no. 44, cf. no. 34),
has double-lobed terminals (see fig. 3A). The crown on the matrix for no. 44 was depicted by Lewis in 1740 (see fig. 3B) with triple-lobed terminals at the sides of the crown, as on the coins of Edward I, but in contrast with the double-lobed terminals of Edward II's coins (Oman 1931, 167). The detail in the 18th-century depiction is presumably a mistake. Different types of initial crosses, perhaps comparable with the differing initial marks on the matrices, appear on coins from Edward I's reign onwards (North 1975, 20). All this might seem to point towards the reign of Edward II, or possibly that of Edward I, for the group of matrices, were it not for the claim (Perry 1945, 55; Bridbury 1982, 47) that the subsidy of cloth (as opposed to the alnage) was instituted in 1353 by Statute 27 Ed. VIII c. 4. No earlier reference to the cloth subsidy has been located. In the present state of knowledge, it is safer provisionally to assign the matrices to the period 1353-80, but not entirely to discount the stylistic affinities in the period 1279-1327, which presumably led Birch (1887), Lewis (1740) and Tonnochy (1952) to their conclusions *. The point cannot be further resolved at present.

What is clear, is that these matrices, with their comparatively simple legends (which, in contrast to most later medieval examples, make no reference to a place of origin) are the earliest English series for which direct evidence is known.

* The late 13th - or early 14th - century date ascribed to the matrices (Egan 1985, 1) was based on the stylistic parallels, together with the opinions of the above three scholars, and may be erroneous.
The seals from these matrices could have been of wax, which would militate against survival in the archaeological record. The relatively large diameters (26 mm) might have been considered more appropriate for wax than for lead, or the possibility of using lead may not have occurred to the authorities until a later date - the earliest recorded lead seals for cloths (nos. 5747 & 6511, see below) have stamps with diameters of only c. 15 mm - though seal diameters seem soon to have increased.

Wax was certainly used for some later alnage and subsidy seals. Statute 8 Ed. IV c. 1 (1468) required wax seals ('empressez en cere') on both ends of certain cloths, instead of one seal of lead, and Statute 17 Ed. IV c. 5 (1477) also mentioned their use (cf. Chope 1912, 589). In 1511-12 Statute 3 Hen. VIII c. 6 required that wax should not be used for alnage seals; this may have been a provision against a lingering tradition, or it may have been in response to a practice that had recently arisen.

A matrix with a broadly similar device, though in a much cruder style than that of the above versions, specifies Southampton:

crowned king's head facing, feather with scroll to each side,
SVBSIDIVM: PANNORVM: SVThTS (Lombardic letter) around

This matrix has been published as dating to the reign of Edward III (Tonnochy 1952, 12, no. 32), presumably because more of the king's bust is included (as on coins from this reign until almost the end of the 15th century, cf. Oman 1931, 240). This matrix may well date to the 14th or early 15th century, but there seems no reason to assign it to any particular reign within this period. The addition of a place-name may imply an increased emphasis on detailed records, and hence a later date than for the series above. (See also under Hampshire, Southampton Seal.)
Seals with a leopard's head:

A matrix for Suffolk, and a seal and second matrix for Bristol with this device are known. All have Lombardic lettering. The Suffolk matrix has a leopard's head over a fleur de lis in a two-arched tressure, SIVLNAGIPANNORxINCOM'SVFF; around (recorded from secondary sources - see fig. 4).

The Bristol matrix has a crowned leopard's head with the tongue out, in a six-arched tressure, SIVLNAGIIxPANNORVIxINx BRISTOLLIAx around, and the seal has the arms of Bristol, (SxIVLNA)... around ///(leopard's) head over a fleur de lis in an arched tressure, ...(N)O(RViL)N... around. (There are fuller descriptions under the respective county headings.)

(fig. 4) matrix with leopard's head for alnage in Suffolk (from Proceedings of the Society of Antiquaries 1861, 228)

There appear to be at least two, if not three, different styles here, so these devices were not necessarily contemporary, despite the basically similar design. The Suffolk matrix has been dated to the mid 14th century (Pigot 1863, 14-15), though this is based on a dubious symbolic interpretation of the heraldry. The distinctive form of 'F' (similar to that in 'F' for 'faulty' seals - see below) makes a late 15th - or early 16th - century date more likely. The Bristol arms on no. 1128A
may connect this seal with the stipulation in Statute I Ric. III c. 8 (1483–4) that town arms should be on one side of alnage seals, though the arms of England were supposed to be on the other; (see Bristol seal no. 704, which has a different second stamp, but could be of the type referred to). Further evidence is needed before seals with the leopard's head can be dated reliably or assessed in greater detail.

Seals with a crown over sun, fleur de lis and rose:

These have Lombardic-letter legends:

2282, 3113, 5758

crown over the three devices (the rose and sun appear in either order to the sides of the fleur), ..Cl(DII PA)... (i.e. 'subsidy of cloths') around (cf. Egan 1985, 1 fig. 5a)

One seal from this series (no. 5758) is for a faulty cloth, and has an ornate bulbous 'F' on the second stamp (ibid. fig. 5c). This provides the main clue to the date - presumably late 15th century (see on 'F' for 'faulty' seals, below).

(fig. 5) crown over rose, fleur de lis & sun (cf. no.5758)
(drawing E Rigby)
Seals with a crown over a rose:

3000, 3049  Seals with a crown over a rose (apparently the complete main device) have S'SV...PANNOR\^ IN COM ... (Lombardic letter) around this device.

No. 3049 is a Sussex seal, and no. 3000 has an ornate bulbous 'F' for 'faulty' on the other stamp. These too are presumably of late 15th-century date - see on Seals with 'F' for faulty cloths, below. These crown-over-rose seals probably represent another county series. The design differs from the Kent series (nos. 1335 etc.) in that the rose occupies a smaller part of the design on them than it does on these present seals.

(fig. 6) crown over rose (cf. nos. 3000 & 3049)  
(drawing E Rigby)
Seals with a crown over a fleur de lis:

These are known only from matrices. The legends are in Lombardic letter. The device appears in slightly different borders:

- in a six-arched tressure, S'SVBSIDII PANNOR IN COM ESSEX around (Suckling 1848, 292-3 & pl. no. 7) - see fig. 7 below; in an eight-arched tressure, S'SVBSIDII PANNORV IN COM CANTE around, suggested to be of 14th-century date (Tonnochy 1952, 11, no. 30); in a two-arched tressure, S'SVBCIDII PANNORV IN COM EBORV around, known only from an 18th-century depiction (Gardner 1754, pl. 1, no. 12 - see fig. 59). These are also discussed under the respective counties (q.v.).

(fig. 7) matrix for subsidy in Essex

![Matrix](drawing Norfolk Museums Service) (no. 3500, from Suckling 1848)
Seals with a crown over sun and rose dimidiated and conjoined:

Seals with this main device have the arms of England, or the arms of Bristol on the other side (the legends are in Lombardic letter):

1129, (?)4672
crown over arms of England in ornately-shaped shield, rose to each side, S VLNAGII PANN(ORV)...// crown over sun and rose dimidiated and conjoined, S VLN(A)G...IN COM'... (cf. fig. 8A)
No. 1129 is a Worcestershire seal.

704
ship issuant from a (?) port in a tower (arms of Bristol), D...C)(M B)... around // crown over sun and rose dimidiated and conjoined, ...COM... around
This seal could be from a series with town arms, as stipulated in Statute 1 Ric. III c. 8 (1483-4), though the seals described there were supposed to have the arms of England on the other side (cf. Bristol seal no. 1128A).
The sun and rose dimidiated and conjoined appears on coins of 1471-90 (North 1975, 74, 79 & 81).

(fig. 8) sun & rose dimidiated & conjoined
(drawings N Griffiths)

A) cf. nos. 1129 & 4672; B) possibly a contemporary counterfeit (no. 3614)
One seal has a very crude version of this device:

III/// (crown) over sun and rose dimidiated and conjoined (see fig. 8B).

The nine (apparently complete) seems too little to be a length in yards. It may refer to the weight in pounds of a very small cloth (some 16th-century pieces weighed only 8 pounds - cf. Devon, Historical Background), or it could be a width in quarter yards (though no statutory requirement for seals to give this information has been noted prior to the 16th century - e.g. Statute 25 Hen. VIII c. 18 of 1533-34, see on Worcestershire, Historical Background and Seals). The crudeness of the device here, especially in comparison with the two above seals, may indicate that it is a contemporary counterfeit.

**Seals with other crowned devices:**

Two seals in this broad category cannot be ascribed to any of the above groups (the legends are in Lombardic letter):

1412 crown over arms of England in ornately-shaped shield, (?) sun (or sun and rose dimidiated and conjoined) to left, VL...
PA(NN)OR'VE(N)A(L)'I... around /// rose, sun and (?) flag with cross (presumably of St. George)

If the device on the first disc is a sun and rose conjoined, a date between 1471-90 is probable (see above, on Seals with a crown over sun and rose dimidiated and conjoined).

3051 crown over arms of England in ornately-shaped shield, rose to left, sun to right, S VLNA... (A)NTC... around /// crown over sun to right, illegible device to left

This could perhaps be another seal with crown over sun, fleur de lis and rose (see this group, above), though only two devices (?) rose and sun) can be made out.
Seals with a crown as the central device:

In each case the crown is in a six-arched treasure. The legends are in Lombardic letter.

A copper-alloy matrix with this device has S'SVBSIDII-
PANNORV:IN COMITATV:LINCOLN around the treasure. It has been published as dating to the 15th century (Tonnochy 1952, 11, no. 31), though there is no reason for it not to be from the early part of the next century.

The device is analogous with that on some London seals (nos. 371 etc.), on which the surrounding legend is S'SVBSIDII-
(PANNORV; INCIVITATE:LINON) and the other side has the head of St. Paul and the same legend. The London seals appear to date from the 15th - and possibly the early 16th century. (See also under Lincoln and London Seals and fig. 40C.)

The above series of seals with various crowned devices may each have been in use throughout the country for a time, or some may have been contemporary with others, current in different areas. On present evidence, only those with a dimidiated and conjoined sun and rose are assignable to a specific period. This series, and the seals with a leopard's head, refer to the alnage, while the others refer to the subsidy, though whether there is any further significance to this point is not known.
Incomplete seals with the arms of England:

3155, 4728 These cannot be attributed to any of the specific series described above (again the legends are in Lombardic letter):

4671, 7195 crown over arms of England in ornately-shaped shield, sun to right and rose to left, SVBCIDII (or ....SIDII) PANNO(R)' IN COM...

No. 7195, which is from a mid- to late 15th-century context, has been published (Shiel 1984, 253 & 369 pl. 3, A1. The part of the legend interpreted by Shiel as ANPAR reads 'II PAN').

No. 4671 could possibly be a Kent seal (see under Kent Seals).

59A A matrix with a similar device (but with a lance-rest recess in the top of the shield) has slightly different abbreviations (see under Wiltshire Seals, fig. 56).

969 Another has ...(LN)A(GLII) around a crown over the arms of England in an ornately-shaped shield on one side, and a crown over an illegible device on the other.

3059, 3138 Two London seals have a sword to each side of the national arms. No. 3059 has a sun to the right and an illegible device to the left on the other disc (see under London Seals).

(fig. 9) London stamp with crown over the arms of England, sword to each side (cf. nos. 3059 & 3138) (drawing P Crossman)
Seals with an ornate 'F', for faulty cloths:

The significance of the device on these seals is made clear by Statute 4 Ed. IV c. 1 (1464) - 'F' is an abbreviation for 'faulty'. Several of these seals, from a number of different stamps, have been recorded. The long stroke on the right of the letter F makes it look more like an 'R' to present-day eyes, but comparison with 'FRA' in the legends of many late-medieval and early 16th-century coins (e.g. Oman 1931, pl. XXVI no. 1) confirms that it is an F.

One group has:

649, 1729, 1923, 2191
bulbous F, sun and rose to sides (sometimes the rose is to the right, sometimes to the left), S.SVBCI...PANNOR' IN COM... around // crown over arms of England in ornately-shaped shield, rose and sun to sides, rose S'SVBCIDII PANN(O)... around (Lombardic letter)

No. 2191 is possibly a Somerset seal.

1921
A variant has roses to both sides of the arms, with ...L(N)II PAO (Lombardic letter) around, and further types have a crown over rose, or a crown over a rose, fleur de lis and sun (Egan 1985, 1, fig. 5a & c), as the main devices on the other sides from the F.

No. 5758 is a Suffolk seal (see fig. 10A below).

These are presumably the equivalents for faulty cloths, of seals from some of the series with crowned devices described above.

No. 1923 has been published as dating to the reign of Richard III, but this is based on a misinterpretation of the letter F as a royal initial R. The pottery from the deposit in which it was found is dated to 1500-30 (Dawson 1979, 52 fig. 12, 54 & 61, no. 232).
The seals with rose-and-sun devices (nos. 649 etc.) may date from 1471 - 1490 (see on Medieval Seals, above). Another seal with only the bulbous F legible on one side has no stamp on the other disc.

A) bulbous F (cf. nos. 649 etc.)  
(drawing N Griffiths)  
B) thin F with crown & FAVTI  
(no. 3432) (drawing S Meyer)

Several stamps have a thinner version of the F, with a crown above:

2277, 2709  
3374, 4941

crown over F, fleur de lis to each side, (AO) (Lombardic letter) around //-

The legend presumably refers to cloths.

Further examples have: illegible letters (? initials of the alnager) to the sides of the F; and an inverted lion passant to the left (cf. the lions on the obverse of noble coins of the 14th and 15th century - e.g. North 1975, pl. II nos. 5, 11, 15 & 21 - though these may be somewhat earlier than the group of seals); the lion device could possibly be from a single re-used element of a coin die. Another seal has no legible devices to the sides of the F, but ...O(?R):FAVTI. (Lombardic letter) around - i.e. [seal for] faulty [cloths] (see fig. 10B).
As well as the 1464 Statute (see above), Statute 5 & 6 Ed. VI c. 6 (1551-2) required a seal of lead with an F to be put on each end of faulty dyed cloths (along with a printed letter F an inch high alongside the fault), and Statute 4 & 5 Phil. & M. c. 5 (1557-8) required a seal of lead with 'faulty' in full (no seal corresponding with this latter type has been recorded). The series of seals with the crown over F may have been used into the first half of the 16th century, and perhaps later in view of the legislation from the 1550s. The same thinner type of F appears in the legend of at least one crown-over-portcullis stamp (no. 523 - a Suffolk seal, see below), providing possible confirmation for the suggested sequence of bulbous- to thinner F stamps. Further finds are needed to clarify dating, and the number of variants of the series. On present evidence, none of the seals with a crown over the F gives a provenance.

Seals depicting a king enthroned:

Two types are known (the legends are in Lombardic letter). The first has:

king facing, seated on throne and holding sword and sceptre, arms of England on his tunic, ...CVSx[REX]...(ORVMx) around //crown over shield with arms of England, all in a multiple-arched tressure, ...C... around (see fig. 11, below)

Nos. 468 & 1336 have been published (respectively Endreff & Egan 1982, 59, fig. 7a, & Boon 1966, 106-7). The legends may be
abbreviations of *Henricus rex Anglorum*. Comparison with the similar (though not identical) legends on coins of Henry VII and VIII (e.g. Oman 1931, pl. XXIV nos. 6 & 8, pl. XXV, & pl. XXVI nos. 1 & 5) does not point to the reign of one monarch in preference to the other's for these seals, Henry VIII being depicted beardless on coins until almost the end of his reign. Cf. also crown-over-portcullis seal no. 1738, which has 'HENR' in the legend.

(fig. 11) king enthroned (no. 468)  
(from Endrei & Egan 1982, fig. 7a)

These are the only seals in medieval style with national (as opposed to county) references in the legends. Their place of origin in England is unknown. No contemporary reference which might illuminate their particular function has been located.

The second type has:

king facing, seated on throne, wearing mantle and holding sceptre and (?)orb), Lombardic-letter H to right, all under canopy with pointed arch, (illegible legend around) // privy mark

The privy mark is probably that of an alnager. The mantle makes this version closer to the design of the 'sovereign' pennies of the two Henries (Oman 1931, pl. XXV no. 5, & pl. XXVI no. 5) than the stamps of the type described above.

* 'Rex' is read by Boon on no. 1336, though the present writer did not see this; deterioration of the metal may have occurred. A motif like an 'H' below the seated king on this seal is interpreted by the same writer as the letter, but Roman script is a most unlikely partner for the Lombardic-letter legend, and the device is probably part of the underneath of the throne. Boon's published illustration depicts the king holding a shield with the arms in front of his body - this too is a misinterpretation.
Possible 1553 County Group

Several seals with the arms of Tudor England may constitute a series of seals similar to that of 1610-11 (see below), though very few have complete stamps, and only one (no. 750) has the date legible. The basic devices seem to be:

157, 676 crown over arms of Tudor England, E R/1 5/5 3 to sides// control letter or letters, COM’... around (cf. Egan 1985, 2, fig. 8)

This type of second stamp is only certain on a Somerset seal:

750 : 8:, COM'(S)OMERSET around (Roman letter)

(fig. 12) Tudor arms and ER 1553 (drawing N Griffiths)
Cf. fig. 51 for stamp on other disc.

4801 A Gloucestershire seal with DC, ..LOCESTE.. around is definitely dated to the sides of the arms, but only one numeral survives.

A second Gloucestershire seal has a different stamp:

136 G, + COM·GLOCEST... around, with an incomplete stamp with the arms of Tudor England on the other disc. More complete examples of both types are needed to clarify whether one or both are of the suggested 1553 group.

4011 A sub-rectangular ('spade'-shaped) seal cast with set dimensions X..II(I)/(X)XII (cf. Yorkshire no. 4772) also has a very similar, but incomplete stamp with the Tudor arms, having (E) R to the sides
at the middle of the shield (leaving no room for a date here). This shows that there was more than one type of stamp with the arms and ER. Here too further complete examples may clarify the groupings. On present evidence, it seems likely that there was a '1553' county group, and that there were other 'ER' seals with the national arms, possibly from the reign of Elizabeth I.

The 1553 stamp is the earliest one known with a date, and the earliest attributable one on which Roman lettering appears. The style of the arms and of the Arabic numbers for the date (particularly the 5, with its sharp angle and sloping top stroke) are very similar to those on coins of Mary and Elizabeth I, though Arabic numerals in an identical, angular style were not used for that medium until 1554 * (Oman 1931, pl. XXX no. 1). It seems that the engravers for the Mint may have tried out this new style on alnage-seal dies in the year before it began to be used on the coinage. (See on Kent crown-over-rose seals for a possible similar anticipation of elements of coin design by alnage-seal stamps, and cf. Challis 1978, 42-3 for the engravers to the Mint working on alnage-seal dies.)

* The earlier Arabic-numeral dates (on coins of the early 1550s) are in a more curving style akin to pen writing (North 1975, pl. V no. 53).
Crown-over-Portcullis Series of County Seals

190, 1222, (?1527, 1716, 2089, 3006, 3146, 3240, 4844, 4913, 4943

This group is one of the largest recorded. The basic design is: crown over chained portcullis (usually with a lattice of 3 X 3 squares - cf. Girling 1964, 112, fifth row, at left) with various abbreviations, usually for 'sigillum ulnagii pannorum venalium in comitatu...' (seal of alnage of saleable cloths in the count of...) in Lombardic letters. Stamps with Roman-letter legends have ER to the sides of a portcullis with a lattice of 3 X 3, 4 X 3, or 4 X 4 squares (cf. Girling ibid., 112, fifth row, at right) and an abbreviated version of 'sigillum pro comitatu...' (seal for the county of...).

(Lombardic) 260, 337, 376, 377, 470, 661, 736, 1024, 1329, 1330, 1540, 1665, 1763, 3005, 3110, 3934, 4855

(Roman) 837, 2383, 2822, 2926, 3129, 4373, 4725, 4985 (for Lombardic-letter legends) 5'VLN'PAO'VEAL'I CO'...;
(for Roman-letter legends) 5..PRO•COMITA...

(fig. 13)

A) Devon portcullis seal with Lombardic-letter legend (no. 1598) (drawing J Pearson)

B) Worcestershire portcullis seal with Roman-letter legend & ER (double-struck) (no. 456)

C) cruder portcullis and no edge stamp (cf. nos. 2325 etc.) (drawing N Griffiths)
No. 3934 has been published (Spencer 1985, 48, fig. 30, & 51, no. 85).

No portcullis seal is known with a reference to the subsidy.

While several of these seals have no stamp on the other disc, privy marks and specifications are known here on some examples; (pounds weight were required on Lancashire portcullis seals by Statute 8 Eliz. I c. 12 of 1566, though no actual example has been recorded from that county).

Counties represented by seals with Lombardic-letter legends 1598, 1629, (?) 2464, (?) 4306; 2433, 3144, (?) 4064; 1762; 507, 523; 2284, 4033; 4772 are: Devon (cf. Egan 1985, 2, fig. 9 - see fig. 13A above); Kent (no. 3144 is to be published - Egan forthcoming A); Oxfordshire; Suffolk (no. 523 is also to be published - Egan forthcoming B); (?) Worcestershire (no. 4033, with R/ to the side, is the only recorded Lombardic-letter portcullis seal apparently to have royal initials); and Yorkshire (the portcullis stamp is secondary on a 'spade'-shaped seal). No. 2262 could perhaps read COV... for -'Coventry', but the preceding 'CO' suggests this is a county seal; it may well be another Devon example.

Counties represented by seals with Roman-letter legends are 3308 Counties represented by seals with Roman-letter legends are 456, 1690 Somerset and Worcestershire (see fig. 13B above).

One seal with a portcullis stamp has on the other disc a crown over the arms of England, illegible device to left, "HENR... (Lombardic letter) around. This Henry VII or VIII seal (cf. the seals with a king enthroned) is the earliest attributable one from the portcullis series. There are some other indications of dates for the series. No. 523 has the same style of 'F' as on seals for faulty cloths (q.v.) and may therefore also be an early
representative of the present series (antedating no. 507 from the same county, which seems to have the open form of F).

Five of the seals with Lombardic lettering have a fleur de lis at the start of the legends. If this fleur can be compared directly with mintmarks on coins - since the engravers of matrices for the seals may also have worked on the dies for coins (cf. Challis 1978, 42-3) - it may indicate a date between 1554 & 1560 (cf. North 1975, 105 & 108), though a fleur mark is also known on coins of some earlier reigns.

Another seal has a crown over a large 'E' (on the other disc from the portcullis stamp), either for Edward VI or Elizabeth I (Girling 1964, 112, at bottom). Portcullis seals are mentioned (see above) in legislation of 1566, and one example (with E to the left of the portcullis) is apparently dated 1567 in the edge legend.

The other seals with ER (nos. 456 etc., above) are probably also from Elizabeth's reign - though the use of Roman lettering on coins, when first introduced, was current with that of Lombardic style for some time. The date when the portcullis series of seals went out of use has still to be determined. They may have continued into the early years of the reign of James I.

Other letters (apart from the royal initials) recorded to the sides of the portcullis are SR and CW. These may be the initials of alnagers (cf. Kent's 16th-century seals with a crown over a rose).

Various stamps with privy marks and initials, for the alnager, searcher, clothier and possibly finisher (see no. 3308) have been recorded, usually on the other disc from that with the portcullis.
Several of the marks are highly stylized. Initials can be read on others: (? )GA; TA; R(? )B; ..G; G..; (?).S. (on a Kent seal). SR appears in incuse on one seal, and another has a secondary stamp with .. H to the sides of a teasel — possibly indicating the person who raised the nap (see under Somerset county seals). Two seals appear to have 'T' to the right of a crudely-engraved crown on the other disc from that with the portcullis; (no. 2854 is probably dated 1567 — see above).

Further examples have Roman numerals apparently from VII to XLIII, probably for the cloths' weights in pounds (cf. 1566 legislation, above) on the other side from the stamps with the portcullis.

One portcullis seal has an edge legend apparently reading *THE(SOL)*E...G(H)A(RN)... (Lombardic letter). This does not correspond with the usual formula; it cannot at present be interpreted.

Another seal which probably belongs to this portcullis series (though the device is not very clear) is still attached to a scrap of coarse woollen cloth; (see Kent no. 1335 for another seal still having a fragment of cloth attached — fig. 32).

Further seals have various stamps for which the engraving of the portcullis was crudely-executed (see fig. 13C, above).

None of these stamps appears to have an edge legend. Numbers 193, 2842 & 4981 definitely omit it. Most have Roman numerals on the other disc, presumably for the weights of the cloths (see above): (incomplete) •XV (no. 193); XXVI (nos. 2813, 2842 & 2878); (retrograde) IIVXX (no. 4981); XXX (no. 119). Number 2645 has an illegible device here, which possibly includes specifications. The crudeness of the engraving for these stamps
contrasts markedly with that for the ones which do include legends (see above), and seems inconsistent with die production under the authority of the Mint (cf. Challis 1978, 42-3). These present seals may be contemporary counterfeits, used to avoid the quality control procedures, and (perhaps more importantly) the subsidy and alnage payments. The three similar examples with XXVI were probably all stamped by the same pair of dies; they were all found in London, where wholesale deception might have been relatively easily achieved among the large number of transactions on the complex city markets. Even where (presumably genuine) portcullis seals had edge legends, few stamps registered fully. Those on which the place of origin is legible, seem, on present evidence, to have been in the minority. It appears that advantage was taken of this weakness in the sealing system. A further seal with a possible portcullis stamp, which lacks an edge legend (and has scratches on the other disc) was found in Copenhagen. It may be of English origin, or it could perhaps be a continental counterfeit, put on a cloth woven in mainland Europe, in an attempt to pass it off as an English product. The attribution to the portcullis series (even in the suggested circumstances) is not certain, because of the difficulty of interpreting the stamp.

Portcullis stamps of different types are known on some larger-diameter Norwich seals (q.v. – cf. fig. 48B), as well as on some later four-part alnage seals.
Crown-over-Thistle, and 1610-11 Series of Seals

Seals with stamps of both series were used during the reign of James I; they apparently replaced the crown-over-portcullis stamps (see above).

The basic device of the thistle series (probably the earlier of the two) is a crown over a thistle, IR to sides, COM'... around (cf. fig. 36A).

Two-disc seals with this stamp are known for: (?) Herefordshire (no. 2513); Lancashire (nos. 2696 etc.) - similar seals with C R, presumably for Charles I, are also known from here; Norfolk (nos. 3312 etc.); Worcestershire (no. 4058); Yorkshire (nos. 740 etc.); probable Buckinghamshire seal no. 3938 (see below) has a 1611 stamp on the other disc. (Peterborough no. 2200, though having a quite similar device, is not of this series.)

The 1610-11 stamps form a complicated series. The basic devices are a central letter, 1611 around top, COM'... around //arms of Stuart Britain with a crown, 1610 or 1611 above.

(fig.14) 1610-11 series stamp for Somerset (cf. nos. 2085 etc.) (drawing N Griffiths)

These stamps appear on two-disc seals, and on the inner discs of four-part seals, which sometimes have SER/CHED/1611, + AVLNEGER + around, usually on an outer disc; the '1611'
sometimes appears as part of the edge legend. Various other stamps are known accompanying these ones (or some of them), on four-disc seals. This 1610-11 series seems to mark the transition to the four-part type of seal for several counties. The stamps are known on two-disc seals of Buckinghamshire (no. 585 - cf. nos. 3938 and 2823), possibly Devon (no. 227), Worcestershire (nos. 435 etc.), and on four-disc seals of Essex (no. 5545), Somerset (nos. 2085 etc. - on no. 1893 an accompanying stamp is dated 1613), and Wiltshire (no. 1300), while Yorkshire no. 1757 (like no. 2085) has a 'serched 1611 aulneger' stamp on an outer disc.

The later county series of seals are generally more complicated, with a number of design connections between different counties, and there are also a great many designs which were apparently unique to one county. At present these later seals are probably most readily comprehensible under county headings, with appropriate cross references (see below).
Berkshire, Historical Background

Berkshire was included with Oxfordshire in the 14th-century alnage returns (Bridbury 1982, 114). By the late 15th century the county was apparently capable of producing over 1,200 cloths of assize per year. Kersies and broadcloths, manufactured especially in the Kennet Valley, were exported in some numbers to the continent in the late medieval period (Edler 1936-7, 57-62; Heaton 1965, 85 & 88; Ramsay 1957, 19 & 36; P Ramsay 1972, 50; Zins 1972, 162). Berkshire kersies (along with those of other counties) were excepted by Statute 33 Hen. VIII c.18 (1541-2) from the specifications for length and breadth that had been required by Statute 27 Hen. VIII c. 12 (1535-6), since it had proved very difficult to manufacture these textiles to the set dimensions. The main reason was apparently the uneven shrinkage of the coarse wool when wetted. Newbury, Abingdon and Reading were the county's principal cloth towns in the early 16th century (Ponting 1971, 22). Reading cloths had to be between 28 and 30 yards long, and to weigh at least 90 pounds according to Statute 5 & 6 Ed. VI c. 6 (1551-2).

There was a marked decline in the production of traditional textiles in the post-medieval period (Chalklin 1965, 116 & 122; Ponting 1971, 32; Ramsay 1982, 16). In 1640 the Royal Commission on the Clothing Industry suggested Newbury and Reading should be the centres of administration of textile quality regulation in the county (Thirsk & Cooper 1972, 249). As elsewhere, nothing specific seems to have come of these proposals (cf. Plummer and Early 1969, 18-9), and by the early 1680s there were very few clothiers still active in Reading (Mann 1971, 27). The average annual profit on subsidy and alnage in the late 1680s for Berkshire was £130, levied on broadcloths, kersies and serges (H.M.C. 1894, 42). Shalloons for linings were woven in Reading in the early 18th century (Ponting 1971, 151; cf. Ramsay 1982, 17).
Berkshire Seal

An inner disc of a four-part seal has been recorded:

4102 TD, ền : BERKS: around

This TD could be the alnager whose initials appear on Hampshire seal no. 1383, which may be dated 1669. The administrative grouping under the alnage system that such a connection would imply for these adjoining counties requires further evidence before it can be regarded as certain.
Buckinghamshire, Historical Background

Buckinghamshire's textile industry was not of great importance - 'the cloth trade never assumed very large proportions in the county, but a certain amount of weaving... was done, presumably for local use' (V.C.H. Buckinghamshire 1908, 128-9, referring to the 17th century; cf. Heaton 1965, 85-6 for low production here in the late 15th century). Buckinghamshire is not mentioned by the Royal Commission on the Clothing Industry's report in 1640 (Thirsk & Cooper 1972, 246-52), though in the late 1680s an annual average profit of £30 was made on the subsidy and alnage of the county's kersies (H.M.C. 1894, 42).

Buckinghamshire Seals

Only one seal, of the two-disc type, has the county name sufficiently legible to be certain:

585 A '1611' around top, (C)OM!BUCKIN(GHAM...) around // arms of Stuart Britain, ..61.. above (this date could be either 1610 or 1611 - cf. Wiltshire no. 1300 and Worcestershire no. 596). Number 585 has been published (Egan 1978A, 671 & pl. IX no. 1a & b).

(?)2823 A similar but less-complete stamp as the first on no. 585, and with ..ER/HED,..(L)NE(G)... around on the second disc (cf. no. 817) could be another seal for the county, though a four-disc seal (no. 5545) also with a 1611 A stamp has ESSEX, making attribution for no. 2823 difficult. (See fig. 14 for a similar 1611 stamp.)
Another seal with an incomplete 1611 A stamp has a thistle, (I) R to sides, (CO)M:... (the first letters are probably BV...*) around on the other disc.

The survival of one definite county seal (no. 585) and a probable second one (no. 3938) from the reign of James I, indicates that some commercial cloth production took place there at that date, while the discovery of at least the former seal in London shows that there was also a certain amount of trade beyond the county of origin.

* 'SV'...for Suffolk or Sussex are less likely alternatives.
**Cheshire, Historical Background**

There was an industry producing 'cottons' (i.e. a long-napped woollen cloth) during the 16th century in Cheshire (Tawney & Power II 1924, 191-2; Lowe 1972, 66). It was laid down by Statute 5 & 6 Ed. VI c.6 (1551-2) that Cheshire cottons were to weigh at least 30 pounds. Provision for half cloths was made in Statute 4 & 5 Phil. & M. c. 5 (1557-8). The county is not mentioned in the Royal Commission's report on the clothing industry in 1640 (Thirsk & Cooper 1972, 249-50). There was some attempt to manufacture new-style worsteds in Chester in the 17th century (Allison 1961, 77). Linen * was said to have been 'lately a considerable manufacture' in the county, though 'now in a manner expired' in 1680 (V.C.H. Lancashire 1908, 379).

**Cheshire Seal**

Part of a probable Cheshire seal, apparently the inner discs of a four-part alnage seal, has been recorded. On one side crudely-executed devices appear to have been integrally cast:

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1251

1251 crown over portcullis // XXX/III
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On the other sides of the discs are stamped devices:

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crown over rose, A^..HESHIRE around // portcullis
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* Linens do not seem to have been widely sealed in England - see The Sealing of Textiles in England: The system in operation, above.
The missing letter on the former stamped disc can hardly be other than a C, though the significance of the initial A is not clear (?control letter). Presumably a pro-forma cast seal having the set dimensions of a particular type of cloth (? cf. weight of 30 pounds in the 1551-2 Statute) has here been used as a blank for striking with different information (see Suffolk nos. 766 & 2093 for other seals with cast devices, which have been used as blanks for stamping). This crown-over-rose design places the seal in the reign of James I (cf. Essex no. 5545 and Devon, Tiverton fig. 18).
Devon and Cornwall alnage figures are given together for the 14th century (Bridbury 1982, 114). A deputy alnager was appointed for the counties by the middle of the century (Chope 1912, 572), and Exeter apparently had a separate officer in 1394 (ibid. 575). False sealing was investigated in Devon on several occasions towards the end of the century. In 1399 there were 16 seals for the Devon alnager (presumably pairs of matrices for each side of eight seals). This may be compared with the annual average (between the years 1394 and 1398) of 1,464 cloths of assize examined by the alnager in the county - though the lists from which this information is extrapolated may not be accurate (cf. Carus-Wilson 1967, 279-80 & 285-7 especially). In the mid 15th century Devon had 12 brass matrices, six for alnage and six for subsidy (Bridbury 1982, 114; Chope 1912, 583-4) - cf. the legends referring to these institutions on the respective sides of some recorded late-medieval seals (e.g. London nos. 1379 etc.).

The main types of textiles woven in Devon up to the 17th century were woollens, known as dozens, straits and kersies. These names, referring respectively to the length in yards, the width, and the fabric, do not seem to have been mutually exclusive; dozens were in origin 12 yards long (ibid. 576), and though they were very coarse, they could be superior to straits. Kersies ('Devonshire dozens') were exported from Exeter and Tiverton from the 1430s, and there was an expansion in this trade between 1480 and 1520, with exports reaching over ten thousand cloths per year (Youings 1968, 2).

Tiverton and Totnes were centres of textile production in the 16th century; 'Totnes whites' became a main product of the latter (Ponting 1972, 242). Dimensions and weights for kersies, sometimes specified as Devonshire kersies, are given in several 16th- and 17th-century Statutes, notably 5 & 6
Ed. VI c. 6 (1551-2), by which they were to be between 12 and 13 yards long and to weigh at least 14 pounds. The changing requirements for most types varied from 11 to 24 yards length, and 13 to 32½ pounds weight, the overall trend being an increase in size and a relative decrease in weight over the period. A kind of strait woven in both Devon and Cornwall, and known as a Tavistock type (cf. the 'Tostocks' mentioned in Statute 6 Hen. VIII c. 9 of 1514-5) was required by Statute 7 Ed. VI c. 9 of 1552-3 to weigh a minimum of only 8 pounds. Statute 27 Eliz. I c. 18 (1584-5) removed the specifications required by previous legislation for straits of Devon and Cornwall made for export.

Statute 35 Eliz. I c. 10 (1592-3) attempted to reform abuses in the manufacture of Devon kersies and dozens (cf. Youings 1968, 38). The alnager John May complained in 1613 that Devon kersies 12 yards in length were stretched by up to 3 yards, and that this type of cloth was being imitated in Yorkshire and sold abroad as the genuine Devon product (May 1971, 29 & 32-3; Chope 1912, 592-4). Kersies were the main textiles woven in the county until the Restoration (Hoskins 1935, 40); they continued to be manufactured in Tiverton until 1710 (ibid. 16). In 1640 a Royal Commission suggested that Exeter, Tiverton, Totnes, Barnstaple, Kirton and Tavistock were suitable towns to be centres of control of the textile industry for the county (Thirsk & Cooper 1972, 249).

Though some serges were woven in Devon from at least the 16th century (Kerridge 1972, 25), the later, heavier types, which were counted among the new draperies and known (because of their durability) as 'perpetuanas', rose to prominence during the 17th century. The main manufacturing area straddled south Somerset and north Devon. Serges were an important export from Exeter by 1618 (Ponting 1971, 32, & 1972, 242; cf. Youings 1968, 3). Tiverton was a manufacturing centre and the base of a number of clothiers, while the finishing processes and trade (including for cloths woven at Taunton in
Somerset) came to be concentrated in Exeter. Prior to 1660 export directly from Exeter was on a modest scale, and mainly to France, but in the 1680s just under 120,000 serges were exported annually, and by 1700 the proportion of the nation's textile exports passing through this port is estimated at between a quarter and a third (Youings 1968, 87 & 91; Hoskins 1935, 30; Ponting 1971, 21, & 1972, 242). The average annual profit on subsidy and alnage on Devon cloths in the late 1680s was £1,500 (the largest total for any single county), levied on broadcloths, bays and serges. Bays of Barnstaple paid 2d each (H.M.C. 1894, 42-3). Devon serges held their position from c. 1688 to 1715 as the single most important branch of the English woollen trade (Hoskins 1935, 39). Towards the end of the 17th century Celia Fiennes was much impressed by the scale of Exeter's finishing industries. By 1700 finishing had increased here still further (ibid. 37). According to Defoe, some 100,000 serges (with an estimated value of between £60,000 and £100,000) were sold in some weeks in the city in the early 18th century - these figures are probably exaggerated (ibid. 43-4). The industry was centred in Exeter, Tiverton, Bampton, Sandford and Crediton, and the main foreign markets at this time were in the Netherlands, Iberia and Italy (ibid. 40; Ponting 1971, 151), supplementing established outlets in the Baltic, and (via London) in France (Youings 1968, 87-8). From a peak at the start of the 18th century, Exeter's textile trade perhaps halved between 1710 and 1730, as that of Norwich expanded. Serge workers in Devon received low wages as a part of the drive to undercut this rival trade (Hoskins 1935, 74-5). Tiverton (which had produced worsted serges from c. 1690) tried to gear its industry to new demands by manufacturing finer 'cloth serges' in the 1720s. Although by 1745 Exeter's woollen exports were at half the level they had been in 1700, they still made up over 10% of the national total. From about this time Tiverton's textiles were supplanted in the Netherlands by those of Norwich (ibid. 41 & 75; Youings 1968, 88 & 167). The period between 1748 and 1793 (during which trade to the continent was not
interrupted by major wars) was a time of recovery in the serge trade, with exports rising to double the totals of 1745. In 1750, with serge exports worth £400,000 per annum, the principal markets abroad were in Italy and Germany, and while the Netherlands trade was past its peak, that to Iberia was increasing. Thirty years later exports to Italy and Spain had risen substantially, while those to Germany had much declined. Trade to Flanders fell off in the 1790s (Hoskins 1935, 78-80). The final collapse of the large-scale serge trade was occasioned by wars on the continent in Europe and with America at the end of the century. The minor Portuguese market for the serges woven in rural areas, and known as 'long ells', continued into the early 1800s. Long ells were exported by the United East India Company to China - an outlet which had been developing since c. 1750, and which expanded particularly from 1792, with trade peaking in 1803-7. Though the long ells actually made a loss (while the camlets and broadcloths which went with them showed a profit), this remote market prolonged Devon's textile trade by about half a century. The end finally came with the opening up of the previously restricted Chinese market in 1833 (Ibid. 81-4 & 86; Seward 1972, 36 & 41).

Devon Seals

The earliest recorded Devon seals are of the two-disc type, and probably date from the late 16th century. They have:

1598, 1629, 2464, 4306 crown over portcullis, Lombardic-letter legends around (at least two versions *)

* No. 1629 reads PAO and no. 1598 reads PANO.
The most complete example (no. 1598 - see fig. 13A) reads
SVL(N)AG' PANO' VENAL! I' COM' D(EVO)', with a fleur de lis as
initial mark (cf. Egan 1985, 2 fig. 9). If this initial mark was
used in the same way as those on coins, it probably indicates that
the die for this stamp was cut between 1554 & 1560
(cf. North 1975, 105 & 108, and see on Crown-over-Portcullis
Seals).

(?)2262, 3005 Further crown-over-portcullis seals may also be from Devon. A
crudely-engraved VII (the lowest complete dimension recorded on
an alnage seal) on the other stamp of no. 2262 could be for a
very low-weight textile. Cf. the Tavistock-type cloths required
by Statute 7 Ed. VI c. 9 (1552-3) to weigh a minimum of eight
pounds. It is possible that the seal is from a lighter cloth of this
type, though no reference to allowance by the alnagers of such a
deviation has been noted. In the next century some Suffolk
cloths weighed only five pounds (Pilgrim 1959, 45).

Similar in design to stamps of the 1610-11 group are those on an
incomplete two-part seal:

227 C, ...(E)VON* around // arms of Stuart Britain

The earliest datable four-disc seal is for the alnager NB:

594 NB ,...ER•CH... [i.e. 'searched'] around // NB, ...6:DE:VEN
around // crown over fleur de lis, (1)6 18 to sides//-

If the 6 on the second disc is correct, it may be part of '1616' (cf.
Somerset no. 1893 and Worcestershire no. 596 for inconsistent
dates on the same seal). The alnager NB is also known on
Dorset, Gloucestershire, Somerset and Wiltshire seals (nos. 244,
593, 383, 3332 etc.), which include at least two (nos. 244 & 593)
from the reign of Charles I (i.e. 1625 or later).
Probably dated (16)64 are:

-//CO:/DEVON/64(?6)//crown over fleur de lis/-

These all have discs, which (at 11mm or less in diameter) were too small to accommodate the first of the stamps in its entirety. Nos. 4641 & 3078 (below) may have a number after the 4, and Nøel-Hume (pers. comm.) has four examples which he believes may be dated 1646. The relative commonness of these stamps could suggest their use for some years prior to the PW/WP series of (?) 1664 onwards (see nos. 6537 etc. for Exeter, cf. no. 2840 below). No. 2423 has the inner discs clipped parallel with the connecting strip. Other seals with a similar stamp on the second disc have a crown over harp on the third disc - this variation may have been to distinguish seals for different types of cloth (cf. Suffolk nos. 1901 & 2668 etc.).

Three incomplete seals cannot be ascribed to either group.

There is an annually-changing series of seals from the 1670s and early 1680s:

493 (inner disc) */72/**, D·E·V·O·N around top (i.e. 1672)

1648 (missing) // crown in triple border // * / 76, DEVON around top // - (i.e. 1676)

332 (inner disc only) * /-77*, DEVON around top // two (?) unicorns supporting coronet with three plumes through (i.e. 1677)

1246 (illegible scratches) //*/79, DEVON around top // (missing) // (missing) (i.e. 1679)

1255, 4029, (?110)

-//*81*,DEVON* around top // lion couchant on inverted portcullis, 8 1 to sides // - (i.e. 1681)

Number 4029 has W (incomplete) on the fourth disc - cf. the WP/PW mark on no. 2840 following.
An inner disc with a broadly similar design has √,D (1) /I (2) to sides, (D)...ON * around base.

By comparison with Exeter no. 6537 this is a county seal of the alnager WP/PW for 1½d subsidy. The Exeter example is dated 1664; the same alnager appears on seals dated up to 1676.

Also from this series is an inner disc with:

√,DEVON around top.

See also the corresponding Exeter series, and the similar seals from Somerset and Wiltshire (nos. 734 and 1623 etc.).

Undated seals:

-/-// crown over rose, DENSHERE around //-

The rose stamps on these seals are analogous with those for other counties which appear on seals of the 1610-11 group (see Essex no. 5545). No. 4480A is closed with the searcher's/ alnager's mark, no. 4788 has a possible R & L ligature (perhaps for one of the Dukes of Lennox or Richmond who held the national alnage contract) on a secondary stamp, and nos. 201 & 2994 are closed with ...ON stamps (i.e. DEVON or EXON) - cf. no. 1709 listed under Exeter. Similar seals are also known for Tiverton (see fig. 17, below) and Totnes.

-/-// crown over fleur de lis, I R to sides//DE/VON

(missing) // (missing) // crown over thistle, I R to sides //DE/...N

* enough of the first letter survives to establish that this stamp reads 'DEVON' not 'EXON'
Similar seals are known for Exeter. This crown-over-thistle stamp differs from that on seals with:

239, 883

(missing) // (missing) // crown over thistle, IR to sides

*DENSHERE* around //-

These seals probably date from the reign of James I rather than from the briefer reign of James II.

3955

No. 3955, an incomplete seal with DE/VON on the fourth disc, may be the same as one of the preceding types.

Also possibly a James I seal (since no. 947 is from an excavated group which seems to date from that period) are:

947, 1879, 1890

-// ✯,*✯CO.. DEVON around // arms of Stuart Britain, ✯ to each side //-

No. 1890 is closed with a (S)EAR/(CHED) stamp on the fourth disc.

Having the ligature of the alnager SL or LS are:

331, 723

-// £ ,DEVON IOB around // (missing) // (missing)

The IOB probably means 1 1/4d (obolus = 1/4d). The same alnager is known on Exeter, Dorset and Hampshire seals (nos. 48, 1370; 4097; 1401, 2413).

(?) 405

A stamp on the second disc of an incomplete four-part seal has T ,...SHEIR around, and may be from Devon or Hampshire.

This alnager TP/PT is also known on Essex and Kent seals of Charles I or II - (for dating see Kent Seals, nos. 1449 etc.).
Devon, Crediton Seals

Two probable clothiers' four-disc seals are known:

3162, 4519 -//8 (? offstruck stamp) // arc over CREDITON, FULFORDS around top, MANUFACTURERS around base //-

The 8 on no. 4519 is presumably an incomplete dimension, probably the length of the cloth in yards. This seal is from a group which includes United-East-India-Company seals dated 1803-7, found in a drain in Southwark. These two Crediton seals are presumably of late 18th- or early 19th-century date. No. 4519 was probably originally on a cloth destined to be traded to the East - possibly to China (see Devon, Historical Background). The firm of Fulfords has not been traced. These are among the latest seals to have a place-name.

Devon, Exeter Seals

Several 17th-century seals are from the finishing centre of Exeter.

The earliest dated stamps are on incomplete four-part alnage seals (inner discs):

6537, (7) 1993

$\mathcal{V}_6$, 4/D 1/1 2 to sides, EXON around base
(i.e. 1664, 1½d subsidy)

The alnager WP/PW's seals follow on chronologically:

1243, 1962

(missing) // $\mathcal{V}$, EXON** around base / crown/ ** / two crowns/65//- (i.e. 1665).

4104

(inner disc) $\mathcal{V}$, 68, (E)X ON around (i.e. 1668)
2987, 4849 -#/71, #EXON# around top // two beasts (?) lions supporting (?) coronet // (i.e. 1671)

Another was found in s'Hertogenbosch (Janssen 1983, 266-7, no. 91a & b).

271, 3578 -#/\b\b, EXON around top // two lions passant, crown above, 7 2 to sides// (i.e. 1672)

1929 -#/7•3/ two flowers, E•X:O•U around top// (missing)//- (i.e. 1673)

This is presumably the 1673 Exeter seal published last century (Cuming 1862, 279).

411, 568 -#/7•74/7•70, 7EXON7 around top // three harps // (missing) (i.e. 1674) The inner parts are 'star'-shaped on no. 568, but round on no. 411. This variation may be for different types of cloth (cf. Suffolk nos. 1901 & 2668, etc.).

1253 -#/7•5, 7EXON7 around top // crown in triple border//- (i.e. 1675) Here too the inner parts are 'star'-shaped. See fig. 15A & B, below.

1091, 1252, 2086, 2849, 4719A-D (i.e. 1676) See fig. 15A & B, below. The inner parts of these seals are square. Nos. 1091 & 1252 are closed with √ stamps, and no. 2086 has a different (illegible) privy mark, probably that of a searcher.

12, 662, 1928, 4117 -#/7•77•, EXON around top // two unicorns supporting a coronet with three plumes through //- (i.e. 1677)

The inner parts here are square and the outer parts are round (cf. Egan 1985, 3 fig. 15 a & b). No. 1928 is presumably the 1677 Exeter seal published in the last century (Cuming 1862, 279). See fig. 15C, below.
A) EXON (Exeter), (1675 & (1676 (nos. 1253 & 1252)

B) crowns

C) EXON (1677, unicorns supporting coronet with plumes (drawing N Griffiths)

1646, 4103 -//\* /78, * EXON\* around top// (missing) // - (i.e. 1678) *

4355 -//\* /79, EXON around top // (missing) // (missing) (i.e. 1679)

290, 1257, (? 2145, 2714, 3386, 3389, 4699 coronet, 80 below// - (i.e. 1680)

Nos. 3386 & 4699 could be 'Devon' seals.

2156, 3382A&B, 3686 -//\* /81, • EXON• around top// lion couchant on inverted portcullis// - (i.e. 1681)

3388 An inner disc from an incomplete seal, having 7.. /\* • E•X•O•N around top, is presumably from 1670, since this is the only date in the decade otherwise unrepresented in this series.

392 An undated seal with the alnager WP/PW's mark has:

-//\* , EXON around top // three fleurs de lis// *

The number of seals from this series recorded for Exeter is almost six times the number for Devon (35 compared with 6), reflecting the prominence of Exeter in these dozen years (1670-81) as the county's principal finishing centre (see Historical Background, above) - and also as the centre for for sealing.

* No. 1646 may omit the asterisks to each side of the city's name.
Post-Restoration undated seals have:

4173, 4717, 4718 -// Charles II-type head, OF ENG LAND around // crown, 1½ above // EX/(O)N

These may have been used under Charles II, James II, or William III, since the head appears elsewhere with stamps for all three kings between 1660 and 1702.

From the reign of James I or James II are:

133, 187, 440, 1148, 1492, 1891 (illegible stamps or scratches) // -// crown over thistle, I R to sides // EX-/ON.

Nos. 133, 1148 & 1492 have the N of 'Exon' reversed, and no. 1891 has a scratched W on the second disc. A similar seal (no. 2998, q.v.) has a 'DEVON' closing stamp - here too the Exeter examples are more common (six recorded, compared with the one for Devon).

833, 1709, 4831 (offstruck stamps) // -// crown over rose, DENSHERE around, // EX-/ON

No. 2994 could be closed with an incomplete 'Devon' (not otherwise recorded) or an 'Exon' stamp. It, and similar seals without a stamp on the fourth disc are listed under Devon. The rose stamp can be paralleled on seals from other counties which also have stamps of the 1610-11 group (e.g. Essex no. 5545).

800 -// -// crowned lion rampant, I (R) to sides // ..X/..N

3387, (? ) 3743 Two seals lacking the defining third disc could be of any of the above three types.

Undated seals for the alnager SL or LS are:

48, 1370 -// £ , EXON IOB around // (missing) // (incomplete stamp)

These stamps are paralleled by Devon, Dorset and Hampshire ones (q.v.). The IOB probably means 1½d subsidy (obolus = ½d).
The ligature indicates that these are seals for one of the Dukes of Lennox and Richmond, who held the contract for the farm of alnage from 1605 to 1724. Cf. Essex nos. 2174 etc. and fig. 20, Somerset no. 2989, & Suffolk nos. 2361 etc.

(fig. 16) rose; coronet over L & R ligature for Dukes of Lennox & Richmond (no. 762)

In addition to the above alnage seals, two types of slightly larger four-disc seals of clothiers have been recorded:

4090 (inner disc) eagle displayed, *JAMES GRANT EXON around;

907, 7196 A // (dimension - see below) // shield with on a dexter bend wavy three mullets [i.e. stars], *IAMES•WHITE OF EXON around // C (F or P)

No. 907 has 25 on the second disc, and no. 7196 has 38 on the reverse - these are either the weights in pounds of the cloths, or (more likely on a clothier's seal) the lengths in yards. No. 7196 (an inner disc only) has the stamps on both sides of the flan - some kind of mis-striking. It has been published as a token or tally (Shiel 1984, 254 and pl. 4, no. A4). The arms are those of the White family* A James White was a freeman of Exeter in 1617-18, and he had died by 1648 (ex info. J P Allan of Exeter Museums). The identification is not certain.

* The mullets are pierced in the correct version.
Devon, Tiverton Seals

The earliest Tiverton seals are probably from the reign of Elizabeth I rather than of Edward VI:

159-161, 1775 A & B, 2571
crown over fleur de lis, E R to sides, S(I) . . . TIVERTON around
/ /-

The first word of the legend is presumably 'sigillum', (cf. Surrey, Guildford nos. 2212-3).

(fig. 17) Tiverton seal, ER and fleur de lis (drawing K Hayes)

A variant appears to have the E at the bottom left, and the legend begins 'TIVE(RTON). On the second disc is the incomplete privy mark £, presumably that of the alnager or searcher.

Having a stamp on the third disc paralleled on seals of the 1610-11 group (cf. Essex no. 5545) is a seal with:

1123
-///- crown over rose, DEN(SHIR)E around //O,† TIVERTON around (Cf. Devon nos. 200 etc. and Totnes no. 4640).

(fig. 18) DENSHERE, crown over rose; TIVERTON around circle (no. 1123)
In addition to the above alnage seals, two probable clothiers' seals are known. Of uncertain date (16th-century or later) is a two-disc seal:

4308 (scratched) 3//W1i, (Tl)VERTON around

The present location of a further seal described last century (Cuming 1862, 279), is unknown:

two sheep passant, GEORGE DVNSFORD TIVERTON around

The relatively large number of apparent 16th-century alnage seals recorded for the town, and the absence of obvious 17th-century examples, may be a reflection of the development of Exeter as the finishing centre for cloths woven in Tiverton (and hence the place where alnage seals would have been issued), or the ER seals may have continued in use after the death of Elizabeth I.

Devon, Totnes Seals

One definite Totnes alnage seal is known:

4640 -//-// crown over three fleurs de lis, I(R) to sides //Ο, TOTNES around

The stamp on the fourth disc is similar to that on Tiverton no. 1123 (q.v.), which is thought to date to c. 1610-11.

Another possible town seal is an incomplete four-disc one. An inner disc has:

(? 3872 (crudely engraved) tower with portcullis, inverted key to each side

This device may be a simplified version of the Totnes arms (on water in base a triple-towered castle, the portcullis raised, between two keys, the wards upwards and outwards *).

* As recorded in 1572; variants are known from 1564, 1620 and 1644 (Briggs 1971, 388).
Dorset, Historical Background

Dorset cloths were not to be sold folded or tacked, but open, so that they could be inspected, according to Statute 13 Ric. II st. 1c. 11 (1389). In the 14th century the county's alnage figures were included with those for Somerset (Bridbury 1982, 114). Some details in the late 15th-century alnage records for Dorset and Somerset have been shown to be bogus (Carus-Wilson 1967, 286-7). Dorset can be regarded as an area in which several textile manufacturing traditions came together - from the west and north west kersies ('Dorsetshire dozens') and later serges, and from the north broadcloths and later medleys (Ponting 1972, 235; cf. Thirsk & Cooper 1972, 191-2; V.C.H. Dorset 1908, 360-1). Probably a minor development reported in the 1590s was the change of some Dorset weavers from manufacturing types of kersey characteristic of Devon to the west, to types which originated in counties to the north and east (Ramsay 1982, 14). A Royal Commission in 1640 recommended that Dorchester and Lyme should be the centres for the textile industry's organisation in the county (Thirsk & Cooper 1972, 249). In 1678 kersies were among Dorset's most important textiles (V.C.H. Dorset 1908, 361). Other products at about this time would have included serges and bays (Mann 1971, 27-8). The annual average profit on the county's subsidy and alnage in the late 1680s was £120, levied on broadcloths, kersies and dozens (H.M.C. 1894, 42). Early in the next century Defoe noted that several towns here were producing textiles (V.C.H. Dorset 1908, 360). The county's cloth industry was in decline a century later (Heaton 1965, 279). Dorset's textile manufactures never attained great importance.

The port at Lyme was used to ship out some Somerset cloths in the late 16th and early 17th centuries (V.C.H. Somerset 1911, 411).
Dorset Seals

Two county alnage stamps have been recorded:

4097 (inner disc of a four-part seal) "£", 2·DORSET** around

This 17th-century seal is analogous to those of the same alnager SL or LS on some Devon and Hampshire seals (see Devon nos. 331 etc.).

The other stamp is known only from two illustrations in the Green Papers *:

#78, DORSET around top

(cf. the very similar design on the inner discs of four-part Devon and Exeter (16)78 seals **.)

A further seal appears to refer to Dorset and Somerset together:

244 - // NB, S0...DOR... around // thistle, C to left // -

(?)247, (?)597 A different version, which probably also mentions both counties, has a portcullis on the third disc.

The alnager NB is also known on seals of Devon, Gloucestershire, Somerset alone and Wiltshire, which include examples dated 1618. In the definite Dorset/Somerset example (no. 244) C(R) indicates the reign of Charles I - i.e. 1625 or later. Though Somerset cloths were exported through Dorset in the later 16th century (see Historical Background), no obvious reason (such as a finishing centre in Dorset for Somerset cloths) for the issue of seals with these stamps has been found.

* The drawings differ in detail slightly, but the basic design is the same. It is assumed (from other demonstrable adaptations in Green's drawings) that they represent the same seal - which is not among those from Green's collection now in the Museum of London.

** This seal is not necessarily for a kersey, despite V.C.H. Dorset 1908, 361 - see above, under Historical Background.
Essex, Historical Background

There was apparently a russet industry at Colchester from at least the middle of the 13th century, and cloths were made at Coggeshall from the second half (Carus-Wilson 1967, 213-4; Van Uytven 1983, 162; Pilgrim 1972, 252). Statute 13 Ric. II, i c. 11 (1390) required all cloths to be sold unfolded, as was done in Essex (i.e. so that the buyer could see that there were no faults - V.C.H. Essex 1907, 381). Colchester was still producing russets in the early 15th century (ibid. 384), and at the end of the medieval period the main Essex cloths were straits and broadcloths (cf. Statute 8 Ed. IV c. 1, of 1468). 'Colchester' whites had a wide renown (Kerridge 1972, 24), and Coggeshall cloths - perhaps the same as the later Coggeshall whites - were woven at least from the early 16th century (V.C.H. Essex 1907, 382). Coggeshall whites were mentioned in Statutes of 1551-2 (5 & 6 Ed. VI c.6) and 1557-8 (4 & 5 Phil. & M. c. 5). The former laid down a length of 28-30 yards and a weight of at least 80 pounds for Essex long cloths, and 23-25 yards and at least 64 pounds for short cloths. Cheaper handwarpes, which replaced Coggeshall textiles on the market (Pilgrim 1972, 259), were to weigh three pounds per yard, whatever their length. The latter Statute mentioned that handwarpes of a traditional type woven in Bocking, Braintree and Coggeshall were being counterfeited elsewhere. Attempts to limit the number of weavers of cloths and kersies in Essex towns were abandoned for Bocking, West Bergholt, Coggeshall and Dedham by Statute 1 Eliz. I, c.14 (1558-9), (cf. V.C.H. Essex 1907, 385-6), and for Boxted and Langham by Statute 27 Eliz. I, c. 23 (1585).

There was a recession in the Essex textile industry in the mid 16th century (Pilgrim 1972, 253), but soon afterwards a new direction was taken with the arrival of religious refugees from the Netherlands, who included a number of weavers. They settled in Colchester around 1565, and (after a second
group arrived in 1570) the immigrant community numbered nearly 200. About six years later, a few Dutch workers moved from Colchester to Halstead in response to an invitation to help stem the town's decline in weaving (Pilgrim 1972, 261 and 263; V.C.H. Essex 1907, 387 and 389). These were the only two places in Essex where Dutch immigrants established textile industries. At Colchester the Dutch community's searchers examined all the local cloths woven by the native English and by the 'strangers' themselves, at the Dutch Bay Hall. Cloths were examined three times - after weaving, after fulling and after shearing. This scrutiny was so conscientiously carried out that in the early 17th century the Colchester Dutch community's seals were taken at face value, as guarantees of good quality, both in England and abroad (May 1971, 6 & 7; Pilgrim 1959, 50; V.C.H. Essex 1907, 388). Bays were sold 'upon the credit and bare inspection of the seals, without opening the packs', and 'by this laudable diligence of the Governors and their officers, the bay-trade kept up its reputation for many years, as well, or better than any other trade whatsoever' (Morant 1748, 75). This scrupulous quality control was accordingly more expensive than was usual elsewhere - on a 40/- cloth the added cost was 10d (May 1971, 49). Fines were levied for substandard work, the monies from the English and the Dutch being assigned to help the needy of the respective communities. Details of the organisation of this aspect of quality control by the Dutch were published 20 years after their corporation was wound up (Morant 1748, 74-5). The description given of the seals for different types of bay is rather confusing: a crown bay, the most common sort, had four seals - a 'letter seal' with three crowns and 'Dyts Colcester baye' ('Dutch Colchester bay') on one side, and on the other a griffin, the three other seals were similar but had 'Dyts Colcester Crone bay' as the legend; a cross bay, the best sort, had five broad (i.e. large-sized) seals - a letter seal like that for crown bays, and four others with three crowns and a cross, and 'Dyts Colcester 100 cross 1571' on one side, and on the other a griffin. In
addition there were four small seals stamped while the textiles were being processed by the weaver, the rougher and the miller - one had '100' to specify 'one hundred bay', another indicating any faults in the weave, was issued by the haller of raw bays, a third came from the sealer of white bays, and the fourth gave the length in ells. A 'rent bay', so called because the selvedges were torn off, had two seals, and a 'cutt bay', which had one end cut at an angle, had three seals (cf. V.C.H. Essex 1907, 388-9) *. Details of these last seals are not given. Elsewhere, the removal of selvedges and angled cuts in cloths were indications of faulty pieces, to be marketed as seconds (May 1971, 44 & 47). It is possible that Morant's 'rents' and 'cutts' were not types of bays, but inferior-quality seconds, marked accordingly.

In 1572 the clothiers of Bocking and Coggeshall put a bill to Parliament by which they would have been enabled to use a distinctive seal for their cloths, but their efforts were apparently not successful (V.C.H. Essex 1907, 391). It is possible that the wish to have their own seals was because the Colchester Dutch may have had their '1571' seals by this time (see above).

The textile industry of Essex came to be concentrated in towns in the north of the county - notably in Bocking, Braintree, Coggeshall, Dedham and Halstead (i.e. towns in which white cloths had previously been manufactured), as well as in the major centre of Colchester (which had concentrated on coloured cloths before the development of the newer fabrics). Similar new draperies were also woven in Sudbury in Suffolk (q.v.) - this town may be regarded as part of the same manufacturing area as those in Essex. Dedham and a few nearby villages continued to weave traditional short woollens identical to those of south Suffolk (Pilgrim 1959, 37 & 1972, 255; V.C.H. Essex 1907, 391).

* Of the seals in V.C.H. Essex 1907, fig. 7, only h-o and q are definitely Colchester examples (see on seals, below). The 'iron clamp' (p. 388) is not mentioned by Morant. The stone mould for casting blanks for seals (ibid.) is in the Colchester and Essex Museum (presumably no. 158, (?) Jos. 1258). This mould is for casting two broad seals at a time. No. 1319.31 in the same collection may be another uncompleted mould.
The clothiers of Coggeshall complained in 1575 that their bays, which had been made for upwards of 35 years in the town, were now threatened by a 21-year monopoly grant to a John Hastings to make freesadoes in the manner of Haarlem. They argued that their bays differed from freesadoes, and so were unaffected by the monopoly, but Mr Hastings and his agents had used violence in attempting to end their trade. The outcome of the case is not recorded. The fullers and weavers here (who had by now been incorporated) purchased an old chapel in 1588 for use as a wool hall (V.C.H. Essex 1907, 391).

By 1580 the number of Dutch immigrants at Colchester was causing concern to the poorer English there (V.C.H. Essex 1907, 390). Friction between the two communities continued for many years. For example, in 1605 - when there were almost as many English as Dutch bay and say makers (Pilgrim 1972, 262) - the former petitioned the Privy Council, hoping to end the sealing of English cloths by the Dutch. These grievances were not received favourably by the Council (V.C.H. Essex 1907, 392). As late as 1630 the English complained that fines had been levied by the Dutch on allegedly faulty pieces which were in fact perfect (ibid. 394; cf. Pilgrim 1959, 47-8). The highly successful manufacture of new draperies, particularly bays and says, by the Dutch in Colchester and Halstead was at first resented, and then taken up by the native English weavers. The cloths woven by the Dutch at Halstead were said in 1582 to sell at the best prices in England (V.C.H. Essex 1907, 389; Pilgrim 1959, 53 & 1972, 263). A series of disputes marred relations between the native English and the immigrants here too, when the Dutch were given the right to search and seal all locally-woven cloths. In 1586 the English petitioned that these functions should be shared by both communities. The rivalry came to an abrupt end after the seals of the Dutch were counterfeited, and the imitations put on inferior cloths. This proved to be the last straw for the Dutch, who decided to leave Halstead as a result of these events. In
1589 they rejoined their parent community at Colchester (V.C.H. *Essex* 1907, 389-90). Their departure proved a considerable economic setback to Halstead, which had been producing 160 to 180 bays a week for the London market. Subsequently only seven or eight single bays were produced each week. The poor spinners and weavers of Halstead and the surrounding villages petitioned for the return of the Dutch, but, despite pleas and official encouragement, the immigrants apparently did not go back (Pilgrim 1972, 263). Colchester bay makers complained in 1592 that Halstead weavers had recently started to use the same marks on their products as their own - previously Halstead stamps had had a crown and six feathers (A.P.C. XII 1901, 444). Later that year new devices for Halstead bay seals were suggested as follows: [? for the commonest type], 'a rose underneath the crown full stamped'; for 'the second sort, two crowns one above an other with a rose full stamped at the foote of the lowest crowne'; for 'the third sort, three crowns sett two and one with a roase full stamped at the foote of the lowest crowne'; for 'the fourth and beste sorte' [? cf. Colchester cross bay - see above] three crownes with a plaine cross and roase full stamped at the foote of the crosse and lowest crowne' (A.P.C. XIII, 1901, 76-7). Like the Colchester weavers, those at Halstead 'doe use two seals, and the other hath in letters expressed the name of the towne'. Some of these stamps are known among surviving seals. The native population later tried unsuccessfully to capitalize on the reputation built up by the Dutch. A cloth industry had, however, reappeared at Halstead by the late 18th century (Pilgrim 1972, 264; V.C.H. Essex 1907, 400).

Though an association of English cloth manufacturers in Colchester was apparently in existence in the early years of the 17th century (ibid. 391), it was the formal incorporation in 1618 that the English community's seals recall in the date they all bear *. The stimulus for incorporation at this particular

* The existence of these seals (see nos. 530 etc., below) refutes the generalisation (V.C.H. Essex 1907, 393) that Dutch-community seals instead of special English-Colchester ones were used by indigenous clothworkers.
time may have been a dispute between an English clothworker and the Dutch corporation concerning allegedly faulty bays (ibid. 393; Pilgrim 1959, 49).

The traditional white broadcloth industry of Essex diminished rapidly in the early 17th century as the manufacture of new draperies expanded (Pilgrim 1959, 51–2). Statute 4 Jac. I c.2 (1606) required Essex blue-dyed cloths and long whites to be 29–32 yards long and to weigh at least 80 pounds. The manufacture of bays and says was at this time carried out at Colchester, Coggeshall, Bocking, Braintree, Halstead and Witham (V.C.H. Essex 1907, 392). The weavers of Braintree found the requirements of the recent legislation difficult to observe; as their bays were not even up to the previous standard, selling became difficult (Pilgrim 1959, 57). Coggeshall's 'ordinary bays' (known as 'Coxalls') were coarser than those of Colchester; many were taken to the Netherlands to be finished (Pilgrim 1959, 43). By 1622 Dedham and Boxted were the only places in Essex still manufacturing coloured fabrics (ibid. 39).

In 1632 a London clothworker, Tobias Jupp, was convicted (in the first case of its kind) by the Court of Star Chamber of using iron stamps to make counterfeit Colchester seals, which were put on inferior bays manufactured at Bocking. He was condemned to the pillory and fined £1,000 – the savagery of the penalty being a reflection of the severe damage it was felt such malpractices could do to this important branch of the textile trade (V.C.H. Essex 1907, 394).

A lapse of standards in searching at Colchester (noted in 1635) may have occasioned an order in 1638 that no bay maker should produce more that 60 pieces per quarter year; in 1711 the limit was 234 pieces (Morant 1748, 75).

The trade in bays and says from Colchester to London (where probably since c. 1612 Leadenhall had housed a Colchester Bay Hall – Rememberancia 1878, 72, III 56) was said in 1633 to be worth over £3,000 per week (V.C.H. Essex 1907, 395); in one year during the 1620s 28,000 pieces were exported from the capital (Pilgrim 1959, 54). During the 1650s nine tenths of
these textiles - which were by then woven in Bocking, Braintree, Witham and elsewhere, as well as in Colchester - were sent to Iberia (V.C.H. Essex 1907, 396). The Royal Commission in 1640 suggested only three towns to be centres for administrative control of the textile industry in Essex - Coggeshall, Colchester and Dedham (Thirsk & Cooper 1972, 249).

A petition by the clothiers of Coggeshall in 1652 requested incorporation, and the right to mark their bays with a distinctive seal, 'with a cock upon the same' (V.C.H. Essex 1907, 396) - none of these seals is known, but the punning cock appears on earlier Coggeshall seals used by an individual clothier (see nos. 922 & 923 etc. below).

Attempts during the Civil-War period to introduce a bill to regulate the manufacture of bays and says in Colchester failed, because of Parliament's preoccupation with political and military affairs. By the time these troubles were over, the town's textile trade had suffered considerable disruption - notably during the siege of Colchester (but cf. Pilgrim 1959, 51). The cloth trade here never fully recovered (V.C.H. Essex 1907, 396). Eventually, Statute 12 Chas. II c.22 (1660), 'an Act for Regulating the Trade of Baymaking in the Dutch Bay Hall at Colchester', was passed *. By this time contraventions had grown from the apparently isolated incident in 1632 to become (according to the Statute) a much wider problem - '...slight and naughty bayes have been and daylie are made...' at Colchester, and were sent, sometimes furnished with counterfeit seals, to London, whence they were exported abroad as genuine Colchester bays. Sealing at Colchester was to be at the Dutch Bay Hall, both before and after fulling (no mention is made of any English-community sealing arrangements), and counterfeiting was now to be punished by a fine of £20, and the pillory on subsequent convictions - somewhat milder penalties than those imposed on Jupp less than 30 years previously (V.C.H. Essex 1907, 397).

* The text is given in Thirsk & Cooper 1972, 269-71.
In the late 1680s the average annual profit from the subsidy and alnage on Essex textiles was £700, levied on broadcloths, bays and perpetuanas. The duty on each Colchester bay was 3d, long bays of Bocking paid 6d, and short bays of Bocking paid 3½d (H.M.C. 1894, 42-3). In 1689, 800 textiles per week were produced in Colchester, with 300 to 400 from the surrounding villages (V.C.H. Essex 1907, 397-8). Morant cites (but does not seem to believe) a figure of £30,000 for the weekly value of Colchester textiles, though he places more trust in the claim that 1,000 to 1,200 bays per week were manufactured there at this time (Morant 1748, 75). At the start of the 18th century, the Dutch weavers at Sandwich in Kent, feeling that they had been badly treated, moved to Colchester to make bays there. They gave a new impetus to the town, making it 'a most noble place to trade' (V.C.H. Kent 1932, 407). Even after the wars with Spain early in the century had caused Iberian consumption of Colchester's textiles to decline (Morant 1748, 75), bays and says were still, in the 1720s, being sent there, and on to Spanish colonies in America (V.C.H. Essex 1907, 399). Bays of Colchester and Bocking were considered the best available at this time. The production of 'Bockings' was now at its peak. Seven waggonloads of bays and says were sent to London from Bocking and Braintree each week (Pilgrim 1959, 59). Braintree's products too were sent on to Iberia, and Italy was now another important market (V.C.H. Essex 1907, 398-9). According to Defoe, the name 'Colchester bay' was applied to the products of Bocking, Braintree, Kelvedon and Witham, as well as to those of Colchester itself. Although Dutch-Colchester seals had been held in such esteem that merchants did not bother to examine the cloths to which they were attached (see above), in 1722 (when Colchester bays were known 'over most of the trading parts of Europe') it was said that 'the integrity and exactness of their [the manufacturers'] methods' was 'much omitted', and the hard-earned reputation 'will certainly abate'. The Dutch community at Colchester ceased to have a separate existence in 1728, having gradually been
assimilated into the native population (ibid. 399). The textiles of Bocking were
imitated in the West Riding of Yorkshire in the 1730s; these northern versions
were known as 'long broad bays', or simply 'Bockings' (Heaton 1965, 269;
Atkinson 1956, IX). By the middle of the 18th century, the textile trade of
Essex had very much declined, but bay making continued at Colchester,
Bocking, and (to a lesser extent) at Braintree, which still exported some long
bays to Iberia. Say making was kept up in Halstead, Headingham and Witham,
and bays were also woven at Halstead. There were still 14 bay weavers in
Colchester in 1793 (V.C.H. Essex 1907, 400-1).
Essex Seals

A medieval county-seal design is known from a copper-alloy matrix:

3500 crown over fleur de lis in six-arched tressure, S'SVBSIDII PANNOR IN COM ESSEX around (Lombardic letter) - see fig. 7, above.

The device is broadly comparable with that on London seals (nos. 1888 etc.) which are attributed to the 15th- and early 16th centuries. The matrix has been published (Suckling 1848, 292-3 & pl., no. 7).

The apparent absence among finds of any county seals until the second decade of the 17th century is remarkable, not least in view of the prominence of surviving Colchester seals, some of which might be expected to date from the last quarter of the 16th century.

The earliest attributable recorded seal is of the four-disc type, from the 1611 series:

5545 -//A, •1611 around top, •COM'E... around // crown over rose, COLCHESTER • around // ...(ER/C)H(E)D/1611, ...(LN)EG... around

For a similar '1611 A' stamp, but for Buckinghamshire, see no. 585 under that county. (See also no. 2823 ibid., and cf. figs. 14, 18 & 21). The presence of a county stamp together with one for a town on the inner discs is unusual.
There are two types dated 1614:

592
-// lion passant, 1614 below //ESS/EX//- (lozenge-shaped parts)

1760
6.4// shield with quarterly, first and fourth a leopard's head, second and third a covered cup between two buckles [arms of the Goldsmiths' Company], COM·ESSE·X around // 1614 over arms of Stuart Britain, I R to sides //S(E)/ARC/HE(D) (lozenge-shaped parts)

(fig. 19)
Stuart arms of Britain, IR 1614;
arms of the Goldsmiths' Company,
COM ESSEX; 64 (no. 1760) (drawing K Hayes)

The presence on a cloth seal of the arms of a Company having no obvious connection with textiles has no ready explanation. Comparison with one of the two types of 1614 seal for Kent, which possibly has the arms of the Salters' Company (no. 756), suggests a similar background, but goes no further towards an explanation *

* It is possible that the alnagers were members of these Companies, and used the arms (illegally) in a personal context, though the same date in two counties might suggest some kind of formal arrangement, possibly an ad hoc measure connected with the Cockayne Project (Friis 1927, passim) for finishing cloths in England before export, though this is pure speculation.
Also with lozenge-shaped parts, and having more immediately apparent design parallels with Kent county seals of the 1610s and early 1620s (q.v.), are:

1902

59(\text{	extdagger}) // \text{COM/ESSEX/1616/\textdagger} // three lions passant //-

4369

64//(C)OM/(E)SS(E)[? date]/// 162.. over arms of Stuart Britain, (I) to right //-

There are \text{P} and \text{R} secondary stamps respectively on the second and third parts, possibly the initials of the alnager or searcher.

The high numbers on the first parts of the above seals, presumably weights in pounds, suggest that they might have been for broadcloths (cf. the dimensions in several late 16th-century Statutes).

Other dated seals are from the post-Restoration period. Comparable designs for these appear on Suffolk seals, suggesting different arrangements of county groupings for the alnage may have come into force after the early 1620s:

1247

(missing) // crown, two stars above and (?) two below, I B to sides //16/74, E \cdot S \cdot S \cdot E \cdot X... around // (lozenge-shaped parts)

2715

Another, with 'star'-shaped inner parts and a square outer one has three crowns, 6 to left on the second disc.

1100

- // portcullis, 3 crown star above // 16/77, E \cdot S \cdot S \cdot E \cdot X... around //-

This seal has outer discs and inner square-shaped parts;

1805

another has an inner disc.

4354

- // 16/79, E \cdot S \cdot S \cdot E \cdot X... around // (remainder missing)

(lozenge-shaped outer part, inner disc)

3480

-// 80, \text{E} \cdot \text{S} \cdot \text{S} \cdot \text{E} \cdot \text{X} around // (remainder missing)

(lozenge-shaped outer part, 'star'-shaped inner part)
4698 -// Charles II-type head, OF ENG LAND around // lion passant, 1 1/4* above, 88 below // ESS... [i.e. 1688]

Similar but undated are:

1098, (?), 1080, (?), 3380

-// Charles II-type head, OF ENG LAND around, cogged incuse border // rose, 3 above, incuse cogged border // * / ESSEX / *

No. 1080 has 53 on the first disc, presumably for the weight of the textile in pounds. No. 3380 has a pierced mullet and possibly (E)SSEX/(E) on the fourth disc.

2099 -// Charles II-type head, OF ENG LAND around, border // 6 /fleur de lis, incuse cogged border // ESS/EX

Further seals can be dated provisionally by analogy with others, or by external evidence:

3379 (lozenge-shaped inner part) COM/ESSEX/acorn D acorn

Cf. the 1616 seal above and the others from the 1610s for Kent (nos. 1892 etc.).

For the alnager TH or HT (also known on Kent seals dated 1628-?39, see nos. 126 etc.) are:

1087 64 // T , rose to right /ESEX/rose//crown over CR//-

Other seals with similar stamps on the second disc have a lion passant over CR on the third disc, and respectively 25//AC privy mark, and no stamp on the outer discs.

Further CR seals with Kent parallels (nos. 1449 etc., q.v.), which probably date from the reign of Charles I (since post-Restoration parallels are with Suffolk seals, as above) are:

134, (?), 791, 862, 1088, 1242, 2259, 2480, 3381, 3584, 3814, 4482

-// star (etc.) over T , ESEX around base // lion statant on chapeau, C R to sides //-

A variety of different devices is known over the TP or PT alnager's mark. No. 2480 has 128// on the outer discs, no. 3584 has // (? portcullis) here, and no. 791 has
(incomplete) 3 on the first disc. Further incomplete seals with the same stamp as above on the second disc, have a crown over harp, C R to sides on the third disc.

1772, 4475
Seals for the alnager TB, who is also known on Suffolk stamps (nos. 299 etc.), are:

4315
4315 -//ESEX/TB// crown over rose, C R to sides, // (incomplete privy mark)

893
1880 -//ESEX/TB// crown over fleur de lis, C R to sides //-

442, (?588
29/ESEX/TB// dragon rampant, C R to sides, with small crown over each letter // RP privy mark (small secondary stamps on second and third discs have been scratched out)

An incomplete seal (inner discs) has:

4126
ESEX/TB// unicorn rampant, R to right, with small crown above

624
A further incomplete seal has ESEX/TB on the third disc, and 25 on the fourth.

Five further examples were found on a ship wrecked off the south coast of Norway:

5686A-E
58/ESEX/TB// arms of Stuart Britain, C R to sides, with small crowns above //((L or D)E,(SEARC)HE(D) around

No. 5686E has an uncertain device on the first disc; 5686 A and B have illegible secondary stamps on the second and third discs. These seals have been published (Molaug 1980, 173-83 & 195), citing a possible identification of the alnager TB as Tobias Blosse of Ipswich, which would tie down the date of the seals to the period 1625-31. Suffolk TB seal no. 3328 (see fig. 53) could be of Commonwealth date, calling the identification as Tobias Blosse into question (see Appendix 5).

Several types of seal with an L and R ligature (for one of the Dukes of Lennox and Richmond) and lozenge-shaped parts (see also on Devon nos. 762, etc.), have been recorded:
Coronet over \( R \) ligature, \( \text{TH(E) COVNTY OF ESSEX} \) around

Two examples have \( R \) to sides of the arms on the third part;

another has a rose over two fleurs de lis, \( 5 (?2) \) to sides here;

another has a crown with \( I R \) (or \( B \)) to the sides.

A further type has discs:

- coronet over RL // coronet over \( R \) ligature, ESEXE around //-

A variant has crown over RL, demi (?lion passant below on the second disc.

Possibly related is an inner disc with \( R \) heart \( L/ESSE(X) \)

Also undated is:

54/ES/EX//thistle//- (incuse \( H \) on connecting strip between the first and second discs)

The inner discs may have the devices integrally cast.

An incomplete broad seal (two-disc type) has:

(missing) // (central device illegible), ...100 ESEX...(edge legend)

This is presumably a county seal for a 'one hundred bay' textile.

* These are thought to be parts of the same seal.
Essex, Bocking Seals

The devices of parts of four Bocking bay seals (both two- and four-disc types) are known. All have large-diameter discs (over 45 mm). They may all be seals of individual clothiers.

Dated inner discs from four-part seals have:

4533   bird of prey rising, wings displayed and inverted, bells on legs,

*BOCKING*̀JOO* BAYES* 1637 around

4993   stylised star, FINE+BOCKING rose 100 •• BAYES 1648 around

The second disc of a two-part seal has:

1905   angel facing, rose : THE rose PRIME rose BA(Y)•OF•

..WCING: around

The incomplete word is presumably BWCING - an eccentric version of the town name. The angel is very similar to those depicted on mid-17th century 'de Londino' seals of the capital (q.v). This stylistically slightly inferior provincial version may have been an attempt to confuse customers into believing that the cloth to which it was attached had been examined in London.

738   A copper-alloy matrix, in the form of a disc, has:

sheep [cf. paschal lamb] lying on a ground, cross and bifurcate banner behind, Ioo FINE•BOCKING•HUNDREDS• around

No corresponding bay seal has been recorded.
Essex, Braintree Seals

A possible two-disc Braintree alnage seal and two four-disc clothiers' seals have been recorded. None is complete.

The alnage seal (cf. Colchester nos. 853 etc.) has:

3507

(missing) // crown over (?) rose, (BR)ANT... around

If correctly interpreted, this seems to be analogous in style to the crown-over-rose seals attributable to the reign of James I (cf. Essex no. 5545 and fig. 21).

Both of the following inner discs from four-part seals have diameters of c. 50mm. One is dated:

474

bird of prey rising, wings displayed and inverted,
+BRANTREY 100 BAYS 1619 around

The other has:

2225

lion rampant, (I0)HNMARYANSMAKEIN(G)INB(R)...(Y) around

John was presumably a member of the Maryan family of Braintree which included several textile workers (Quin n.d., 74).

These two discs may be from two different types of seal, or the designs could possibly have gone together as one seal for bays.

Essex, Coggeshall Seals

Two different types of Coggeshall clothiers' four-disc seals for bays have been recorded. Both have inner discs of c. 45mm and both are dated:

922, (?3384

// ship, WALTER N(IC)HOLE(S) MAKING around // cock,
100 BAYES 1621 COXALL around // [distorted]
Number 922 has been published (Guildhall Museum Catalogues, XXIV no. 25; 1903, 308 and 1908, 321).

The second type is represented by parts of at least seven examples (none complete), found together in a well in the City of London:

923A-L

-// stylised star, 1640 • A • COXALL • MINIKIN • BAYES • around //cock, + WILLIAM • TAVER • HIS • MAKEING • around //-

These seals for named clothiers both have a cock as a canting reference to the town name. 'Minikin' was a superior kind of bay made from fine-fleece wool (Kerridge 1972, 28; Pilgrim 1959, 43).

Essex, Colchester Seals

Several two-disc alnage seals with crown-over-rose devices have been recorded; more than one stamp was used:

853, 1397
4564

-// crown over rose, (C)OLCHESTER around

(fig. 21) crown over rose, COLCHESTER (cf. nos. 853 etc.) (drawing J Pearson)
One example has IR to the sides of the rose; this one and others have \( \mathbf{R} \) (for the alnager or searcher TS or ST) on the other disc. The IR on no. 1396 presumably indicates the reign of James I (cf. Essex county seal no. 5545, which is dated 1611, and has a similar crown-over-rose stamp). The crowned-rose device is also similar to that on Braintree seal no. 3507. The same rose stamp may have been used as a secondary mark on Dutch-community broad seal for bay no. 533; cf. also no. 4857, a Dutch-community seal with crown-over-rose and tabular-legend stamps, and see nos. 4787 & 4825 (below).

Alnage seals of the four-disc type are presumed to be later. Apart from no. 5545, described under Essex county seals, all the directly attributable examples are of post-Restoration date. They include the only certain 18th-century four-disc alnage seals which give the place of origin in the legend:

520
-// Charles II-type head, OF ENG LAND around // rose, COLCHESTER 83B (or 838) around //-
(fig. 7a in V.C.H. Essex 1907)

The meaning of 83B (or 8) is unknown.

(?)295
Another seal may be similar, though the head and legends are not clear.

2154
-// Charles II-type head, (OF ENG LAND around), possibly border of incuse alternating \( \bullet \) and \( \triangle \) // rose, possible crown above, COLCHESTER+ around //-

1041
-// head of George I, (GEOR)GIV(S) R(E)X around // crown, 3 below, COLCHESTER around //-

99
Another has DEFEN FIDEI as the legend around the king's head,

(fig. 22) crown over 3, COLCHESTER; head of George I, DEFEN FIDEI (no. 567)

and a further example possibly has the head of Anne on the third disc, with ...MAG... as the legend. An inner disc may have 6 or 3 below the crown - in the early 1690s Colchester bays each paid 3d subsidy (H.M.C. 1894, 43). The George-I seals must date to the first decade of his reign, since the alnage ended in 1724.

Undated seals, presumably of 17th-century date, are:

2721, 3041 (dimensions) // lion passant (cast) // crown (cast) // crown over harp, COLCH(ESTE)R around

One of these has 50 on the first disc, the other has an offstruck 9 (or 6) with 49 scratched above.

Further similar seals have:

4787, 4825 shield with cross raguly and two (of three) coronets [arms of Colchester] // lion passant (cast) // crown (cast) // crown over rose, (C)OLC(H)E(S)TER around

(Cf. Suffolk nos. 766 & 2093 for other seals with cast devices on inner discs, and nos. 853 etc. above for the rose stamp.)

inner discs have:

807 RS, \*COLCHESTER around

See Suffolk nos. 2362 etc. for further RS seals.

4096 portcullis, 3 below, COLCHESTER around, border of incuse \|\|\| around
The 3 for the subsidy on the last example suggests a post-Restoration date (cf. 3d subsidy on Colchester bays, as cited above with no. 395).

COLCHESTER DUTCH COMMUNITY

(All two-disc broad seals have two rivets unless stated.)

Many of the seals used by these immigrants have a version of the town arms (a cross raguly and three coronets) on one side, and a griffin on the other. No explanation of the significance of the griffin is given by contemporaries. It may possibly have been chosen because (generally much earlier, in Christian art) it was a symbol of religious oppression (Ferguson 1982, 20). On the seals it might perhaps have served to remind the immigrants of the intolerance from which they had fled. The date 1571 on all the Dutch-community seals refers to the year which they seem to have regarded as marking the foundation of their textile manufacture on a properly regulated basis, though no formal incorporation in that year is known.

Bay seals:

Two similar versions of a broad seal not yet recorded in England have been found in Amsterdam:

5616, 5617 cinquefoil DWS cinquefoil/COL(C)ESE(R)/.. AY 157(1) ///(?beast)

The textile imprint on no. 5616 is similar to those on seals which have 'bay' in the legend (see below), so presumably the last word here is also 'bay'. No. 5617 has an incomplete privy mark ꞏ on the second disc, probably indicating the alnager or searcher.
This spelling for 'Dutch Colchester' with the suspension mark, omitting the T from the town name, and using letters of several different sizes, is not paralleled on other stamps. It is possible that these are among the earliest of the immigrants' seals.

'Baey' and 'crone-baye' seals with tabular legends:

The most frequently encountered type has:

792, 1105, 1106, 2470

\[ \star \star DVYTS/COLCESTE(R) / \star BA\text{Y}E / \star 1571 \star / \star //\text{griffin} \]
segreant [i.e. rampant], (COL)CHEST(E)R:(D)... around

(fig. 23) Dutch Colchester bay 1571 stamp
(cf. nos. 792 etc.) (drawing K Hayes)

1393
No. 1393 may belong here, or with the 70 cross-bay seals (below).

1490, 4753
Variants have BAYE on the first disc, and another has an inverted A for 'Y' in BA\text{Y}E.

Quite similar are examples with:

1045, 4741-2*, (?)333

\[ DVYTS/COLCESTE/CRONE/ \cdot \cdot \cdot BAYE/1571/?(?\text{griffin}), \]
(COL)CE(STER)...1(571) around

* Nos. 4741 & 4742 probably went together as one seal.
No. 533 (fig. 7h in V.C.H. Essex 1907) may also be of this type; it has a secondary stamp with a rose and COLC(HESTER) around, which may be the same as the crown-over-rose stamp on some alnage seals -cf. nos. 520 and 853 etc. (above). No. 4741 has an incomplete secondary stamp with an I ?(B) privy mark. These secondary stamps may indicate respectively the alnage examination and the searcher.

The omission of the 'H' in the town name is not consistent - no. 4753 apparently has it on the second, but not on the first disc.

Examples of the first of the above types have been found in Amsterdam (Baart 1977, 118, no. 70) - where a date in the third quarter of the 16th century is suggested (i.e. the five years 1571-5 in view of the seals' stated date - though Baart's dating may be based on taking the 1571 at face value), and in s'Hertogenbosch (Janssen 1983, 266-7, no. 89).

70-cross-bay seals:

These have:

539, 1046, 2148, 4609  DUYTS/70: CRUIS/BAYE VAN/COLCESTER/1571// (griffin),

1571 DUYTS ...(COLCE)STER around  (see fig. 24, below)

No. 539 has been published (fig. 7 j in V.C.H. Essex 1907). The Dutch-language legend ('Dutch seventy cross bay of Colchester') presumably indicates first-generation immigrants. The precise significance of the 'seventy' is unknown, though it probably refers is some way to the number of warp threads (cf. '100 bay' and '2300 say' seals, below). No. 532 may, instead of '70', have '100' for one hundred bay, though whether this is a crown- or a cross-bay seal is uncertain (see below). See also no. 1393, above.
Crown-bay seals:

There is great variety in this group – indeed, it would be rash to claim that any two examples not examined together are definitely from the same dies. The basic devices are:

- three coronets (often represented with the arches of crowns) in ornately-shaped shield, 15 71 to sides, DVYTS COLCHESTER 100 CRONE [i.e. 'Dutch Colchester one hundred crown'] around //griffin, usually segreant [i.e. rampant], but occasionally passant, DVYTS COLC(H)ESTER BAYE 15(71) around

No. 4608 seems to refer to 'hundred crown' on the disc with the griffin.

Nos. 430, 1043 and another (unnumbered) have been published (Egan 1978B, 179, fig. 4; Endrei & Egan 1982, 66, fig. 13;
Nobel-Hume 1956, 198, fig. 26 no. 3; cf. Guildhall Museum Catalogues, XXIV no. 16 - 1903, 307 & 1908, 320). Nos. 1933, 1934 (a possible instance of two examples from the same die) and 2936 have the 5 in the date beside the arms reversed; these are to be published (Egan, forthcoming C).

The prominence of the crowns/coronets (in a version of the Colchester arms lacking the cross) provides a visual reference, which would not have been lost on contemporaries, to the name of the fabric (cf. the inclusion of the cross in the arms on 'cross bay' seals, below).

Some examples have privy marks, probably those of searchers or alnagers: EB (no. 303); RF (no. 3233, cf. no. 1518 below); \( T \) (TF or FT), (no. 1802); \( F \) (no. 1813); incomplete are \( H \) (no. 511); \( 1 \) (no. 657).

Morant's description of crown-bay seal devices corresponds with those on the recovered examples, though the legends differ slightly (see Essex, Historical Background). He also mentions 'letter seals', with legends which correspond with those on the griffin stamps of the recorded crown-bay seals (Morant 1748, 74). Possibly his account (written after the seals went out of use) has confused the stamps for each side of the seals with different types of seal - Morant may have examined the dies rather than the seals. Crown bay was the most common sort according to Morant, and this is confirmed by more than 30 recorded seals. The textile imprints on the inside surfaces of these discs are of a plainwoven fabric with c. 12 x 12 threads per 10 mm on average. None of these seals exhibits a high standard of engraving, and that for several of them was downright feeble. It was the poor engraving on counterfeit Colchester-bay seals.
which first drew the attention of the authorities in the 1632 case (V.C.H. Essex 1907, 394). It is difficult to be sure that any particular one of the seals listed here is genuine, though presumably some are, and, equally, some counterfeiters would have been more highly-skilled than others.

Further, less completely legible seals may also belong to this group. Four have been published (the first three are not in the numbered list: Hodgkin no. 1902, 29; Larn et al. 1974, 78, fig. 16, who date this seal to 1667; Baart 1977, 120, no. 77; no. 531 is illustrated in V.C.H. Essex 1907, fig. 7 m).

Variants include DVTS (no. 418, cf. no. 2479 above), reversed S & N in legend (no. 1518), and one with ... BAYE loo DVYT on the first disc (no. 140). Others have possible searchers' or alnagers' marks as secondary stamps: RF (no. 1518 - cf. no. 3233 above); a shield with unidentified arms - ermine, on a bend dexter a lion rampant between two escallops (no. 509); ( ) (no. 1264): GAN... (no. 1941). See also no. 532 (described with 70 cross-bay seals, above). The date ascribed to the seal published by Larn (above), almost a century later than the '1571' in the stamp, is a clear demonstration that the latter is not to be taken as the year of use.

100 cross-bay seals:

These have:

Three coronets and cross raguly in shield with engrailed top and base, 15 71 to sides, DVYTS COLCESTER 100 CROS 1571
around // griffin segreant [i.e. rampant], + DVTS +
around
one-hundred cross-bay stamps; arms of Colchester and griffin
scale approx. 3:2 (cf. nos. 475 etc.) (drawing N Griffiths)

Several slightly different dies were used. Most of these seals have only one rivet (unusual for Dutch-Colchester broad seals), but nos. 4610 and 4735 have two. Neither of these two seals is legible where 'cros' would be - they are ascribed to this group because the cross is included in the arms and because of the shape of the shield, though they may prove to be a further type. No. 4739 has two cinquefoils on the main stamp, and no. 1755 has a secondary stamp with an anchor (presumably a searcher's or alnagers' mark). See also no. 532 (described with 70 cross-bay seals, above).

'Cross bay' was the best sort according to Morant, though these seals differ in detail from his description (Morant 1748, 74-5). The inclusion of the cross (making these the equivalent of the full Colchester arms) is only paralleled on some say seals - nos. 541 etc., see below. The cross on these present examples was probably recognised by contemporaries as a canting reference to the fabric name. The textile imprints on 100 cross-bay seals are of a fabric with c. 8 to 10 threads per 10 mm - i.e. a marginally looser textile than crown bay (which had 11 to 12 threads in the same length). No. 519 is from an early 18th-century context (Egan 1984, 124-6, fig. 62A, B & C, and no. 475 appears as fig. 62D there; cf. Egan 1985, 2, fig. 11a & b) - there is no
specific reason to believe that it is residual, so seals with '1571'
could have continued up to 1728, when the Dutch community
ceased to administer quality control (V.C.H. Essex 1907, 399*).

Probable Dutch-community bay or say seals:

<table>
<thead>
<tr>
<th>No.</th>
<th>Details</th>
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<tbody>
<tr>
<td>20, 141, 537, 1925, 2041</td>
<td>Some broad seals have crowns and/or griffins, but not enough legible detail to permit a closer attribution to groups. No. 2041 has a textile imprint consistent with say (see below); no. 537 has two (?) of three) coronets, but no cross - it could therefore be a crown-bay seal, but it has only one rivet, and no definite crown-bay seal with this trait is known; no. 141 has been multiply-pierced and clipped for reuse as a strainer. A further seal in this present category is known only from a photograph (Hodgkin 1902, no. 40).</td>
</tr>
<tr>
<td>1515, 2919, [2920]; 2611</td>
<td>Other variants with the cross in the arms have the spelling DVYTSH(E), or (?)DWIH... with a griffin passant on the second disc. The spelling of 'Dutch' on these seals is unparalleled elsewhere. No. 2919, with an incomplete RD privy mark, may be part of seal no. 2920. A further second disc has nothing legible but a small (i.e. secondary) stamp with a privy mark $\frac{4}{\lambda} W$; the imprint on the back from a fine textile suggests that it too is probably a say seal. The secondary stamps are presumably those of searchers or alnagers.</td>
</tr>
</tbody>
</table>

* V.C.H. Essex publishes two seals in fig. 7 (n & o) as cross-bay seals; this appears to be an error - n is probably a say seal, & o probably a crown-bay seal. The mistake has recently been repeated (Essex Records Office 1976, 5th page, no. 3).
There is also a first disc with two rivets and an incomplete legend 1571 (COL)S(E)S(TE)R ...Y around the full Colchester arms, but in an ornately-shaped shield with an engrailed top, 15 71 to sides (V.C.H. Essex 1907, fig. 7n).

Say seals with the town arms:

These have:

three coronets and a cross raguly [arms of Colchester] in a plain-shaped shield with scrolls at the sides [no date here], DWYTSH COLCESTER SAY(E 15)71 around // (?griffin)

(cf. Egan, 1985, 2 fig. 11c)

(fig. 27) Dutch-Colchester say stamps; Colchester arms and griffin (cf. nos. 541 etc.) (drawing J Pearson)

No. 541 has been published (V.C.H. Essex 1907, fig. 7q). What appears to be a further incomplete example was excavated in York by the Archaeological Trust*. Further examples have secondary stamps P and T over W.

* Union Terrace site, 72.18. A (identified from a photograph). The seal could not be located during three visits to the Trust. I am grateful to Mr. R. Bartkovic for providing a photograph of it.
2300 say seals:

These two-disc seals are of medium size (discs of c. 30 mm diameter). Several variants are known:

916, (?), 1394, griffin segreant [i.e. rampant] // DWTS/COLC(H)ESTER/SAEY
1395, 2995, 3282, 3445 •2300/DRAET/1571

(The 'H' of Colchester is apparently omitted from nos. 1395 & 3445, but definitely present in nos. 916 & 2995). The fourth word may be a version of the Dutch draad (= thread) *.

Another seal has:

2456 (DV)YTZ/(C)OLCHEZ/TER 2AEY/2300 DRA(ET)/1571 // griffin passant, with a secondary stamp of a privy mark, apparently H over XX

None of these seals exhibits a particularly high standard of engraving. The Dutch-language legend may indicate that these were used by first-generation immigrants.

The precise meaning of '2300 draet' is not clear, though the figure is probably some kind of reference to the number of warp threads. The textile imprints on the seals are of a fine cloth, with c. 22 threads per 10 mm (like those on other say seals). Comparison with imprints on '100 crown-bay' seals (which have c. 11-12 threads per 10 mm) and '100 cross-bay' seals (with c. 8-10 threads per 10 mm) therefore does not support the possibility of a 23:1 thread ratio per linear unit.

* The first letter looks more like a 'P' in some examples - notably nos. 916 & 3445 - but 'D' is more comprehensible.
Two-disc medium-sized say seals:

DVYTS/COLCHES/-TER/-SA(E)Y/ [?date] // ornately-shaped shield with cross raguly and three coronets [arms of Colchester]

No. 419 has illegible scratches. Others have counterstamps, probably indicating the searchers or alnagers: nos. 3042 and 3043 have R, and the former additionally has the initials IH or HI, while no. 4167 has a fleur de lis // H (?PH) and acorn.

4857 Another seal has the same stamp as for the rest of this group on the first disc, but crown over rose, (COL)CH(E)STER around on the second (cf. Colchester nos. 853 etc. and Essex county alnage seal no. 5545, which is dated 1611).

Seals with one or with two coronets:

These all have incomplete stamps, but the number of coronets recorded is in each case the original total. Numbers 510 & 4255 are two-disc broad seals, & no. 3190 is a fragment of a single-disc seal:

510, (?)3190 single coronet in ornately-shaped shield, [legend around] // (?) griffin segreant [i.e. rampant]

4255 two coronets in ornately-shaped shield, 15 71 to sides [legend around] // (? beast)

A single-disc seal has:

4802 two coronets in ornately-shaped shield, 5 to right // (? beast)

The textile imprint on no. 510 is similar to those on bay seals.

Until similar seals with readable legends are found, the precise function of these Dutch-community seals will remain obscure.
Single-disc seals with three coronets:

These have:

2403, 2567
three coronets in ornately-shaped shield, I(5) to left //-
No. 2567 has a α secondary stamp on the second side.
These may be related to no. 4802 above.

Tubular one-part seals:

2491, 4834; 4834; 2526; 584
Four of these small rectangular seals (average dimensions c. 20 x 15 mm) have parts of stamps for Dutch-community broad seals, though none is complete enough to permit identification of the specific type or types. The other sides have a crown, or a crown and DC (presumably for 'Dutch Colchester'), or a crown on the vertical member of a cross raguly. Three further examples have just a crown and DC (nothing on the other side), and another has two crowns, C below right, with D (complete stamp) on the other side. (? Cf. Nöl-Hume 1956, 198, fig. 26 nos. 1 & 2).

The function of these seals, which would presumably have been attached to the textile by a tape through their hollow centres, is obscure. Cf. Sandwich seal no. 2306 and Norwich no. 904. They are also similar to the 'pipe-seals' (pijploden) found in Amsterdam (Baart 1977, 110).
The date 1618 refers to the year in which the English community's Weavers' Company was incorporated (V.C.H. Essex 1907, 393). No English-community bay seal is known, but there are three basic types of say seals.

Four-disc broad seals for say:
These have inner discs c. 42 mm in diameter with the devices integrally cast, while the smaller outer discs were stuck with stamps to effect closure. The inner discs have:

shield with vertical member from cross raguly and three coronets [cf. arms of Colchester], 16 18 to sides, fleur de lis ENGLISH-COLCHESTER-SAYE around // three-towered castle with pennons on the towers, hatted male figure standing, facing, in offcentred doorway at top of steps, and holding partisan-type weapon and(? key)
Two complete examples respectively have on the outer discs the arms of Colchester // EP (cf. nos. 992 and 4393 of the two-disc type, below); lion (? passant) // SR or RS mark. The initials are presumably those of searchers or alnagers.

Two-disc broad seals for say:

These have very similar, but somewhat more crudely-executed stamped versions of the designs cast on the inner stamps of the preceding four-disc seals. The legend on the first disc has Ψ at the start, and the 'N' is reversed. Nos. 992 and 4393 have EP secondary stamps, presumably for the searcher or alnager (cf. no. 2274 above). These are the only English-community seals to have two rivets (a common trait of seals used by the Dutch immigrants). The design with the arms is very similar to those on some of the Dutch community's '1571' seals. The possibility of confusion at a glance in markets where arrangements at Colchester might not be known, may deliberately have been exploited by the English, in the hope that their says would be mistaken for Dutch-community products with their higher reputation.

The castle on these four- and two-disc seals is closer in appearance to the actual one in the town than a conventional heraldic representation would be. The off-centred entrance and the shape of the window openings are taken from the structure itself, though there is no other reliable evidence for a central tower like that depicted on the seal. The seals' representation of the castle (taking them to have been issued in, or just after
1618) presumably predates the extensive structural damage during the Civil War. (Cf. Clarke 1985, 32, where no. 3295 appears as fig. a.)

Medium-sized two-disc seals for say:

Several of these are known, from a number of different dies: shield with vertical member of cross raguly, and two coronets, 16 18 to sides // ENG/\LISH/\COL* /CHESTER/\SAYE* /1618

(fig. 29)

English Colchester say 1618 two coronets and vertical member of cross from town arms (cf. nos. 7 etc.)

(drawing K Hayes)

There is a variety of alternative devices in place of the *s on the second disc. The engraving for the designs on these seals is rather poor. No. 2872 has a DO incuse secondary stamp, probably giving the initials of the searcher or alnager.

dating:

The four-disc seals with the castle are presumably earlier than the corresponding two-disc broad seals, since the design on the latter is clearly derived from that on the former (though this reverses the common development of types for alnage seals). Less lead would be required for two than for four discs, though if
large seals were intended to act as advertisement labels, the
cost of lead might not be the primary consideration. The
smaller, medium-sized English seals could be the latest ones.
Confirmation of the chronological sequence awaits examples of
all three types dated by external evidence.

Essex, Possible Dunmow Seal

A possible Dunmow seal has been recorded. Although the place-
name appears in a form that is apparently otherwise unknown
(and despite the London arms on the second disc), this four-disc
seal with large (47 mm diameter) inner discs, for a named
clothier's bays, has much in common with seals from other north
Essex towns - cf. Braintree no.2225 and Coggeshall nos. 922 &
923 etc.

-// shield with cross, sword in first quarter, FINE 100 BAYES
OF IOHN DRAP(E)R around// shield with a chevron between in
chief two havettes and in base a teasel cob [arms of the
Clothworkers' Company], MAKING IN DVNMAR 1638 around // -
Presumably John Draper was a member of the London
Clothworkers' Company, a connection which would have been a
considerable asset in trading his bays.

Essex, Halstead Seals

At least two basic types of two-disc Halstead seal have been
recorded. All the discs are over 40 mm in diameter.
Three examples may be grouped together because of the
similarity of their main device:
569, 3247 crown over rose in ornately-shaped shield, [i.e. retrograde 1592] (H)A(LSTED CR)OWNE B(AY) around //(missing)

5621 crown over rose, •1592 ...(N)E around // griffin

This seal was excavated in Amsterdam.

The other type has:

658 three crowns over rose in ornately-shaped shield, •HALSTED 100... around, with secondary ? mark //(? part of beast)

These two basic types correspond with the new designs (as established in 1592 to avoid the use of stamps similar to ones used at Colchester), respectively for the 'commonest' sort of Halstead bays, and for the 'third' sort - i.e. the third best of the four kinds? (A.P.C. XIII 1901, 76-7).
Gloucestershire, Historical Background (including Bristol)

The county's textile industry was probably quite extensive at an early date, with fulling mills dating from the 12th century (V.C.H. Gloucestershire 1907, 157; Perry 1945, 51). Bristol's industry was established by the early 14th century (Bridbury 1982, 50). The later 14th-century figures for cloths examined by the alnager there are among the highest totals in the country (ibid. 114), though up to 1453-4 figures for the city include some cloths woven in Somerset. Textiles from Somerset could have been included in later figures, but there is no specific mention as there was previously (Perry 1945, 62-3). The port of Bristol was in some years during this period at the top of the national league for cloth exports, occasionally surpassing even London (Bridbury 1982, 83). Gloucestershire's contract for the alnage and subsidy farm cost £20 in 1399; the county alnager, Robert Whittington, collected about £25 each year at this time (Perry 1945, 55-7). The alnage accounts of 1468-78 suggest an annual production of between 4,000 and 5,000 cloths in the county, about three quarters of these being alnaged in Bristol (Heaton 1982, 85-6), but the accuracy of the record has been seriously questioned (Carus-Wilson 1967, 279-80 & 283-5). A 'Book of the Alnage of Bristol' survives, which gives day-to-day details of the numbers of cloths sealed in the reign of Richard III; though the accuracy of this too as a basis for production totals has been queried (ibid. 290), it could prove a useful source for the daily work of the alnager (it has not been examined in connection with the present thesis). Bristol's woollen industry slowly declined after 1500 (Perry 1945, 73), though the city remained an important centre for the cloth trade.

In the 16th century, Gloucestershire formed part of the important concentration of textile production in the West Country (Ponting 1971, 21). Bristol's frizes, some of which were exported, rose in price in the middle of
the century (Heaton 1982, 149-50). There was a Weavers' Company in Cirencester later in the century (Perry 1945, 93). Cloth production in the south of Gloucestershire and the Stroudwater Valley expanded during this period. The rural industry (already renowned for its coloured broadcloths and scarlets) was important enough to be exempted from the provisions of Statute 4 & 5 Phil. & M. c. 5 (1557-8), which sought to concentrate textile industries in the towns (ibid. 83; Ponting 1971, 19 & 22, & 1972, 237). Statute 5 & 6 Ed. VI c. 6 (1551-2) required Gloucestershire's white and red cloths to be between 26 and 27 yards long, and to weigh at least 64 pounds if white, and 60 pounds if red; broad blue cloths were to be between 25 and 27 yards long, and at least 68 pounds in weight - this was reduced to a minimum of 61 pounds by Statute 4 & 5 Phil. & M. c. 5. Provision for the rural textile industry of Gloucestershire (and also that in Somerset and Wiltshire) was made by Statute 18 Eliz. I c. 16 (1575-6), but this was repealed by Statute 21 Jac. I c. 28 (1623-4). In 1576 it was alleged that alnagers in the west of England, including Gloucestershire, were not carrying out their duties properly, and were allowing clothiers to put alnage seals on their own products. Statute 27 Eliz. I c. 17 (1584-5) altered the specification for the county's white and red cloths. The alnage contract for the cities of Bristol and Gloucester was purchased in 1596 for £72.6.8d by Robert Webb (Perry 1945, 122 & 124). New types of coloured and medley cloths began to be developed in Gloucestershire in the late 16th century (Ponting 1971, 26). White cloths were being exported via the Netherlands and Germany through Europe around 1600 (Mann 1971, XII-XIII), but the county's trade was badly hit by recession in the mid 1610s, carrying on into the 1620s (Perry 1945, 127-8). The urban textile industry of Gloucester declined in the late 16th and early 17th century, and the clothworkers' guild there was 'quite decayed' in 1634 (Lobel & Tann 1969, Gloucester 12; Perry 1945, 96). For attempts to raise the standards of control in textile regulation in Gloucestershire and elsewhere in the early
1630s, see Wiltshire, Historical Background. The lightweight new draperies known (because the better-quality ones were made from imported Iberian wool) as 'Spanish cloths', became important from the 1620s (Mann 1971, XIV-XVII; Perry 1945, 103-4). In 1640 the report of the Royal Commission on the Clothing Industry recommended Gloucester and Stroudwater to be centres of regulation for the county's textiles (Thirsk & Cooper 1972, 249). Though the overall importance of Cirencester in the trade diminished in the middle of the century, bays and stuffs were manufactured there at this time (Mann 1971, 7-8).

From the 1650s, the Levant Company took an increasing number of Gloucestershire cloths to Aleppo, Constantinople and Smyrna. Textiles tended to be made longer and narrower to appeal to customers there. This trade was disrupted in the 1680s and 1690s by war (ibid. 18-19 & 21). In the late 1680s the average annual profit on subsidy and alnage for the county was £600, levied on broadcloths (H.M.C. 1894, 42). By now Gloucestershire cloths were being sent to Persia and China by the East India Company (Mann 1971, 22). Traditional broadcloths continued to be manufactured in the county right through the 17th century and later (Perry 1945, 104).

The period 1690 to 1760 was a particularly successful one for Gloucestershire textiles, with the fostering of new markets in America (shipping the cloths via Bristol) as well as in India and elsewhere in the East (ibid. 135-6; V.C.H. Gloucestershire 1907, 160). Gloucestershire white cloths were imitated in Yorkshire, and some of these derivative fabrics were traded to Turkey. The Halifax versions produced in the early 18th century were not as fine as the originals (Ramsay 1982, 16). A total trade of c. 50,000 cloths per year from Gloucestershire was claimed in 1712 (Mann 1971, 33). Home consumption greatly increased in the late 17th century, and the export of 'Spanish' cloths peaked in the second decade of the 18th century (ibid. 25-6 & 29). There was a decline in exports to the Levant in the 1730s and 1740s,
though the East India Company's trade was increasing. Cloths called 'Salisburys' were being made in Gloucestershire in 1768, just as 'Worcesters' had been produced there from the 1630s (ibid. 40 & 43). The Iberian trade was diminishing in the 1770s and 1780s (ibid. 44-5). By the end of the century, the sale of broadcloths had picked up again, and exports to China were beginning to compensate for the decline in consumption in India by the end of the 1810s. Gloucestershire continued to supply the East India Company with broadcloths for China up to 1833 (ibid. 62, 157-8 & 167).

**Gloucestershire Seals**

The earliest two recorded seals are of the two-disc type. They appear to date from the 16th century. One or both may belong to the suggested 1553 group (q.v.);

4801
DC, (G)LOCESTE(R) around // crown over shield with arms of England, (?) 3 or 5 to right (cf. fig. 12)

136
G, + COM· GLOCEST... around // (?)arms of England

There is a notable series of dated four-disc alnage seals from the 17th century. The earliest ones are from the reign of Charles I and are for the alnager NB:

593, 2102, 4597, 4664
-//NB, : GLOSTE(R)SO...(E)RSET around // 162.. over arms of Stuart Britain, C R to sides //-

No. 2102 has 32 on the first disc and no. 4597 has 74 here, probably for the weights of the cloths in pounds. These seem to be seals for Gloucestershire and Somerset together. They may have been for the fabrics woven in an industrial area comprising north Somerset and part of Gloucestershire, as well as Wiltshire (Ponting 1972, 235). The alnager NB also appears on Wiltshire, Dorset, and Devon seals (nos. 3332, 244, 594, etc., q.v.), as well as other examples.
459, 575, 757
-//16/III/37, CO..*GLOS...SHIRE around // (missing) // I B,
(S)ERCHED around

1777 RN/III, 1648*GLOSTERS around (inner 'star'-shaped part)
A similar, but possibly not identical, stamp with RN/III is on a
disc found at Boughton Hill, New York State, U.S.A. *
Similar seals have:

1745, 2601 RN/V-I, ...STER-S•A• // crown over arms of Stuart Britain in
ornately-shaped shield, C R to sides (inner discs)
The III and VI are presumably the susbsidy rates in pence; if so,
these are the earliest dated seals to give this information. 'S A'
may stand for 'subsidy and alnage' or 'seal of alnage'.

463, 758 (inner disc) •6*/GLOS/TER/1658 in wreath
Here too the six is probably an indication of the subsidy, in
pence.

1626 -//(II) over (?)III, 1671*GL... around// crown over arms of
England, C R to sides //-
A seal with lozenge-shaped outer parts and 'star'-shaped inner
ones has:
-//•3•/TN, ...(O)STE(R)-S•1676 around// crown over shield with
three fleurs de lis, C (R) to sides//-
This was found at Rochester Junction, New York State, U.S.A. *

137, 3256, 4601,
(?)3342, (?)4272
-// crown over arms of England, C R to sides //
•3•/TN, *GLOSTER-S•16(8)2 around //-
The inner parts are scallop-shaped, except for no. 4272, where
the surviving inner part is 'star'-shaped. It too may be a 1676
seal.

* Identified from photographs sent by Judy Ozone of
Rochester Museum and Science Centre, Rochester, N.Y.
Possibly part of a complete seal.
A similar seal has 6 in place of the 3 on the third part.

An undated seal for the same alnager has:

-//*/EP, R...GGS//+/I-/TN, * GLOSTER* ...G(S) around//-

('star'-shaped inner parts)

The EP on the second part suggests a second alnager or searcher along with TN (who appeared alone on the preceding seals).

Number 1097 may be for one of the textiles known as 'rugs'.

Further incomplete, undated seals are:

(inner disc) GLOS/TER/4½

The 4½d subsidy suggests a post-Restoration date.

-// 28, GLOSTER... around // (missing) // (missing)

White cloths 28 yards long were being produced in Gloucestershire in 1604 (Coleman 1977, 79), though the date of the seal is uncertain within the 17th century, and the figure on it could well refer to the cloth's weight in pounds.

Gloucestershire, Bristol Seals

Two Bristol seals and a matrix have been recorded. The devices are all in late-medieval style, with Lombardic-letter legends.

The seals have:

ship issuant from (?a port (in a tower) [arms of Bristol], D...(COM B)... around // crown over sun and rose dimidiated & conjoined , ...COM... around

arms of Bristol [as above], (S\VLNA)... around // leopard's head with fleur de līs close to mouth, ...(N)O(RV: I)N... around

The copper-alloy matrix has:

crowned leopard's head, with tongue out, in six-arched tressure, S:VLNAGII\X:PANNORVI:IN*BRISTOLLIA: around
The above two seals are, apart from some London examples, the only recorded medieval-style ones to have city or borough arms. They could perhaps relate to Statute 1 Ric. III c. 8 (1483-4), which required civic arms to appear on cloth seals (see under Medieval Seals). The sun and rose dimidiated and conjoined on no. 704 is a device used on coins of 1471-90 (North 1975, 74, 78-9 & 81); it may be a reliable indicator of the date of these Bristol seals, particularly in view of the 1483-4 Statute.
Hampshire, Historical Background

The alnage returns of 1471-2 claim an annual production of 1000-2000 broadcloths for the county (Heaton 1982, 83-6), though the accuracy of the records of the alnager here later in the decade has been called into question (Carus-Wilson 1967, 279 ff.). In the 16th and 17th centuries, kersies were woven in the county, for example at Winchester (which was usually mentioned specifically in earlier alnage returns) and at Southampton (V.C.H. Hampshire 1912, 484-6; cf. Statutes 27 Hen. VIII c.12 of 1535-6, and 33 Hen. VIII c.18 of 1541-2; the latter mentions the decline of this industry in Southampton). These textiles were exported to different parts of Europe - to Hungary (cf. Endrei 1975, 124) and Italy, and later to south Europe and the Levant (Ramsay 1982, 35). 'Hampshire kersies' were also woven in neighbouring Surrey (V.C.H. Surrey 1905, 347); perhaps the name is indicative of the popularity of Hampshire's products.

Walloon refugees settled in Southampton in 1567. They wove new draperies such as rashes, serges and frisadoes (V.C.H. Hampshire 1912, 485-6; Platt 1973, 222). In 1569 a John Hastings was granted a 21-year patent to make frisadoes in the manner of Haarlem. Hastings' textiles were finished in Christchurch, though they were perhaps not woven there (V.C.H. Hampshire 1912, 486-7).

In an attempt to make trade easier for Southampton and other towns hit by a decline in exports, Statute 3 Jac. I c.16 (1605-6) changed the length required for kersies from the 18 yards specified by Statue 14 Eliz. I c.10 (1572), back to the former, more saleable 24 yards. The clothiers of Basingstoke in 1630-1 drew up a petition as part of a campaign to revive Hampshire's diminishing broadcloth and kersey industries (V.C.H. Surrey 1905, 348).

The Royal Commission on the Clothing Industry in 1640 recommended Andover, Basingstoke and Southampton to be county centres for control in the
industry (Thirsk & Cooper 1972, 249). An annual average of £160 profit from the county's alnage and subsidy was made in the late 1680s on kersies and serges (H.M.C. 1894, 42). By the end of the century, traditional woollen weaving had almost disappeared (Chalkin 1965, 122; cf. Ramsay 1982, 16). Shalloons for linings were being woven in Andover in the 1720s (Ramsay ibid. 17).

**Hampshire Seals**

All the recorded Hampshire seals are of the four-disc type.

Possibly from the Commonwealth period, if the cross is that of St. George, is:

1383
(inner discs) shield with cross // T., *HAMSHIERE around

Others give no specific indication of date, though they were probably used during the 17th century:

1401
-/-$, HAM(P)S·IOB· around // crown over rose //-

Probably for the same alnager SL or LS is an inner disc:

2413
$, HAMPS 3 around

Presumably the 3 indicates three pence subsidy, and IOB means 1½ pence (obolus = ½d). See also on Devon no. 331 etc.

Other seals have:

2034
-/- HA(M)/SHE ...// (missing) //-

3367
(first disc) (rose)/HAMP/SHIRE

(7405)
A further possible Hampshire example, for the alnager TP/PT, is listed under Devon (q.v.).

**Hampshire, Southampton Matrix**

No seal is known for Southampton, but a discoid copper-alloy matrix survives:
crown over king's head, with part of bust, feather with scroll to each side, SVBSIDIVM:PANORVM:SVTHNTS: around (Lombardic lettering)

The style of the engraving is rather crude. The matrix has been published as dating to the reign of Edward III (Tonnochy 1952, 12 & pl. IV, no. 32 *). Though there are basic similarities with the design on pennies of the late 13th to 15th centuries (and presumably the clumsy head on this matrix is ultimately based on that), there does not seem to be any reason for assigning it to a specific reign - see on Medieval Seals with a King's Head. Southampton does not seem to have had a prominent cloth-manufacturing industry under the Edwards, though trade through the port was thriving in the mid 14th century (Platt 1973, 20, 154-5, and 162). If the matrix is of about that date, it is possible that it would have stamped seals for imported textiles, or perhaps for cloths woven inland at Romsey (ibid. 159-60).

* Tonnochy publishes the last word of the legend as SVTHNTS
Herefordshire, Historical Background

Herefordshire was not a notable cloth-producing county at any period. Richard More, the accuracy of whose records has been questioned, was alnager here in 1474–78 (Carus-Wilson 1967, 279 ff.). Herefordshire was not mentioned by the Royal Commission for the Clothing Industry in 1640 (Thirsk & Cooper 1972, 249-50). The fine, short wool produced by Herefordshire sheep, by contrast, enjoyed a particularly high reputation (Dyer 1973, 95; Perry 1945, 104).

Herefordshire Seal

One probable Herefordshire seal, apparently of the two-disc type, with an alnage stamp registered on the very wide connecting strip prior to folding, has been recorded:

2513 (scratched) 24½ \ TT privy mark; the alnage stamp is: crown over thistle, ...H..RE... [i.e. COM : HEREFORD ?] around

This device is comparable with the crown-over-thistle seals recorded from several counties and attributed to the reign of James I (cf. fig. 36A). The 24½ is presumably the length in yards, or weight in pounds of the textile, as determined by the clothier or searcher TT.
Huntingdonshire, Historical Background

The area does not seem to have been prominent in textile production - neither the county nor the local towns were mentioned by the Royal Commission on the Clothing Industry in 1640 (Thirsk & Cooper 1972, 249-50), but some new draperies were woven at Peterborough in the 17th century (Kerridge 1972, 27).

Huntingdonshire, Peterborough Seal

A possible two-disc alnage seal for Peterborough has been recorded:

2200 (incuse) A (?)F/M // crown over thistle, L (S) to sides, ...ERBOR(O)... around

The L and (?) S in the position usually reserved for royal initials is unusual. Very few alnage seals have incuse letters - here they are presumably the initials of the Christian names of a husband and wife, with surname initial below. L and S are probably the alnager's initials, and the incuse letters the initials of a searcher and his wife. Though the crowned thistle is not exactly similar to that on the county-series seals mostly attributable to the reign of James I (cf. fig. 36A), a 17th-century date seems likely. The first quarter of the century may be indicated by this device.
Kent, Historical Background

According to the alnage accounts, Kent produced an annual average of just over 1000 cloths of assize in the later 14th century (Bridbury 1982, 114). A similar figure was recorded in the late 1460s (Heaton 1965, 85-6). A possible hint of growth in the county's industry in the next century is provided by an order for 22 seal dies by the alnager for Kent, Sir Edward Guldeford, in 1517 (V.C.H. Kent 1932, 404 - citing Memoranda Rolls, King's Remembrancer, 8 Hen. VIII Mich., m. 24) - see fig. 30, below. This could mean eleven pairs of dies (cf. Devon, Historical Background for late medieval matrix pairings), but the recorded Kent seals which can be attributed to the 16th century are generally stamped only on one side. Compare the eight seal matrices issued for Kent in 1579-80 (below), and see on Kent Seals for further evidence that production may have been on a large scale around the early 16th century, though no direct historical evidence which might confirm these indications has been located. Kent's textile production was part of a branch of the cloth industry apparently second only to the West Country in output in the early 17th century (Chalklin 1965, 116).

Statute 5 & 6 Ed. VI c.6 (1551-2) required Kent cloths to be between 28 and 30 yards long, and to weigh at least 90 pounds. The minimum weight requirement was dropped to 86 pounds by Statute 4 and 5 Phil. & M. c.5 (1557-8). Fines in London are recorded in 1565-6 for cloths lacking in weight from several Kent towns, notably Cranbrook, which was a major centre of production in the 16th century (V.C.H. Kent 1932, 405; Chalklin 1965, 117). The traditional broadcloth and kersey industries were supplemented in the later 16th century by the introduction of the manufacture of new draperies by foreign settlers. Dutch immigrants came to Sandwich in 1561, to Maidstone in 1568, and there were Walloons at Canterbury from at least 1571 (V.C.H. Kent 1932, 406-8). Though seals were required from 1568 to be used on the
(fig. 30) Caption on following page.
Order for 22 matrices for alnage seals for Kent, 1517:

It is recorded for posterity that Sir William Stafford, custodian of the king's mint in the Tower at London, was on the 27th of June last given orders that twenty two new seals [sc. matrices] should be engraved, to be of suitably hard metal, for lead seals of saleable cloths in the county of Kent, to be engraved with marks and differentiations (lines 1 - 6)

.... and that they should be given to Richard Tailour to deliver to Sir Edward Guldeford, farmer of subsidy and alnage of the above-mentioned cloths in the above-mentioned county, to look after (lines 13 - 15).

Memoranda Rolls, King's Remembrancer, 8 Henry VIII, Mich., m. 24. (P.R.O. E159 295)

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Legumes, sackcloths and woollens woven by the Dutch at Maidstone (ibid. 408), none of these has been identified among the recorded examples. The Dutch at Sandwich wove bays, says and linsey - woolsies (Chalklin 1965, 124). Regulations for this community were recorded in 1594 (though they had presumably been in operation for some time). Four 'leads' (?)tags) were to be woven by the weaver on the end of every bay, for four seals to be put on by twelve overseers in the Cloth Hall. The textiles were searched both before and after fulling. The seals are described in detail: a 'crown' seal (cf. alnage seal), 'which they have by authority from the alnage, to whome they pay a yearly composition for it'; a 'town seal ...by which it is known where the commodity was made'; a third seal giving the number of warp threads, 'whereby is discerned the several degrees of goodness'; a fourth seal to specify the kind of bay - these seals were of three types: 'for the best bay, a seal with a ship, the second a rose, and the third a flower de luce'. This system of
regulation was so scrupulously observed, that in the Low Countries, Iberia and Barbary, where the products were traded, '.....the seal being seen, it sufficeth'. This Sandwich system came to be adopted by the immigrant communities of Colchester, Canterbury and Maidstone. (H.M.C. 1892, 573-4 *; cf. May 1971, 6).

The Walloons at Canterbury probably established their textile industry in the mid 1570s. Eight hundred and thirty cloths were sealed at the Cloth Hall there in 1576 (probably the first year the system operated), at 2d per cloth. (V.C.H. Kent 1932, 407). The principal products were bays and says, with silks and silk rashes becoming more important (and later including some very elaborate and expensive fabrics made with gold and silver thread), (Cross 1898, 184, 202, 204 and 240). As early as the 1580s the London Weaver's Company (who by this date were almost exclusively concerned with fabrics of silk or with a silk content) had become alarmed at the threat these immigrants' skills and new equipment posed to indigenous workers (ibid. 187-8), and in 1638 and 1639 the London Company tried to 'overthrow' the authority of the Canterbury Cloth Hall (ibid. 194-7). The Privy Council intervened with an order that Canterbury textiles should be searched and sealed in Canterbury, and not in London, and that the London and Canterbury Weavers should be formally separated into different companies. Apparently in connection with the new arrangements, the deputy alnager was required to change his seal back to its former device, or to use a different design from that on the alnager's seal (ibid. 241-2). The significance of the last point, which may refer to London or to Canterbury seals, is obscure. By this time, the manufacture of rays and silk rashes was in the decline, though figured, mixed stuffs were still being developed (ibid. 240).

*I am in debted to Ursula Priestley for bringing this reference to my attention.
Five seal matrices were sent to Kent for traditional fabrics in 1579, and in the next year three more were sent from the Exchequer to the alnagers William Fitzwilliam and George Delves for the new draperies there. Only five other matrices were issued at this time for new draperies in the whole of the rest of the country (N. J. Williams 1951-2, 353-4), again perhaps suggesting a remarkable prominence for the county. None of the recorded Kent stamps can definitely be identified with the new matrices. The county’s apparent total of eight new matrices was considerably less than the 22 ordered here over 60 years previously (see above).

In 1592-3 a bill was drafted for the maintenance of the cloth trade in the Cranbrook area, where a fuel shortage threatened the dyeing industry and hence the textiles too. It was enacted in 1596 that no Kent cloths could be exported undressed (V.C.H. Kent 1932, 409). The high point of the trade in Kent’s traditional woollens apparently came early in the 17th century, with the export of heavy coloured cloths (Coleman 1977, 77). The county’s products were sent especially to Germany and the Netherlands, and some reached south Europe and the Mediterranean. The general trade depression affected Kent’s industry in 1614-16, 1622 and 1630-1, after which the ground lost by the traditional fabrics was not recovered (Chalklin 1965, 120-1 & 166). In 1631 it was claimed that Kent cloths coming to Blackwell Hall in London formerly had a ‘ticket upon them’ containing the lengths of the cloth in the water and the number of holes that were in the cloth so that each man saw what he bought’ (van Ufford 1983, 74). Dimensions are known on a number of seals (e.g. no. 3350 for Kent), but no indication of the number of holes in a cloth has been identified on any seal, though presumably the ‘tickets’ referred to were seals of the usual kind. The report of the Royal Commission for the Clothing Industry 1640 recommended Canterbury, Sandwich and Tenterden as centres for regulation in the county (Thirsk & Cooper 1972, 249-50). Two new matrices were ordered for the Walloons at Canterbury in 1642, one having the
city's arms (three Cornish choughs, on a chief a lion passant guardant) for 'the best sort of mingled says', and the other with a different (unspecified) device for 'the worser sort'. Twenty-three shillings was paid for one or both of these matrices. For each cloth sealed 1d was paid to the city, and ½d to the keeper of the seal (Cross 1898, 200). No corresponding seal has been identified. Some half a dozen years later there was an attempt by some 'shismatiques' among the Walloons to search and seal the textiles produced by the community, rather than to allow the appointed (local) Weavers' Company overseers to continue to carry out these duties. There was alarm at possible confusion if a second, rival cloth hall were to be established - if, for example, 'faults were committed in the fastening of the seale' the wrong group might be blamed (ibid. 199-200 and 244-5). Kent cloths still sold well in 1662, though twelve years later the industry was in difficulties (V.C.H. Kent 1932, 410). The Canterbury-Walloon weavers were eventually separately incorporated in 1676, after a period of protracted internal disputes. The document of incorporation refers to 'a leaden plate to be inscribed "Wall:Wea:Cant:" as a badge', to be fixed 'unto every piece or webb' manufactured by any member of the Fellowship (Cross 1898, 250). None of these seals has been identified. The last two decades of the 17th century (when the revocation of the Edict of Nantes sent over more refugees skilled in weaving) was the zenith of the Canterbury silk industry (Chalklin 1965, 127). Celia Fiennes saw twenty silk looms in one house at this time (Morris 1949, 123-4). The annual average profit on the alnage and subsidy for Kent in the late 1680s was a mere £30, levied on broadcloths and kersies (H.M.C. 1894, 42), suggesting that the decline of the traditional industry was by then at an advanced stage. The south-Kent broadcloth industry around Cranbrook came to an end in the late 17th century (Ramsay 1982, 30), though these traditional fabrics were still being manufactured elsewhere in the county until at least the 1720s (ibid. 16). The Dutch departed from Sandwich at the start of the 18th century, because
they felt that they had been poorly treated, and moved to Colchester, where the local Dutch congregation was still very active. Sandwich was apparently left 'a most miserable poor beggarly town, and scarcely half inhabited' by their departure (V.C.H. Kent 1932, 407). At Canterbury, says were still being produced in 1700 (Heaton 1965, 264), though the silk industry there began to decline in the first quarter of the 18th century in the face of increasing rivalry from French and Indian imported fabrics (Cross 1898, 253-4; Chalklin 1965, 127).

Kent Seals

A late-medieval discoid matrix has:

66 crown over fleur de lis in eight-arched tressure, S\SVBSIDII\PANNORV\IN\COM\CANTE\ fleur de lis\ around (Lombardic letter)

It has been published as being of 14th-century date (Tonnochy 1952, 11 & pl. IV, no. 30), though the crown device is similar to London seals found in 15th - and possibly early 16th - century contexts (see nos. 371 etc. below).

A possible Kent seal may be of medieval date:

4671 crown over ornately-shaped shield with arms of England, rose left, sun right, SVBCIDII P..NNO..IN COM (KENT) around (Lombardic letter) // (missing)

The rose and sun could indicate a date between 1471 and 1490 (see on Medieval Seals).
A number of seals with a crown over a double rose and Lombardic-letter legends have been recorded: crown over double rose, letter to each side, S:\PAO\VEALII\CO\ KENT(A) around (Lombardic letter, the last letter in the legend varies from stamp to stamp) //-

A variant includes an initial letter 'U' as an abbreviation for 'alnage' - S'VPAO...I'COx(KENT)

(fig. 31)

A) crown-over-rose stamp, with probable alnager's initials to sides (no. 3052)
   (drawing N Griffiths)

B) halfcrown of Henry VIII (from Oman 1931, pl. XXVII no. 2)

Presumably the letters to the sides of the roses are the initials of alnagers. They are: (?)B (L or D) (no. 710); C B (no. 1704); E H (no. 1378); G H (no. 3052) - this also has GH at the start of the edge legend; ..(? )H (no. 3142); .. R (no. 1335); (?)M T (no. 2286); B (? )V (no. 2301); B ..(no. 4562);
   (? )M..(no. 1734); S .. (no. 1679).

No. 1335 is still in place on the corner of a fragment of plainwoven woollen cloth, measuring 135 x 85 mm, which has two holes, possibly for other seals, along the same side (fig. 32).
fragment of woollen cloth, with Kent crown-over-rose seal in place (no. 1335)
This is the only known substantial fragment definitely of English cloth with an alnage seal still in place (but cf. possible crown-over-portcullis seal no. 1527). No. 1335 is to be published (Egan, forthcoming A).

The design on these seals is very similar to that on some coins from the reign of Henry VIII issued from c. 1526-47 (cf. North 1975, 92, nos. 794-6; Oman 1931, pl. XXVII no. 2 - and see fig. 31B above). The same engravers may have worked on the alnage-seal dies and those for the coinage (cf. Challis 1978, 42-3). It is possible that these stamps are the ones produced by the 22 matrices ordered in 1517 (V.C.H. Kent 1932, 404, and see fig. 30) - if so, they would have anticipated the design's appearance on the coins perhaps by almost a decade, or even more. The above thirteen seals are a large group for one county in the 16th century. Kent appears to be the only county to have its own device for alnage seals at this date (see Historical Background).

Crown-over-portcullis seals are known for Kent:

2433, 3144 crown over portcullis, SrV(L)...P.VENA(L)...0:KENT·G around (Lombardic letter) //-

No. 2433 has a privy mark (? initials GS), presumably for the alnager or searcher.

The earliest dated four-part alnage seals for the county have two different sets of stamps for the same year:

756 -// shield with three covered cups, mullet [i.e. star] in chief, W V to sides, COMлекс KENt 1614 around // (remainder missing)
The arms, if personal, are unidentified (Endrei & Egan 1982, 61 & 73), though there are similarities with the arms of the London Salters' Company (per chevron three covered salts with salt shedding on both sides). The mullet could be a cadency mark for an eldest son - it would be highly unusual, and illegal, for such a mark to appear on a Company's arms. (For two types of Essex seals also dated 1614, including one with the arms of the Goldsmiths' Company, see Essex nos. 592 and 1760.)

505, 1195 - // arms of Stuart Britain, I R to sides, (1614) above // T mark, */COM*KENT* around // (missing) (lozenge-shaped inner parts)

No. 505 has an incomplete ...(B/I)... stamp on the fourth part.

Other dated seals from the reign on James I (all of which have lozenge-shaped parts unless stated) are:

1892, 2095, (? 4359

//-+COM / KENT / 1616 / + // arms of Stuart Britain, I R to sides //-

No. 1892 has (?3)3 on the fourth part, probably for the weight of the cloth in pounds; no. 4359 is an inner disc.

3003 An incomplete variant (with discs) has CO: in the legend, with cinquefoils in place of the crosses.

4360 (inner parts) CO(M) / KENT / 1618/*//*/ SEA / RCH* / ED /*

Others, apparently with the same date, have:
(fig. 34) Kent 1618 seal (after the Green Papers - scale not given)

- // COM / KENT / 1620 // (crown) over arms of Stuart Britain, C R to sides // -

A further (unnumbered) example of this type is published (Hodgkin 1902, 103, no. 41).

Similar in design, but with C R, presumably for Charles I, are:

- // COM / KENT / T // arms of Stuart Britain, C R to sides // -

Probably related to the above series, but lacking any indication of date, is:

- // COM / KENT // crown over fleur de lis // - (with discs)

Further incomplete examples with lozenge-shaped parts have

COM (or CO:) / KENT (or / T). These may be like the seals with CR, or the other types as above. No. 2469 has 34 on the first part, no. 3004 has (30) here, and no. 1083 has 251 here and 'R' as a secondary stamp on the second part.

For the alnager TH/HT (also known on Essex and Surrey seals - nos. 1087 etc. & 3534) are:

- // SER./.HED / rose 1628 // \[\text{illegible}\] , rose to left / KEN(T) // (sub-square parts)

- // \[\text{illegible}\] , rose to each side / KENT // crown over arms of Stuart Britain, C R to sides, 16 (?)39 to sides of the crown // -
The date (read from no. 1077) is poorly-registered, and cannot be regarded as certain. Probably from one of the above two types are two incomplete seals; no. 3350 has 31 on the first disc, probably for the weight in pounds, and XXII (? for length in yards) as a secondary stamp on the second.

Having the same date as no. 126 (above), but no indication of the alnager, is no. 4358, and probably three others:

- // rose / COMI / TATE / KENT / 1628 // rose / arms of Stuart Britain, R to right // (incomplete stamps)

No. 4343 has 3·2 // W(O) on the outer discs, and no. 4358 has 3 (incomplete) on the fourth.

Further seals with CR are for the alnager TP/PT (also known on Essex seals nos. 134 etc. and cf. Norwich nos. 1386 etc.):

- lion rampant // \(\mathcal{T}\), KENT around // lion statant on chapeau

C R to sides // C / A·D

The stamps on the outer discs, with the mark of the alnager and his wife (A & D C) also appear on Canterbury seals nos. 861 etc. (below). This may mean that these particular county seals were used in the same city.

A variant (inner discs only) has (? crown over rose), C (R) to sides in place of the lion-on-chapeau stamp.

Another inner disc with the \(\mathcal{T}\) KENT stamp may be from a seal of either of the above two types.

If no. 1077 (above) is dated 1639 (which would mean that the alnager TH/HT's seals would occupy most of the reign of Charles I), the CR on TP/PT seals are more likely to indicate the reign of Charles II. See also Canterbury seals (nos. 113 etc.).

An inner disc from an incomplete seal has no indication of date:

\(\dagger 1 \dagger / KENT / ...\)
Kent, Canterbury Seals

A two-disc seal has:

3335 heart, CANTEB..RY ╹ around // (incomplete device)

The other recorded seals have four discs:


Several stamps were in use, as shown by differing devices (fleur de lis etc.) to the sides of RI and the TP/PT alnager's mark.

3321, 3341A-C, No. 3219A apparently has no stamp on the first disc.

Unusually for four-disc seals, this group frequently has the imprint of a quite fine textile between the outer closing discs.

These 21 seals are the largest group recorded of one basic type which give a provenance (apart from the special case of the seals from a wreck).

For the same alnager are:

2529, 3298 lion rampant // CAN / TERBV / + RI + / + T + // lion statant on crown // C/A·D

1111, 1577, 1583, 4344 Incomplete examples may be of either of the above two types.

A further type has:

4321 lion rampant // CAN / TERBV / + RI + / + T + // cross in shield, THE STA: SVBSIDIE·SEA: rose around // C/AD

The legend on the third disc is presumably 'the state subsidy seal'.

All the above four-disc seals are closed, where the fourth disc survives, with the family stamp of the searcher C/AD. Another seal with the same inner discs as no. 4321 has - // D/EL, for a different searcher, on the outer discs.

The CR seals above may be for Charles II rather than Charles I
(see above on Kent county seals), while those with the shield having a cross are likely to be of Commonwealth date, when the cross of St George was a prominent national symbol.

Further incomplete seals have:

- 1920 - RB, *CANTERBVRI around // (missing) // P (? incomplete stamp)

3268 ('star'-shaped inner part) 'B', CA(N)... •S around

Kent, Sandwich Seals

Three broad seals are known:

5619 crown over rose, S W to sides, rose SA(N)DWYC(H) BAYE rose around // (lion) rampant, x15... look(D)... BAEY around

This seal, which was excavated in Amsterdam, has two rivets.

1756 lion passant and hulk of ship dimidiated and conjoined, S above, W below, (L)... A... around // beast passant

Another seal excavated in Amsterdam (Baart 1977, 117-8, no. 68 *) has: three lions passant and the hulks of as many ships dimidiated and conjoined; a secondary rectangular stamp has 00 // lion rampant.

This seal was found in a context dated to between 1575 and 1650.

Like no. 1756, it has one rivet. The significance of the 00 mark is unknown.

The rose stamp on no. 5619 is presumably that described in 1594 for Sandwich bay of the 'second sort' (see above, Kent Historical Background). The stamp with a ship, for the 'best sort' of bay,

* Though published as a Dover seal, this is almost certainly erroneous. The attribution was based on the heraldry, (W. Krook, Amsterdams Archeologische Dienst, pers. comm.). The Cinque Ports all have very similar devices on their civic arms. Dover had no notable textile industry.
may correspond with that on no. 1756, but none of the stamps described in 1594 (H.M.C. 1892, 244-5) seems to be identifiable with that on the last seal. It and the similar device on no. 1756 are presumably derived from the town arms (per pale three lions passant dimidiated and conjoined to the hulks of as many ships). The forms of the above three seals are closely comparable with those used by the Dutch at Colchester, so these Sandwich seals are probably all from the local Dutch community.

A rectangular tubular seal has:

2306

lion passant and hulk of a ship dimidiated and conjoined;

(secondary stamp) LIII // XXXIII=

54 and 34 are presumably respectively the length in yards and the weight in pounds of the cloth. This seal too corresponds with a type used by the Dutch at Colchester (see nos. 2491 etc.).

A four-disc alnage seal has:

4565

-// S,·S(OM)ERS(E)T around // crown over rose, SAND(W)ICH around //-

The rose device is similar to that on seals from the reign of James I (cf. Essex no. 5543). See Somerset nos. 131 etc. & fig. 52 for stamps similar to the second one on no. 4565.

The appearance of two unequivocally irreconcilable provenances on one seal is an unparalleled and unexplained difficulty. All that can be suggested is that a stamp was sent in error to a county for which it was inappropriate. No contemporary reference illuminates the problem. There are serious implications for the reliability of other seals if this occurred in other instances which are not as evidently anomalous.
Lancashire, Historical Background

Although the county was not mentioned in the 14th-century alnage returns, the manufacture in Lancashire of coarse woollens was well established * by the start of the 16th century. The industry here was not concentrated in the hands of a few wealthy clothiers as it was elsewhere. Trade included exports to Iberia, France (especially Rouen) and the Netherlands (Bridbury 1982, 114; Wadsworth & Mann 1965, 4-5; Lowe 1972, 64-5). 'Cotton' - i.e. a relatively light woollen cloth having a raised ('cottoned') nap (ibid. 4; Wadsworth & Mann 1965, 15-17) - was woven in the county in the first quarter of the 16th century; see Statute 6 Hen. VIII c. 9 (1514-15), which exempted Lancashire cloths from the alnage regulations. Statute 27 Hen. VIII c. 12 (1535-6), however, did include the county's textiles in the alnage (Lowe 1972, 86). In 1538 Leyland wrote that 'Bolton... stondith most by cottons' (V.C.H. Lancashire 1908, 376). 'Cottons' were occasionally used as wrappers around other cloths, which would be a function only appropriate for a quite coarse fabric (Lowe 1972, 65). Statute 5 & 6 Ed. VI c. 6 (1551-2) required rugs and frizes manufactured around Manchester, Bury, Bolton and Rochdale to be 36 yards long and to weigh at least 48 pounds, while Lancashire and Manchester 'cottons' were to be 22 goads (33 yards) long and to weigh at least 30 pounds (cf. V.C.H. Lancashire 1908, 376; Lowe 1972, 4-5).

The Trafford family held the alnage contract for Lancashire in the mid 16th century. William Trafford had to deal in 1545 with two Manchester clothiers who traded Manchester cottons and rugs, each of which was furnished with a

* There is apparently no evidence to support the claim (V.C.H. Lancashire 1908, 376) that there was an alnager in Bolton at the end of the 12th century, i.e. predating the earliest known reference to these officers by about a century.
'countre-fayte and untrue sealle'. Two years later, Trafford's widow seized two packs of unsealed 'cottons', but she had to give compensation since the search-and-sealing fee turned out to have been paid. In 1550 the son copied the matrix now held by his mother, and his servant used the forgery in Manchester and elsewhere to get fees for sealing (ibid. 86-7).

The later 16th- and 17th-century expansion of the textile industry in Lancashire (which was exempted from the provisions of Statute 4 & 5 Phil. & M. c. 5 of 1557-8 encouraging weaving in urban centres) was a more markedly rural phenomenon than in the majority of other counties (Wadsworth & Mann 1965, 54-5, cf. 63). From 1561 Thomas Leigh held the county's alnager contract for 21 years, at a fee of only £2.1.8d per year; he was apparently not particularly conscientious in his duties. Two years later a Ward Judd of Salford was accused of using a forged matrix to seal *faulty 'cottons', rugs and frizes (Lowe 1972, 88-90). Statute 8 Eliz. I c. 12 (1566) permitted some fabrics to be lighter than specified in 1551-2: 'cottons' could weigh only 21 pounds, and rugs and frizes 43 pounds; there were to be deputy alnagers in Manchester, Bolton, Blackburn, Bury and Rochdale (cf. Wadsworth & Mann 1965, 23); Lancashire cloths were to have 'the Quenes Highnes seale of leade, having the portcullies crowned, ingraved on the one syde thereof, and the true wayghte... to be ingraved on the other syde' (cf. Lowe 1972, 90-91). Though the portcullis device is well-represented on recorded seals for other counties (see on crown-over-portcullis seals), no Lancashire example has been recorded.

An alnager could on occasion be thwarted by force, as in 1567, when the Manchester clothier John Houghton took six packs of unsealed cloths out of the county. The alnager pounced on him on his way through Cheshire, but the outcome of the brawl (which involved other clothiers), was that Houghton continued his journey, with his cloths, to the market at Stourbridge Fair.

* In his commentary Lowe (89) describes the seals as 'wax'. This is presumably a mistaken assumption.
Alnager Leigh also had to face a claim by Preston Corporation that they, and not the alnage officers, were responsible for sealing cloths in the town. This time Leigh was successful in asserting his rights in court (ibid. 91-2).

By 1576 'cottons' were being traded to France, Iberia and also to the Baltic and Germany (ibid. 66). The authorities in London in 1595 seized some 'cottons' on the grounds that they were frizes wrongly described, and therefore wrongly sealed (Wadsworth & Mann 1965, 12). There was clearly scope for contemporaries to be confused by the use of the word 'cotton' (whatever the intentions underlying this particular case were), and with the industry's development of mixed fabrics in the next century, it becomes virtually impossible in some cases to be certain just what was being described.

Statutes 39 Eliz. I c. 20 (1597) and 43 Eliz. I c. 10 (1601) both tried to tackle the longstanding problem of the excessive stretching of cloths in Lancashire and elsewhere (cf. Lowe 1972, 93-4). Twenty years earlier, the alnager John Leake had complained of 'the Northe partes, wher no true clothes are made' (Tawney & Power 1924, III 214). Annual exports at the end of the Tudor period included 30,000 'newe devised' kersies from Lancashire (V.C.H. Lancashire 1908, 377).

It was probably around this time that vegetable cotton was first used, with linen, for weaving fustians in the county (Wadsworth & Mann 1965, 15). Some surviving scraps of pure cotton fabric found near Bolton and dated (by external evidence) to the first half of the 17th century are interpreted as local products (ibid. 112). The manufacture of woollens was by now retreating to the east of the county, around Rochdale, with fustian weaving to the west (ibid. 23). The fustians woven in Lancashire were included in the alnage patent of the Duke of Lennox in 1613, though the validity of this was contested (V.C.H. Lancashire 1908, 380). By 1610, Manchester bays were being exported from London; bays had been woven in Rochdale for some years by then. Manchester was producing frizes, cottons, white kersies, rugs, and minikins in 1627-8.
There was a Manchester Hall at Blackwell Hall in London for the county's products (ibid. 8; Heaton 1965, 148 & 188). The Royal Commission for the Clothing Industry in 1640 recommended the same Lancashire towns to be centres of quality control as those specified in Statute 8 Eliz. I c. 12 in 1566 (see above), with the addition of Colne (Thirsk & Cooper 1972, 250). Also in 1640 there were complaints that the county alnager, Walter Leacock, had tried to overcharge for sealing, and that on some occasions he had withheld the seals (V.C.H. Lancashire 1908, 377). By 1681 Blackburn's textile manufacturing had declined to the extent that the alnager was no longer active there. Lancashire's woollen products now were bays, minikins, kersies, frizes, 'cottons' and penistones (Wadsworth & Mann 1965, 23 & 14). Vegetable cotton was used in fabrics woven all over the county by the end of the 17th century (ibid. 111 & 113). The precise nature of some of the fabrics produced during the next century is made virtually impossible to establish, because of contempories' use of misleading descriptions to avoid the restrictive legislation that had been intended to stem the commercial threat posed by cottons from India (ibid. 115 & 139-40).

The great expansion in the cotton industry in the 18th & 19th centuries, with the development of the factory system (ibid. 145-6), may not have involved the use of seals at all. Manchester's importance in the woollen industry was slight by the end of the 18th century, though the Woollen Hall there was still used (ibid. 278). The manufacture of bays in Rochdale continued at least until 1812 (ibid. 282).

**Lancashire Seals**

No Lancashire portcullis seals, as described in Statute 8 Eliz. I c. 12 of 1566, have been recorded. The county seals thought (from the use of Roman numerals) to be the earliest recorded probably date to the late 16th- or early 17th century:
crown over rose, LAI KASHIRE around (crude engraving) //(Roman numerals)

On the second discs one example has XXXIII, and two have 5284, (7)535 XXXVI, presumably indicating the weights of the cloths in pounds (cf. 1566 Statute).

(fig. 35) LAI KASHIRE, crown over rose; XXXVI (cf. nos. 5284 etc.) (drawing N Griffiths)

From the reign of James I (cf. Buckinghamshire no. 3938 for dating) are seals with:

2696; 4330 crown over thistle, I R to sides COM: LANCESTERY around //(Arabic numerals, 29 & 32 have been recorded)

189, 579; 628; 1281; 457, 1223, 3924, 4680-1

Presumably from the reign of Charles I are seals with precisely similar devices, apart from C R to the sides of the thistle. The second discs of two of these have 30, one has 31, one 32, and four 34. An example with 37 may have the same thistle stamp, but the monarch's initial is illegible. Here too the number is presumably the weight in pounds of the cloth.

(fig. 36) crown over thistle, C R, COM LANCESTERY; 34 (cf. nos. 189 etc.) (drawing N Griffiths)

No definite four-disc county seal is known (but see 'Lancaster' Seals below).
Lancashire, 'Lancaster' Seals

These may all be county seals, despite the form of the place-name.

Post-Restoration four-disc seals have:

1072 (offstruck) // Charles II-type head, OF ENG LAND around //1½
over lion passant, 88 below // LAN/CAST/ER

1099 Another seal is similar, but has 64 on the first disc, and 2½
3378; 301 (complete device) on the third. Incomplete seals have 34 and 44
on the first discs. The numbers are presumably weights of cloths
in pounds (see above, on Lancashire county seals); those on
nos. 301 and 1099 are greater than the ones on the earlier
county seals, while no. 3378 is directly comparable with
Lancashire nos. 457 etc. This diversity probably reflects the
different types of cloth available in the later 17th century.

Of uncertain date is a seal with:

4916 -// crown over portcullis, .. R to sides // garter, (H)ONI SOIT
QVI M... around //LAN/CAS./.ER (There may be a second
stamp on this disc, possibly with * /IR/3½, but the devices are
extremely difficult to make out.)

Lancashire, Probable Manchester Seal

A probable Manchester seal has been recorded:

2414 -// • I • /RVGS,(?M)...TER around // harp in shield, wreath to
sides //-

It probably dates from the Commonwealth, since the shield on
the third disc has two concavities in the top edge, which, with
the wreath and harp, is directly comparable with the designs on some coins of the Interregnum; cf. also Somerset and Halifax seals (nos. 2923 and 2763 etc.). The deficient word on the second disc is presumably 'Manchester' (though cf. Gloucestershire seal no. 1097). Manchester 'rugs', explained as a 'shagged fryse' (Wadsworth & Mann 1965, 13) - i.e. a long-napped woollen fabric - was mentioned in Statute 5 & 6 Ed. VI c. 6 of 1551-2.

(fig. 37) I, RVGS(? MANCHE)STER;
Commonwealth arms of Ireland (no. 2414)
(drawing K Hayes)

* 'Manchester' fits the available space, whereas 'Kidderminster' has too many letters and 'Chester' too few - neither of these two towns seems to have been noted for weaving 'rugs'.

Lancashire, Probable Rochdale Seal

An incomplete two-disc seal may be from Rochdale:

1653

-//(italic script)

The italic script indicates a probable date of 1650 or later. It is not certain that vegetable-cotton textiles were sealed, so this example may be from a woollen cloth rather than one of Rochdale's more prominent cotton textiles.
Lincolnshire, Historical Background

The importance of Lincoln's early clothing industry and the supposed decline in the late 14th century has recently been questioned (Carus-Wilson 1967, 211-4; cf. Bridbury 1982, 49-51). The county's production in the middle of that century was substantial, if the alnage accounts are to be believed (ibid. 114; cf. Appendix 2A). Both Lincoln and Stamford were usually mentioned in early alnage appointments (Heaton 1965, 127). There was a decline in the later medieval period, and the county did not warrant a mention in the report of the 1640 Royal Commission on the Clothing Industry (Thirsk & Cooper 1972, 246-52).

Lincolnshire Matrix

A late-medieval copper-alloy matrix for the county survives: crown in six-arched tressure, S'SVBSIDII-PANNORV:IN COMITATV:LINCOLN around (Lombardic letter).

It has been published as dating to the 15th century (Tonnochy 1952, 11 & pl. IV, no. 31), which is probably correct. The device is quite similar to that on Kent matrix no. 66.
London, Historical Background

A London Weaver's Guild is first mentioned in 1130 (Carus-Wilson 1944, 42), and regulations governing the manufacture of cloth in other towns, but apparently based on legislation originally devised for the capital, are recorded at the end of the 12th century (ibid. 48-9). Recent archaeological work has revealed large-scale cloth-finishing plants by the Thames from the late 12th and early 13th centuries (Youngs and Clark 1982, 193, site 88; Youngs et al. 1983, 195, site 90). There was a drapery market from 1246 at the east end of Westcheap (i.e. Cheapside), (Brooke 1975, 177). About 200 people were fined in London in 1276 for selling cloth which contravened the assize, though a proportion of the textiles would have been woven elsewhere (Bridbury 1982, 29). Although London was a centre in the 13th century for the production of coarse woollens known as burels (Carus-Wilson 1944, 34 & 48), by 1400 the manufacturing processes, in particular weaving, were tending to move out into the countryside (Thrupp 1977, 63). Early in the 14th century, the number of looms in the city apparently fell from 380 to 80 (Carus-Wilson 1967, 205). Woollen weaving was never again prominent in London, though finishing remained important here well into the post-medieval period.

There is probably a direct connection between the riverside finishing industries - dye houses and possibly fulling - on both banks of the Thames in London, and the great concentrations of cloth seals from the late 15th - to the early 19th century along the foreshore. It is these Thames-side finds which contribute an overwhelming proportion of the seals discussed in this thesis (see Appendix 4). They include examples from probably twenty four counties, as well as a number of imports (not discussed here), and a large number of London dyers' seals (also omitted from this present study).

By the mid 14th century, London was more notable for its trade in cloth than for weaving, though over 1,000 cloths were supposedly examined by the alnage
here in some years (cf. Bridbury 1982, 49, 83 & 114). In the early 15th century, clothiers from Salisbury (and presumably from other production centres) apparently sent their cloths to Westminster Fair before they were alnaged (or at least, the alnagers there seem to have examined the textiles there). London figures in the alnage accounts may therefore have this further complexity (ibid. 69 & 74). An annual average of c. 1550 cloths-of-assize were examined by the alnager in London in the late 14th century, according to the official records (ibid. 114). Exports of English cloth doubled in the 1380s and 1390s (ibid. 101), though by no means all of this dramatic increase was through London. A possible response to the trend towards the concentration of the trade in London, and (in part at least) responsible for fostering this development subsequently, was the establishment in 1398 of Blackwell Hall (which had been purchased by the city in 1369) as London's monopoly cloth market (Heaton 1965, 147); Riley 1868, 550-2). It is probably no mere coincidence that the earliest English reference so far traced to the use of leaden seals for cloths is for London in 1380 (Sharpe 1907, 145-6; cf. Endrei & Egan 1982, 55). There is presumably a connection between these developments and the appearance of seals in the archaeological record, since the earliest excavated English seals are from this period. Two apparent late 14th-century London seals have been recorded (nos. 5747 & 6511); one was found in the capital itself, and the other (which at present stands for the international trade at this date) in Oslo. Statute 4 Hen. IV c. 6 (1403) notes the omission of the seal of lead for cloths wrought, woven and fulled in the city and suburbs 'as in old times was used' - this may refer back to the seals mentioned in 1380.

London was included with Middlesex (which probably had only a very small textile industry) in the later 15th-century alnage figures; these indicate just under 1,000 cloths alnaged in 1469-70 (Heaton 1965, 85-6). Bridbury observes that 'the loss of virtually all the London cloth records... is the greatest single
misfortune that English clothmaking history has ever sustained' (Bridbury 1982, 83). The accuracy of the above traditional broad view of developments at London may, in view of this, be open to question.

The monopoly held by members of the Weavers' Company on weaving in London was ended in 1336 (Miller 1965, 73), and by the 16th century the number of woollen weavers there was insignificant. The Company came to be almost exclusively concerned with silken fabrics. Early in the 15th century, the Drapers' and Merchant Taylors' Companies had the right to search the dimensions of cloths exposed for sale in London, and in some way to mark the size on them (Heaton 1965, 147-8); no seals relating to this have been identified. Cloths were presumably searched and sealed on a large scale at Blackwell Hall (ibid. 149), but specific details of the practice there are surprisingly difficult to find. Reference is made to regulation at the Hall in Statute 14 & 15 Hen. VIII c. 1 (1523), 4 & 5 Phil. & M. c. 5 (1557-8) - in which section XVI states that no one is to search and seal cloths already sealed within Blackwell Hall, but the phrasing is loose, and it is not fully clear whether it is the first or (as seems more likely) the prohibited second examination that would have happened there - 35 Eliz. I c. 9 (1592-3), 39 Eliz. I c. 20 (1597), 4 Jac. I c. 2 (1606-7) and 21 Jac. I c. 18 (1623-4). Though Statute 39 Eliz. I c. 13 (1597) mentions only a search at the Hall, it was (erroneously) cited in the first decade of the 17th century as authority to seal incoming cloths there (Rememberancia 1878, 71, no. II, 230 - undated). In fact the Statute had been concerned solely with fustians, and not with woollens at all. There can be little doubt that cloths were indeed sealed at Blackwell Hall, using the legislation as the authority, but the seeming absence of unequivocal, direct reference is remarkable. Much of the other evidence which refers to searching and sealing in London around this time is preoccupied with the rights and wrongs of a second search at Blackwell Hall of cloths already examined and sealed in the provinces (as in the Statute of
The London authorities doubtless wished to maintain good quality, but they were perhaps more immediately concerned with the potential revenue from search fees etc. The dispute flared up from time to time in the late 16th- and the early 17th century (cf. Endrei & Egan 1982, 56-7, with references).

In c. 1560, the administration of the alnage at London was transferred directly to the city (Ramsay 1982, 46). Blackwell Hall was rebuilt as a 'new, strong and beautiful storehouse' in 1588 (Stow 1971 ed., 289). William Parker was appointed alnager in London in 1581 (Remberancia 1878, 69, no. I, 241), and was soon succeeded by Peter Osborne (ibid. 272, no. I, 263); in 1602 the office was held by John Tey (ibid. 71, no. II, 199), and in 1617 two further searchers were to be appointed because of the mounting workload (ibid. 75, no. IV, 74).

Blackwell Hall was divided into separate rooms and areas (each known as a hall), for Devonshire, Gloucestershire, Kentish, Manchester, Northern, Reading, Somerset, Suffolk and Worcestershire cloths, and there were also Blanket, Medley and Spanish (i.e. for English cloths made with 'Spanish' wool) Halls (Heaton 1965, 148 & 188; S.P.D. James I (1622) CXXVIII no. 73, 363; V.C.H Kent 1932, 404-5). From 1631, Blackwell Hall was to concentrate on 'old draperies', while all new draperies and Suffolk and Coventry cloths, were to be handled at Leadenhall (Jones 1972, 576; Masters 1974, 21). Leadenhall had Wool, Bay, and Colchester Bay Halls, as shown on a plan of 1677 (ibid. 27).

A post-Restoration charter (Birch 1884, 251-65, no. LI) gives details of regulations for woollens at Blackwell Hall, Leadenhall, and a separate Welsh Hall (cf. Ramsay 1965, 131). It is very difficult to gauge the effectiveness of the searches at Blackwell Hall and the other halls; the discovery, when the Lord Mayor ordered a spot check at the main Hall in 1631, that only six cloths out of 29 examined accorded with the required specifications (ibid. 86-7), was probably not an isolated lapse.
No seals have been identified for the London Weavers' Company * (see above), though in the late 1630s it tried to operate rights of search and sealing of silken fabrics woven in Canterbury (see under Kent, Historical Background). This intervention in the affairs of a provincial industry was officially stopped, and quality control was restored to the local corporation in 1639 (Cross 1898, 239 & 241-2). The London Weavers may still have examined and sealed any silks brought to them in the capital - this was, by implication, already happening at that time. The apparent absence of documentary references to sealing by the Weavers' Company (other than in connection with the Canterbury episode) suggests that it was not one of their main preoccupations. In any case, lead may have been an unsuitable appendage for delicate silken fabrics.

In the first decade of the 16th century, over 60% of all English cloth exports were shipped out via London; a remarkable 93% of the national customs duty on exported cloths was collected in the city in 1568-9. The value of London's exports was estimated in 1560 to be over one million pounds annually (Ramsay 1982, 39 & 53). The total of notional shortcloths traded from the city exceeded 100,000 in several years in the later 16th and early 17th century (Fisher 1950, 153; cf. Ramsay 1982, 69). Ramsay suggests that the continuation of London's position as the principal national centre of the textile trade was due more to 'geographical inertia' than to any positive advantage. When the West Country was cut off from the capital during the Civil War, neither Exeter nor Bristol were able to provide adequate alternative trade facilities. The slow erosion of London's supremacy may, however, be traced back as far as the 1630s (Ramsay 1965, 108, cf. 110-11).

* Some seals for Kettering (Northamptonshire no. 4026) and Kidderminster (Worcestershire nos. 2368 etc.) have identical arms, used derivatively for the local guilds.
Seizures of cloths claimed to be unsealed took place at Blackwell Hall in the late 17th century (H.M.C. 1894, 38). From 1682, alnage seals were to be issued for cloths in the city at Talbot Court, leading off Gracechurch Street (ibid. 43-4).

The average annual profit on subsidy and alnage of cloths in London and Middlesex together in the late 1680s was £250, levied on ingrained (i.e. red-dyed) cloths, 'camblets', crapes etc. (H.M.C. 1894, 42).

The factors at Blackwell Hall were thought by the clothiers to have gained too prominent a role in the business of the market by the end of the 17th century. Transactions often took place at warehouses rather than in the Hall during this period. Statute 8 & 9 Gul. III c. 9 (1697) sought to restrict the factors' influence (Mann 1971, 66-79; cf. Ramsay 1965, 131 & 133 on how this situation developed). Neither in connection with the disputed role of the factors, nor elsewhere among subsequent documentary evidence examined, has any reference to official sealing in London after the 1680s been traced. Several later packers' seals * from London are known. These seals were attached to traded textiles by warehousemen and other agents responsible (mainly to provincial clothiers) for packaging and transit. (Plummer 1934, 77, 193, 200 and 205, reveals details of the attachment in London of seals to Oxfordshire cloths in 1749, 1766 and 1772. For the duties of the packer, see R. Campbell 1969 ed., 201).

Textiles gradually receded from their central position in the city of London's economy, though they remained one of its most important commodities up to the factory-production era. The market at Blackwell Hall was closed down early in the 19th century, following a serious decline in its fortunes in the late 18th century (Ramsay 1982, 40).

* These are not included in this present study. The extensive documentary work needed to clarify dating and attribution is still in progress (under the auspices of the Modern Department, Museum of London).
London Seals

The earliest London seals (in fact the earliest attributable English cloth seals recorded) are of the two-disc type, with two rivets. The disc diameters are c. 15 mm. As on later city seals, the bearded, balding head of the patron saint is prominent:

5747, 6511
haloed head of St. Paul facing // (missing)

(fig. 38) haloed head of St. Paul (no. 6511)
drawing E Rigby)

No. 6511 (cf. Egan 1985, 1, fig. 3) was excavated from a late 14th-century deposit in London, and no. 5747 was excavated in Oslo.

Slightly later are the first of a series of larger seals, with disc diameters of c. 27 mm.:

1332, 4688 A & B, 4689
Crown, *SIGILLVM* - *PANNORVM around* // head of St. Paul facing, inverted sword to left, (C)IVITATIS:LODONIÆAL around
(Roman lettering)

(fig. 39) head of St. Paul with sword; crown
(cf. nos. 1332 etc.)
drawing E Rigby)
The engraving for the head is of a poor standard. These are the only known English seals of medieval date with Roman lettering. The stamps have been published (Egan 1985, 2, fig. 6a & b). The sword is presumably that from the London arms (see no. 5000 below). Nos. 4688A & B and 4689 were excavated from deposits dated to the second quarter of the 15th century.

From the same deposits (and probably from later ones as well) are seals with:

371, 1328, 1379, 1888, 2308, 4690, 4716

head of St. Paul facing in six-arched double tressure, sometimes with trefoils at two of the points, SVLNAGII:PANNORV:IN: (?or PANNORVM) CIVITATE: LONDON around // crown in six-arched double tressure, sometimes with trefoils at (?two of the points, SSVBSIDII(PANNORVID:CIVITATE:LON') around

(fig. 40)

A & B) head of St. Paul

C) crown (cf. nos. 371 etc.)
(drawings E Rigby)
Like all the subsequent London seals up to the mid 16th century, these have Lombardic-letter legends.

There were several different dies in use for this group; the Saint's head * appears in a thin, heavily-stylised version in the medieval manner (e.g. no. 2308, which on the first disc has Î at the start of the legend and LOND' at the end - see fig. 40A), or more naturalistically, and with a fuller face (e.g. nos. 371 & 4716 - see fig. 40B). No. 4690 was found in a deposit dated to the second quarter of the 15th century, and no. 2308 was found with mainly 16th-century objects. This slender indication of dating does not support the expected chronological transition from a medieval-to a renaissance-style depiction of St. Paul. These seals were probably in use through most of the 15th- and the early 16th centuries.

Also of late-medieval or early 16th-century date is:

3138 crown over shield with the arms of England, sword to left, S...DON around (Lombardic letter) // crown over illegible device and sun (see fig. 9)

This may be the London equivalent, differentiated by the sword, of a county series with similar devices (see under Medieval Seals). It seems to be the only instance of a close correspondence between the design for London stamps and those for other places.

* An earlier, erroneous identification as Henry VIII (Endrei & Egan 1982, 60) was made at a time when a 16th-century date appeared likely for all the seals of this group.
Probably from this period too, is a seal with:

haloed bust of St. Paul holding shield with a cross, in the first quarter a sword [arms of London], rose to each side, S'SV(B)...NDON around (Lombardic letter) // crown over shield with arms of England, S'V(L)... around (Lombardic letter)

(fig. 41) St. Paul with arms of London (no. 5000)
(drawing E Rigby)

The wedge-shaped rays of the halo are similar to those on the earliest London stamps (nos. 5747 & 6511 above).

Post-Reformation seals no longer included St. Paul:
crown over arms of England, ER to sides, S:VLII'PAO:VIALLE'
LON // arms of London in ornately-shaped shield, fleur de lis or * to each side, LONDINI PRO PANNIS LANICIS [date] around (Roman letter) (see fig. 42A)

Examples with legible dates have 1564 (no. 1767), and 1573 (no. 2615). Several dies, with different dividers between the words of the legend are known. The legend on the first disc is an abbreviated version of sigillum ulnagii pannorum venalium
Londini - 'seal of alnage of saleable cloths in London'. The apparent abbreviation vialle for venalium is difficult (but cf. veal', ven' etc. in this position in several of the legends on county seals, e.g. the crown-over-portcullis series).
arms of England with E R (cf. nos. 378 etc, & nos. 4982A-D)  
(drawing N Griffiths)

Very similar stamps, but with slightly finer engraved lines and a smaller crown (see fig. 42B) have no date, and a fleur de lis at the end of the legend on the second disc. The engraving for the arms of England here is very similar to that on some coins of Elizabeth I. The same engravers may have worked on both sets of dies (cf. Challis 1978, 42-3).

Two probable London seals have the legend S-VL(I)PA...LLE) in Lombardic letter on the disc with the national arms and E R, and no stamp on the other disc. These could be the earliest of the series, though the use of Roman-letter legends does not invariably postdate that of Lombardic-letter ones on coins (M. Archibald pers. comm.).

ER could possibly refer to Edward VI at first, but the transfer of the alnage administration to the city in 1560 or just before (Ramsay 1982, 46), may have been the occasion for the introduction of this series. Whatever the chronological sequence, the persistence of the illogical vialle abbreviation is remarkable. These are the only alnage seals to specify woollen cloths. A seal found at Hämeenlinna (south Finland) with a similar legend, but apparently a large crown on the first disc (Taavitsainen 1982, 33-4; noted from a drawing) may be from this series.
A further possible London seal has the national arms stamp, with a Roman-letter legend, but no stamp on the other disc (cf. nos. 3013 & 4942 with Lombardic-letter legends, above).

For a very similar stamp to those with the arms of England on this group of London seals, see Warwickshire, Coventry no. 3175.

Seventeenth-century two-disc seals are all incomplete:

- 784, 1322, 1411, 3065
  - crown over shield with arms of Stuart Britain, ...DON around (Roman letter) // arms of London in ornately-shaped shield

- 1761, 2111
  - Several seals have an ornately-shaped shield with the arms of London and the legend as on the ER stamps above - and others perhaps have the Stuart version - but no stamp on the other disc.
  - These date from the late 16th- or the early 17th century.

Four-part seals include a number usually with large-diameter (range 22 - 42 mm) inner discs, which have integrally-cast devices:

- 1324, 1326, 2935, 3370, 3682*, 4253A & B
  - shield with arms of London, DE·LONDI·NO, wreath around //angel in long, pleated skirt, facing, holding palm branch right, 4379, [4711]#
  - and an object at the left [on some examples it looks like a trumpet, on others it more closely resembles a lantern, or a cup, etc.], GLORIA rose IN rose EXCELSIS around //-
  - (68 items, a minimum of 64 seals), 5666A-H, 5723A-D
  - (Cf. Egan 1985, 3 fig. 18).

(fig. 43)

arms of London, DE LONDINO; angel, GLORIA IN EXCELSIS (drawing J Pearson)

* Nos. 3682 and 4711 are probably parts of the same seal.
A number of moulds were used - as well as differences in diameter (see Appendix 1), there are several different dividers between the words of the legend, and the angel's dress (which has between seven and twenty-five pleats) has the hem at the bottom straight in some versions and dipped (rounded) in others. The shield on the other inner disc is either contained within the legend, or it interrupts it, in some examples extending to the edge of the disc (e.g. Baart 1977, 117–8 no. 69, and 1981, pl. 17 no. 2). Some examples have traces of a gold-leaf coating * on the inner discs.

The sixty-four or more seals (nos. 5655/1-68), which are among the smallest of this series recorded, having inner-disc diameters of c. 26 mm, omit the X from EXCELSIS - these might be contemporary counterfeits. (See Appendix 5; cf. Braintree no. 1905 for another possible example of intent to deceive.)

Two of these seals have 16 33 to the sides of the angel's head, and one (identified from a photograph at the Museum of London) has 16 34 here. A further variant has D E below the angel's arms - the significance of these letters is unknown. Seals of this series have been found in Denmark (nos. 4253A & B); in a wreck off the coast of Brazil thought to date from the 1660s (de Mello 1979, 221–2, cf. Davis 1973, 34 for the stamp); in the Netherlands (the example published by Baart was found in a context dated to 1600–25, see above); and in a wreck off the

* Analysis of no. 4711 by A. Skinner of Oxford University Research Lab. for Archaeology and the History of Art, letter of 19.5.83 to the writer.
south coast of Norway probably dating from the mid 17th century (Molaug 1980, 82; nos. 5655, 5666 and 5723 - three types, with diameters of c. 23, c. 26 and c. 40 mm for the inner discs - for discussion see Appendix 5).

No. 2935 is to be published (Egan forthcoming C).

A cast copper-alloy disc has the two devices from the inner discs as its designs; the significance of this undated object (which was apparently never lost in the ground) is unknown.

Inner discs from smaller four-part seals have:

2216, 2626 arms of London in ornately-shaped shield, scroll with illegible word [possibly 'subsides'] above, possible wreath around

If correctly interpreted, this legend could indicate a date during the Commonwealth (cf. Kent, Canterbury no. 4321).

A further two-part seal has:

2215 -// arms of London, BAYS above, (7) 6 to sides

The numbers, if read correctly, probably indicate the date 1576 or 1676. From 1631 bays were sold at Leadenhall. There seems to be no evidence for bay weaving in the capital.
Norfolk, Historical Background

Norfolk specialised from the medieval period in the production of worsteds — various fabrics made from long-staple wool, which was combed, and spun on the distaff. The potential for producing a glossy surface was one of the properties of worsted yarn particularly exploited in the 16th and 17th centuries (Allison 1960-1, 73 & 76, cf. Heaton 1965, 261).

In 1314 there were disputes about the dimensions of Norfolk worsted, resulting in a protracted feud between the weavers and the alnager for fifteen years (Miller 1965, 78). The county had an alnager specifically for worsted at least from 1327 (Pat. Rolls 1891; 1 Ed. III pt.1, 31, m. 20). Some, though probably not all, of Suffolk's textiles were being alnaged in Norfolk by 1335 (ibid. 1895; 9 Ed. III part II, 169, m. 19). From 1444-5, four wardens for the Worsted Weavers' Guild based at Norwich were elected annually from the weavers of the city, along with a further four from the rest of the county. The examination of Suffolk textiles in Norfolk continued — cf. Statute 23 Hen. VI, c. 3 of that same year. Over twenty years later, the jurisdiction of these wardens also encompassed Cambridgeshire (Statute 7 Ed. IV, c. 1, of 1467), but the level of their actual involvement in quality control beyond Norfolk is open to question (Allison 1960-1, 74). The county's worsteds were being traded to France and Iberia in the late 14th century (ibid. 73; J. Campbell 1975, 16).

From the 15th century, all Norfolk worsteds were to be sent to Norwich for finishing, searching, (presumably sealing), and sale at the city's Worsted Seld. By Statute 14 & 15 Hen. VIII, c. 3 (1523) there was to be another warden at Great Yarmouth, and another at Lynn if the number of weavers there exceeded ten — this seems never to have happened (at least not in the 16th century), so an officer was sent from Norwich each month to attend to sealing there (Allison 1960-1, 74). Both the 1523 Statute and 21 Hen. VIII
c. 21 (1529-30) authorised leaden seals for worsteds, says and stammins at Yarmouth and Lynn, respectively to be stamped with a 'Y' and an 'L' to indicate the origin. None of these seals, which were apparently the only ones required for these particular textiles, has been identified. There were repeated attempts to prevent the sale of faulty or unsealed Norfolk textiles (Statute 5 Hen. VIII c. 4 of 1513-4 and 26 Hen. VIII c. 16 of 1534-5 for worsteds of Norwich, Lynn and Yarmouth, and also civic orders in 1512, 1548 and 1549; Allison 1960-1, 80).

By Statute 5 & 6 Ed. VI c. 6 (1551-2) Norfolk's long coloured cloths were to be between 28 and 30 yards in length and to weigh over 80 pounds, while short coloured cloths were to be between 23 and 25 yards, and to weigh at least 60 pounds. Statute 5 & 6 Ed. VI c. 24 laid down detailed regulations for the manufacture of Norwich dornix (cf. Allison 1961, 69, and Corfield 1972, 280 for the continuation of this branch of the worsted trade into the 17th century) and also coverlets.

A few weavers emigrated from the Netherlands to Norwich in 1554, and there manufactured fustians ('in the Naples fashion'), russels, satins and satin reverses, all imitating continental products. The Russel Fellowship was incorporated, with the mayor of Norwich at its head, by Statute 1 & 2 Phil. & M. c. 14 of 1554-5 (cf. Allison 1960-1, 81). The Norwich fustians were of worsted mixed with cotton (Kerridge 1972, 27 & 29).

Thirty * Dutch immigrants (from the colony at Sandwich) and French-speaking Walloons settled at Norwich in 1565 (Allison 1960-1, 82 & 1961, 61). They were licensed to manufacture bays, arras, says, tapestry, mockadoes, 'staments' (stammins), kersies etc. (Moens 1887, 18 & 265). The Church of St. Mary the Less was given to the strangers to be their cloth hall, and

* Not 300, as stated later in Allison's work; the correct figure is given by Allison 1961, 61 (first mention); I am grateful to Ursula Priestley for pointing out the inconsistency.
matrices were made for seals for their textiles. From 1571, only unfinished Dutch-community bays were searched here. Finished bays and other fabrics, including those of the Walloons, were searched in a new hall - the seals used here included ones for 'hallage' (ibid. 256-61) - perhaps the equivalent of searching seals. After 1623 St. Mary's was used only as a yarn market (ibid. 19 & 74; Allison 1961, 63). The numbers of textiles sealed at the strangers' hall between 1566 and 1588 are given by Allison (1961, 67).

Say was woven principally by the Dutch, and is prominent in the records from the 1580s to c. 1610. The Walloons' 'caungeantry' (see below) appears especially during the period 1570-1 to the 1630s; records of profits on this commodity ceased in 1648-9 (Allison 1961, 68), though the Walloons were still mentioned separately in 1656 (Moens 1887, 251). Attempts to teach the English to manufacture bays in the 1570s and 1580s did not lead to production on a large scale (Allison 1961, 65 & 68). Regulations were formulated in 1578 for the searching and sealing of the strangers' russels by the English (Moens 1887, 77). In the next year, the farm of alnage and subsidy for new draperies at Norwich was purchased for £300 by the city corporation from the holders, Messrs. d'Alves and Fitzwilliam (ibid. 75). Separate regulations were laid down in 1580 for new draperies woven by the English (Allison 1961, 64). Orders in that year 'touching the searching and sealing of cloths', specified there should be 'an iron.... fixed in a block, with a letter or cypher thereon to strike the backside of the crown seal, ... the cypher or letter to be altered yearly at the coming on of Mr. Mayor'. The stamps were to show 'in what year the .... cloths were sealed', 'the first letter to be the a, and so every year the other letter in the alphabet' (Hudson & Tingey 1910, 146 *). No corresponding seal has been identified, though a series in use from at least 1578 to the early 1600s has the initials of the Mayor of Norwich for the year

* I am grateful to Ursula Priestley for supplying this reference.
(see below, nos. 2811 etc). Also in 1580, lace and knitted hose were required to be searched and sealed at Norwich (Moens 1887, 78; Thirsk 1973, 61).

Following two disputes, the first in 1605 with the Duke of Lennox about the right to the alnage farm of Norwich, and then in 1607 between the Dutch and the Walloons, these two groups were given separate cloth halls. At the hall of the Dutch, 'wet and greasy' fabrics (e.g. bays) were searched; the Walloons' hall was for 'dry', lighter-weight stuffs ('caungeantry') - these latter fabrics differed from traditional worsteds only in minor ways (Moens 1887, 75; Allison 1961, 63). The native English had produced a substantial quantity of caungeantry in the 1580s (ibid. 69).

The right to the farm of the crown (i.e. alnage) seal was purchased from the Duke of Lennox by the Norwich Corporation in 1616. Textiles woven in Norwich at this time had a seal with the city's arms (a castle with a lion passant below), while those from elsewhere in Norfolk omitted the lion. Seals for the immigrants' products had a ship, with the word 'alien' in the middle if the textile was defective. Faulty textiles woven by the English were to have the word 'Norwich' or 'Norfolk', as appropriate, in this position (Moens 1887, 75). Seals of these types, with the exception of those for sub-standard textiles, have been recorded (see below, nos. 806 etc. & 1059 etc.). Seals with the arms for Norfolk and dated 1615 (nos. 1151 etc.) are known - this series may perhaps have begun as a result of orders concerning Norwich stuffs issued in 1613 (Allison 1961, 73).

The new draperies were traded abroad, just as traditional worsteds had been; the main foreign markets were in France, Italy and Iberia, the greater part of these exports being via London. Consignments reached the capital by sea, or perhaps more frequently (and increasingly through the 17th century) by road (ibid. 66 & 76; Corfield 1972, 282). London was also a major consumer in its own right (Priestley 1985, 199). Norwich textiles appeared at the formal cloth halls in the capital, but they were regularly sold in other places there (N. J. Williams 1951-2, 358).
A glossy surface could be given to worsted fabrics by calendering, or by the use of the hot press - which was legalised under James I after half a century of proscription (Allison 1961, 70 & 72). A Hotpressers' Company was incorporated in Norwich in 1682 (Priestley 1985, 194; cf. Allison 1961, 72, where the date is given as 1683). Some Norfolk seals (e.g. nos. 2354 & 2731) have the imprint of a fabric on their outer surface - this is probably the result of calendering, or pressing, when the textile was folded over the seal.

In the first half of the 17th century, and especially in the second half, a bewilderingly wide variety of new draperies was produced in Norfolk. Some were made of worsted combined with linen or cotton. The sometimes bizarre names given to these stuffs (cf. Moens 1887, 78) could confuse contemporaries - there are cases of the same fabric being sold under several different names.

In the 1650s, the names for these textiles were said to be 'daily increasing, and many of them binominous, as which, when they begin to tire in sale, are quickened with a new name' (Corfield 1972, 281; Pilgrim 1972, 256 & 266-7).

A bill for the incorporation of the Company of Norfolk and Norwich Weavers, originally put before Parliament a decade earlier, finally reached the Statute Book in 1650. The Company was to have two presidents and twelve wardens (with provision for others at Yarmouth and Lynn continuing as previously), and the procedures for searching and sealing at the Weaver's Hall in Norwich were formally set out (Firth & Rait II 1911, 451-5; Allison 1961, 73-4). The regulation of russels was to remain in the hands of the Fellowship of the Mystery of Russel Satins. The provisions of the Act were renewed in 1653 and 1657 (Firth & Rait II 1911, 775-80 and 1137), and superseded by Statute 14 Car. II c.5 (1662). The oath of the wardens was set out, and a fine of £20 for counterfeiting the seals was stipulated in these regulations. In the later 17th century, there were two seals for Norwich stuffs, one to be put at each end of the fabrics; one had 'Norwich' on one side, with 'letters on the other which stood for such of the wardens' names as were present at the sealing' (see
nos. 1753 etc. below), and the other seal had 'worsted reformed' on one side, with 'the quantity of yards the piece contained' on the other (Roberts 1677, 291, and 1700, appendix p. 7). The seals of the Russel Company had 'fidelitas artes alit' on one side, and a castle (cf. the arms of Norwich) on the other (ibid.) - see nos. 18 etc. & 3314 etc. below. *

Though there were intermittent depressions in the Norwich worsted industry from 1650 (Evans 1979, 191), the market remained fundamentally healthy until the end of the 17th century (Corfield 1972, 286-7). Some 'Norwich stuffs' were exported via Bristol in 1685 (Ramsay 1965, 119), perhaps across the Atlantic. The south- and west-European markets for worsteds were, however, disturbed by wars, and there were challenges from rival fabrics which also catered for the lower end of the social spectrum. A ban on French imports (such as the worsteds of Valenciennes, which had long been a threat to Norfolk products) in 1679 helped the home market, but by the 1690s, Norwich was having to imitate the cheap printed calicoes imported from India (Corfield 1972, 283).

In the late 1680s, the average annual profit on alnage and subsidy on the county's stuffs was £400. Most stuffs paid 1d each, though narrow Norwich stuffs paid ½d, and crapes under 8 lbs. in weight paid ¼d (H.M.C. 1894, 42-3; cf. Thirsk 1978, 35-6 & 283). The apparent re-imposition of the alnage on Norwich worsted in the late 17th century was strongly resisted. Though the worsted dealers won the support of a resolution in Parliament, the alnage officers soon began to renew their demands (H.M.C. 1894, 41-2).

By the end of the century, evasion of industrial regulation was widespread in Norfolk (as elsewhere), but here the breakdown was rationalised by an agreement in 1699 that alnagers would accept an annual composition rather than continue to levy the subsidy and alnage fee on each textile.

* I am indebted to Ursula Priestley for this reference, which was also independently brought to my attention by Penelope Corfield.
In 1705, the Norwich Weavers' Hall was broken into, and the sealing equipment destroyed, along with some of the records. No attempt seems to have been made by the Company to revive the practice of sealing in the county (Corfield 1972, 283-4 and pers. comm.; Blomefield 1806, vol. III 432), though wardens continued to be sworn in until the 1720s (Priestley 1985, 203).

The development of a crape industry at Norwich in the early 18th century stimulated trade here (Corfield 1972, 282). Worsted were still an important manufacture in the Norwich area in the middle of the 18th century, and in 1770 this trade was said to be worth £1,200,000 per year (Heaton 1965, 264 & 275; Seward 1972, 35). There was a Worsted Committee from 1790 to deal with industrial regulations (Heaton 1965, 418). By this time, the rise of Lancashire and Yorkshire textiles was signalling the end of the Norfolk worsted industry (ibid. 279; Seward 1972, 41). Some Norfolk stuffs were exported to the East, the Chinese market being the most important part of the county's international trade after the Napoleonic Wars (Fawcett 1985, 175).

The Dating of Norfolk Seals

The extraordinary complexity of the seals for this county is due to the presence of three different communities from the late 16th century (the English, the Dutch and the Walloons) each with their own specialised textiles, with the Russel Company in addition, and to the changing of seal dies annually by at least some of these groups. The following is an attempt to use some fixed dates to suggest a possible chronological framework. The resulting scheme doubtless has errors in detail, but it may serve as an interim statement, with the hope that further work will improve on it.

Dated seals with the initials of the Mayor of Norwich:

'1578' (no. 2811) to '1615' (nos. 1151 etc.), & cf. '1630' on no. 1484 – possibly Russel-Company seals?

Crown over rose:

? Elizabethan (no. 4374), '1615' (nos. 1151 etc.)

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Arms as for Norfolk:

'1615' (nos. 1151 etc.); Norwich/'Norfolk' arms mentioned in 1616 (Moens 1887, 75)
- probably replaced by 'Norwich' and initials series by 1654 (nos. 1753 etc.).

Bird:

'1619' (nos. 1430 etc.) to '1628' (nos. 1472 etc.)

'Norwich' and 12 initials:

'1654' (nos. 1753 etc.) to 1704 (nos. 120 etc.)

Many Norfolk seals have small-diameter discs (average c. 15-18 mm), and there seems to have been a general avoidance of the four-disc type, which is not definitely known there until 1681. The small seals may be a specific local response to cater for the flimsiness of many of the country's textiles - a complaint from 1691/2 warned 'our stuffs are so thin that they will hardly bear seals; they drop off commonly', and one individual claimed to have had a thousand seals drop off in his shop (H.M.C. 1894, 37).

Several Norfolk seals have a small escallop on the stamps. This motif is presumed to be the privy mark of the die-engraver (cf. the 'smith of the escallop shell' - active c. 1628 to c. 1640 - who used this device on the communion cups which he made; Cripps 1967, 255-8).

Norfolk County Seals

Relatively few county seals have been recorded compared with the large number known for the City of Norwich. This may reflect the location of most of the weavers in the late 17th century (Corfield 1972, 284).

Probably from the reign of James I are crown-over-thistle seals:

3312, (? )4045, -// crown over thistle, I R to sides, COM NORF! A - around
4605
4846

Presumably the final A stands for alnage. A variant has S, probably for 'subsidy' or 'seal', as the final letter in place of the A.
Another type has:

1821 (? ) 8,★NOR•FOLKE around //(? ) crown

It may date from the 1680s.

The county's seals described in 1616 had a castle (part of the Norwich arms, but lacking the lion beneath), while those for Norwich had the full arms (see fig. 45 below). The poor striking of the majority of recorded Norfolk/Norwich seals of these types means that it is rarely possible to be sure that the frequent absence of a lion below the castle was intentional. In many cases it may be missing as a result of a weak or off-centred striking. Only in a very few instances does the closeness of the border circle to the base of the castle (so as to allow no room for a lion) permit Norfolk county seals of this category to be identified (see nos. 1481, 2511, 3306, 3609 & 4954A, and also nos. 280 etc. under crown-over-rose seals). These are listed together with the corresponding Norwich seals (see below).

Norfolk/Norwich Seals

Dated seals with the initials of the Mayor of Norwich: *

<table>
<thead>
<tr>
<th>No.</th>
<th>Initials</th>
<th>Date</th>
<th>Mayor</th>
</tr>
</thead>
<tbody>
<tr>
<td>2811</td>
<td>RW/1578/CN//</td>
<td>lion rampant</td>
<td>(Mayor Sir Robert Wood)</td>
</tr>
<tr>
<td>2235</td>
<td>SB/1579//</td>
<td>(missing)</td>
<td>(Simon Bowde)</td>
</tr>
<tr>
<td>1593, 2851, 2876, 3179</td>
<td>RW/1599/CN//</td>
<td>lion rampant</td>
<td>(Roger Weld)</td>
</tr>
<tr>
<td>4924</td>
<td>CN/AT/1600//</td>
<td>(lion rampant)</td>
<td>(Alexander Thurston)</td>
</tr>
<tr>
<td>2853</td>
<td>I•T•/1601 //</td>
<td>(missing)</td>
<td>(John Tesmond)</td>
</tr>
<tr>
<td>4417</td>
<td>TL/160.. // (CN) //</td>
<td>(? lion)</td>
<td>(? Thomas Lane, 1603)</td>
</tr>
</tbody>
</table>

* I am grateful to Penelope Corfield for discovering that the initials on this series of seals are those of the serving mayors of Norwich - see Appendix 6B.
Crown-over-rose seals:

Several of these are known.
One at least may be from the reign of Elizabeth I:

4374 crown over rose, E to left // castle, lion passant below [arms of Norwich - see fig. 45 below]
The initial could be that of Edward VI, or of a local officer, but these seem less-likely alternatives than Elizabeth.

From the reign of James I are:

280, 1151, 1196, 1470, 2320, 2356, 2593, 3177, 3652, 3657, 4868 crown over rose // castle, P G to sides, 1615 at base
Nos. 2356 & 2593 have the crown-over-rose stamp apparently from slightly defaced dies. The date helps to identify the initials as those of Sir Peter Gleane, Mayor of Norwich in that year (see Appendix 6B), though the definite absence of a lion below the castle suggests that these may be seals for the county as a whole.
Variants include an example with the same date, but possibly lacking the initials; no. 801 has I R to the sides of the rose, and (COM:NOR(W)I(SI).. around (as nos. 920 etc., below). These thirteen Norfolk seals for 1615 are a remarkable series of single finds.

Several undated seals with the initials of James I have:

- // crown over rose, I R to sides, COM:NORWISI around

Incomplete seal no. 2511 has M to the right of the rose, and a castle on the other disc. Again, there is no room for lion, so this too is a Norfolk county seal. The M could perhaps be for John Mingay, Mayor of Norwich in 1617.

Similar, but lacking any indication of date, are seals with:

- castle, lion passant below // crown over rose

Further examples appear to have only the crown-over-rose stamp.

On other seals with the crown-over-rose stamp, the second stamp has been made with an apparently defaced die. The reason for this (both here and on other Norfolk seals) could perhaps lie in the need to cancel a stamp with a reference to a specific year after only twelve months' use (i.e. the stamps would be on some kind of pliers, and the rose-design die from the pair would be used for more than the one year).

Two incomplete seals with only the crown-over-rose stamp surviving cannot be attributed to a more specific group.
It is quite possible that others of these, for the most part very ineptly-struck, devices would have been attributable more closely, if the full stamp had registered. Though one example (no. 4374) among this major group is tentatively ascribed to the reign of Elizabeth, there is an unexpected lack of 16th-century Norfolk seals in general (see dated examples with Norwich Mayors' initials nos. 2811 etc. above, and no. 745 below, for the few others; cf. also nos. 1673 etc. below), so some of the undated crown-over-rose seals above may belong there.

**Seals with a bird:**

(fig. 44) bird rising, with wings addorsed (drawing N Griffiths)

(The significance of this device is not known)

There are several different variants. Some are dated:

1430, 2541 1619/XXVII/\* escallorp // bird rising, wings addorsed
1472, 2999 XXVII/1628 // (bird)

Possibly related is a seal for the next year:

1804 XXVII/1629// (illegible stamp)

1474 An incomplete example from the 1620s may be of either of the two preceding types.

Another seal has:

2498 bird, stamped on top of and obscuring:

castle, (lion passant) below [arms of Norwich] //XXVII/16..9

(Cf. nos. 1430 & 1804 above.) The significance of the overstamping on disc one is not understood.
Undated are:

1065, 1182, 1478, 2087 bird rising, wings addorsed // escallop: escallop/XXVII/ escallop

1137, 4795, 4959 escallop, bird standing (wings closed) // 27, fleur de lis above & below

2266, 2363 bird standing (wings closed) // cinquefoil/30 / (X or fleur de lis)

The numbers are presumably for the lengths of the textiles. Twenty seven yards was a common length for Norfolk worsteds through the 17th century (Allison 1961, 69; Corfield 1972, 281; Morris 1949, 149). It is possible that there is a chronological progression from the use of Roman to Arabic numerals, with a change perhaps around the middle of the 17th century (cf. nos. 570 etc. below, which have Roman numerals, and are dated 1647). If this is correct, the birds with addorsed wings predate those which have them closed.

2871, 3928 Two further, incomplete seals with birds rising and having wings addorsed, would in this case date from the first half of the 17th century.

The escallop on nos. 1430 etc. may be an engraver's privy mark (see above).

See also nos. 1471 etc. under 'Seals for deficient textiles' (below).

Seals with Norwich or 'Norfolk' arms and two large initials:

Several are dated:

2365 A(C)/(I)620 // castle

1481 castle [no room for lion] // 1627/A (escallop) H

1484 1630/WB//lion passant

(cf. William Browne, Mayor of Norwich 1630)
Apart from Norfolk county seal no. 1481, these may all be Norwich seals - those without a lion visible may be incompletely stamped (see fig. 45 below).

No. 1484 apparently has the initials of the Mayor of Norwich for that year. It may be a Russel-Company seal, since the mayor was the patron of this organisation. The initials on other dated examples are not those of the mayors in office, and no identification has been located.

Dated seals with Norwich or 'Norfolk' arms and several initials:

Presumably the initials are those of the annually-elected wardens of the Weavers' Company. Since none of these seals definitely has more than six initials, there were probably different seals for the city of Norwich and the rest of the county of Norfolk (for each of which there were six of these officers).

(fig. 45) castle with lion passant below- arms of Norwich (the arms for Norfolk seals omit the lion) (drawing N Griffiths)
None of these is definitely from a Norfolk-county stamp without the lion - those with no lion visible could be incompletely-registered Norwich seals.

Undated seals with Norwich or 'Norfolk' arms and several initials:

The initials are presumably those of the annually-elected wardens of the Weavers' Company. These seals are probably from the first half of the 17th century (from which no list of officers has been traced). Since there is no obvious way of sorting the recorded stamps chronologically, they are listed in order of apparent completeness. The arms on the other discs
are a castle, lion passant below (i.e. Norwich - see fig. 45 above). Those without a lion visible may be Norfolk-county seals, or incompletely-struck Norwich ones. The number of initials may vary, and the intended number of initials cannot be discerned on some examples - only no. 2797 (cf. no. 2798) definitely has twelve.

2797, 2798  + *+/RGRG/RM·RG/IS·FA
2727, 3377  I·B/(W)GSC/R·C
1292        + fleur de lis/-(T)C·RK/P·T
1575        ..(P·PH/R)W/H/ pierced star (illegible device) pierced star
1152        GNR..//RW·F../[letters and order reversed]

compare:

802        G(n)/RW
804        RWRK/(T)BHR/   
1159,?1160, TCB(N)/MPT..
3022
3843       ..N··/WAR..[poorly registered]
19         (C).../..NR../(PT)...
4785       (P)R/WCS
683        (C/W·M/N)   [large letters]

This could perhaps be the county's or the city's initials (CN) above and below an official's (WM).

4789       ..B*/..WP*(T)*/[illegible device]
4851       ..(E)/LW(L)/..L  [stamp from ?slightly defaced die]
2264       ..(O)/ARP

(could be 'too narrow' - cf. no. 3064, below)

1200       (A)·RH
3504       T(L)/C/ (illegible device, possible a letter)
3148       ..(M(MN))/...
2805       N..  [stamp from ?defaced die]
1153       ..(S)
Further types with Norwich or 'Norfolk' arms:

4657 castle, lion passant below // opposed lions rampant (cf. supporters in heraldic arms)

1673, 2385 //castle

The Lombardic 'H' may be part of IHS - if so, these two could be pre-Reformation seals. A complete stamp is needed to clarify the design.

Some of the devices on other seals cannot be made out at all:

407, 2676 (? angled lines) // castle, lion (passant) below

2370 castle // (?curved lines)

Though there is no lion visible in the arms stamps on several of the above, none is definitely from a Norfolk-county stamp.

Incomplete seals with Norwich or 'Norfolk' arms:

660, 3151
3227, 3656
2140, 2910,
3071, 3664

Four examples have a castle with a lion passant below (arms of Norwich - see fig. 45 above) and four have only the castle visible.

It is not certain whether the latter four are Norfolk-county seals, or incompletely-registered Norwich ones. Nos. 2140 and 2910 have the imprints of possibly defaced dies on the other discs.

Seals with Norwich or 'Norfolk' arms, and twenty seven:

Some of these are dated:

570, 1301, 3609

1649/XXVII/plant with three flowers // castle

Though none of these has a lion visible, only no. 3609 is definitely a Norfolk county seal (see fig. 45, above).
Undated are:

3204, (? )3778 castle, lion passant below //XXVII, plant motif with flowers above and below

An incomplete seal is illustrated (identified from the drawing) as having a castle, lion passant below //(? )XX (Goodall & Christie 1980, 261, fig. 55, 2). This could belong to either of the above groups with the arms and XXVII.

4757 castle // 2 (incomplete)

The two is of the same form as those on some of the seals with a bird (nos. 1137 etc. above). Twenty seven presumably refers to the length of the textiles in yards (cf. Allison 1961, 69; Corfield 1972, 281 and Morris 1949, 149).

Seals for deficient textiles:

These are defined by two basic types of stamp, reading 'too short' and 'too narrow'. They are probably all of 17th-century date *. The series has no direct parallel in any other county, though special seals for cloths with unspecified faulty workmanship or materials go back to late-medieval times (see Medieval seals with 'F' for faulty). Whether the quantity of these Norfolk seals recorded indicates that the county produced more deficient textiles than was the case elsewhere, or whether searching and sealing here was just more efficient, is not known. No contemporary comment has been noted which might suggest a high regard for Norfolk's searching in particular (though the high

* Ursula Priestley kindly informs me that there are many references up to 1650 in the Mayor's Court Minutes (at the Norfolk Records Office) to fraudulent stuffs; see Sachse 1942, passim.
standards at Sandwich and Colchester were the subject of much favourable comment during this century). The present group of seals suggests that a significant number of Norfolk or Norwich textiles which did not conform with the established dimensions were being produced, and that they were specifically catered for within the system of searching and sealing, rather than being excluded by it.

Seals for cloths deficient in length are:

1564, 2080, 3020, 3658 A – C, /SHO(R)/T: (or TE)
1659, 3788

(fig. 46) seal for a textile deficient in length (cf. nos 1564 etc.) (drawing K Hayes)

The majority of these do not have a lion visible, so they could be for the county of Norfolk; equally they could be Norwich seals which were incompletely struck (see fig. 45 above).

Others have:

1471, 1480, bird rising, wings addorsed // TO/SHOR/TE (cf. fig. 44 above)
2835, 4955
3158 One seal with 'to(o) shorte' has nothing legible on the other stamp.

Seals for textiles deficient in width include a dated example:

3064 (N)OR/WICH/(1)656//TO/(W )ARR/(OW) (see also no. 2264 above)

Others have:

1201, 2344, castle, lion passant below //T(O)/NARO/WE
3226, 4336, (?)1475
Another has NAR/OW, and further variants have NAR/ROW or NAR(R)./W. Of these, no. 3223 has an acorn (possibly an engraver's privy mark) to the right of 'TO', while no. 3306 has no room for a lion and is therefore a Norfolk-county seal (others may be the same, or are incompletely-struck Norwich seals).

The above seals with arms are probably from the first half of the 17th century.

A seal for a notably poorly-manufactured textile has:

TO/NAR(O)/W(E)//TO'/SHOR/TE'

Despite this, the seal (and most of the others above) was found in London, so even the double deficiency was not a barrier to long-distance trade.

Another example with (N)ARO/W has no letters legible on the other stamp, but could be the same as the previous seals.

Seals with 'Norwich' and twelve initials:

These are the seals described by Roberts in 1677 and 1700, with initials of the annually-elected wardens of the Worsted Weavers' Company. The initials (six for the surnames of the wardens of the city of Norwich, and six for those for the rest of the county of Norfolk) appear in most cases in the same order as the twelve annual wardens are recorded in surviving Norwich Mayors' Court Books from 1657 to 1705. The last date is the year in which Corporation seals ceased to be used here. See Appendix 6A for chronological lists of known annual wardens from this period *.

* I am most grateful to Ursula Priestley for confirming from the original records that the letters are indeed the initials of the wardens.
(fig. 47) 'Norwich', stamp (in use 1660s to 1705)
(drawing N Griffiths)

Some seals from the 1650s are dated:

1654:
1753, 3236, (N)ORW/ICH+/1654//HC/NROW/(16).../...
No. 2870 has an escallion to each side of 'I(C)H'.

1656:
3238, 4356 NOR/WICH/(1)656// RO / WCB../1656/MWP(P)/R..
A different seal, with an incomplete stamp on which the last digit also appears to be 6, has:

4135 BD/(S)PR/...(6)/B

In view of its very abraded state, the reading of the possible date is not certain. It is listed here until it can be compared with a more complete example. There is no other indication among the recorded seals from this series of two different sets of initials for any one year.

For 1657 (the first year from which a warden list survives *) is:

287 ..R/..HDR/1657/.. CSP/I...// (missing)

Lacking the full date are:

727 ..RO(W)/ (1)65../BBMW/PP//(N)OR(W)/ICH/165..

* cf. PRBHDR, BCEMKL - the surname initials from the list (Appendix 6A). The initials for Norfolk (the last six) are among the very few where the date is certain and correspondence is not exact. The reason for the discrepancy is not understood.
(?) also 1650s:

1323 NOR/W(I)...; (struck on top of and obscuring) \(\sqrt{...}/BD/..<SRR/6.../..<S\).

Attributable by comparison with the warden lists are the following:

1658:

1944 DRS/PL(B)/AW //...WIC/H

1659:

4850 SB/...L/..B //NOR/WIC/H

Another seal with the H of 'Norwich' on a separate line, like the preceding two, and therefore also probably from the later 1650s, has been published (Calver & Bolton 1950, 276 and plate no. 3. Though this seal is said to be in the collection of the American Numismatic Society at New York, the officers of the Society could not recall any such item there -pers. comm.-). See also nos. 3344 & 4118 below.

The following all have NO/RWI/CH on the other disc:

1665:

805, 3121 FH/BWRW/W(C)SP

1669:

1906, 1947 WC/TPRR/HPCS/PA

1670:

1277, 1943 PR/RMTB/HSPB/..C

1672:

1118, 1624, (?)4932 AD/LNSC/..LGB/..(C)

1675: (The warden list suggests that the last letter should be C for the name Cogine; G consistently appears on the seals. Cf. Cogine/Gogine in the lists for 1671 & 1672 - Appendix 6A - and G as the appropriate initial on 1672 seals.):

713, 1604, 1945, 1956 WB/(L)RHC/BABS/HG
1676: 

3473 /..PR../CP(W)/..GP

1677 (the order in the third line differs slightly from that in Mayor's Court Book, see Appendix 6A):

4918 PR/BBLW/..(P)WH

1679:

2758, 4027, 1016 AB/FCRDP/RGP/BG

1682:

3358, 3911 (R)/GLNC/(B)BMP/S(R)

1683:

3829 /..BB../BP(R)/

1684:

4057 BT../BR../V

1687:

851 BB/W/(LB)

1689:

2035, 3969 GG/WCBB/RCEB/WL

1692 (the last letter looks like G on no. 587, but cf. Appendix 6A):

587, 4310 CC/HPBG/GBLL/C(C)

1693:

647 P(B)/GBH(B)/GBC/

(?)1695:

892 /..G/(G)

1700:

2620 M(S)/..BCI/..DB(F)

1704:

120, 2037 BW/MHHL/DCW(T)

There appear to be more seal variants with further sets of initials than can be accounted for by the 14 years between 1650 and 1705 for which lists of wardens do not survive (see Appendix 6A). Since sealing at Norwich (by the Corporation at
least) ceased in 1705, this series of stamps could perhaps extend into the first half of the 17th century, or it may continue further into the 18th century (though neither possibility accords well with the historical evidence).

The following undatable seals have initials on one disc, and NO/RWI/CH on the other, as above (cf. Egan 1985, 3, fig. 17 a & b *). Those with the full twelve initials are listed in alphabetical order of the first initial:

<table>
<thead>
<tr>
<th>No.</th>
<th>Initials</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1438, 1597</td>
<td>BH/CCMD/MDPH/AC</td>
<td>(cf. Nöel-Hume 1956, 200)</td>
</tr>
<tr>
<td>1650, 4154</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3910</td>
<td>BL/(W)BB(F)/PHG(B, P or R)/GS</td>
<td></td>
</tr>
<tr>
<td>885, 2039, 3362, 3365, 3823</td>
<td>B(S)/LBBT/CGBB/HR</td>
<td></td>
</tr>
<tr>
<td>2448</td>
<td>LS/WDBC/...GB/C</td>
<td></td>
</tr>
<tr>
<td>4118</td>
<td>(LL)/IBHC/WLH/M (N/OR/WIC/H on first disc - cf. 1650s seals, above)</td>
<td></td>
</tr>
<tr>
<td>943, 1008</td>
<td>MT/BADL/LB(G)C</td>
<td></td>
</tr>
<tr>
<td>2740</td>
<td>(K or R)../..M/BB(R)D/SV</td>
<td></td>
</tr>
</tbody>
</table>

The following seals are listed in order of decreasing completeness of the stamps:

<table>
<thead>
<tr>
<th>No.</th>
<th>Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>2243</td>
<td>(C B or P)D/PSR(R)/..SD../...</td>
</tr>
<tr>
<td>3555</td>
<td>B C &amp; S stamped together /W..BC/...B</td>
</tr>
<tr>
<td>803</td>
<td>NS/..GB/..S</td>
</tr>
<tr>
<td>4168</td>
<td>P(I)B(C)/G(C)..W</td>
</tr>
<tr>
<td>4617</td>
<td>..(F)B/SRB/..</td>
</tr>
<tr>
<td>1387</td>
<td>..F../HC../..W</td>
</tr>
</tbody>
</table>

* The letters in fig. 17b do not represent any particular seal or set of annual initials.
243, 1910, 2735, 3360, 3364, 3487

A variant has \( \text{NO}^\circ(R)../..\text{IC}(H) \) (cf. the seals above with dates in the 1650s).

Incomplete seals with groups of initials:

3355, 3847 (B or DB) /BIWI/(W)B/..E
2694 ..W/TBTA/..B
96 ..RO../..GNH// (? illegible)
2575 ILW/WP
238 (scratches) // HO/...G/FR

Norwich Russel-Company seals:

These all have:

18, 1230, castle, lion passant below [arms of Norwich] // FIDE/LITAS
1389, (?2731, 2760, 2916, /ARTES/ALIT
3661, 3740, 3748, 4059

Another example was excavated in Amsterdam from a context dated to 1575 - 1650 (Baart 1977, 121 no. 79). The legend 'fidelitas artes alit' ('reliability fosters skill') seems to be the general meaning - presumably a reference to the quality of the
textiles) is known from a contemporary source to be that of the Russel Company (Roberts 1677, 291, & 1700 appendix p7). Cf. also nos. 3314 etc., below.

The Russel Company was incorporated in 1554-5 (Statute 1 & 2 Phil. & M. c. 14). The seal-stamp designs for russels, as discussed in 1578 (Moens 1887, 77), are not known. Although the manufacture of russels had apparently ceased by 1723 (U. Priestley, pers. comm.), the reference in 1700 implies that they were still being sealed at that date. Perhaps russel seals ceased to be used in 1705, when the city's civic textile sealing ceased (Corfield 1972, 284).

**Seal with Latin legend:**

745 ...R/OVIC/SIG/...VM/-

The legend is presumably Norovici sigillvm ('seal of Norwich'), or similar. This may be of 16th-century date.

**Seal for an individual:**

542 IOHN/WATSON/∞//NOR/WI(CH)/ plant motif, possibly with berries

John Watson, the only individual whose full name appears on a Norfolk seal, has not been identified. He was not a mayor of Norwich between 1570 and 1660 (cf. Appendix 6B), which covers the period from which seals with mayors' initials are known *.

* The name John Watson occurs in several local records e.g. under a list of worsted weavers made freemen in 1665 and 1667, and the same individual (or another man of the same name) is mentioned as a tailor in 1681, and again in 1714. The John Watson who issued the seal could be referred to here.

(I am most grateful to Sue Margeson for providing this preliminary information from a swift consultation at Norfolk Records Office.)
The plant motif could perhaps be the 'grain tree' - the mythical source of a red dye, and hence a general symbol for the dyeing trade (Bromley & Child 1960, 80-1). If it is indeed a grain tree, Mr. Watson could have been connected with dyeing *

Large-sized seals with a portcullis:

These have discs with diameters varying between 38 and 53 mm. The stamps are:

3314, 5615 castle, lion passant below [arms of Norwich], C N to sides, ...(W)...ALITA... around; two incuse •• marks // crown over portcullis [2 vertical and 3 horizontal squares], ...(A)LIT ARTE(S) around

These seals are similar in form to those of the Dutch communities of Colchester and Sandwich with their large diameters and in having two rivets. The incomplete legend is reminiscent of the 'fidelitate artes alit' motto of the Norwich Russel Company's seals (cf. nos. 18 etc., above). There was apparently no formal connection between the Dutch in Norwich and the Russel Company, nor does there appear to be any specific reference to the Dutch in the legends on these present seals. No. 5615 was excavated in Amsterdam. The imprint from the textile on no. 5615 is similar to those on seals for bays from elsewhere.

* Norwich dyers may have used seals from 1574 onwards (Allison 1961, 64). From 1575 they certainly used 'marks', and the searchers for the dyers used lead seals with the legend 'Norwichfore' (Moens 1887, 79) - none has been recorded. A warden of the Norwich dyers was fined for not sealing six stuffs in 1637 (ibid. 80), though it is not clear if this was specifically in connection with regulations concerning dyeing.
Tubular one-part seal:

This rectangular one-part seal has incomplete stamps similar to those on the two preceding examples, though the legend may differ:

904 crown over portcullis ...NG... around // castle, (C) to left

There are two small secondary stamps with P on the second side, perhaps for the alnager or searcher (cf. no. 1940 below). For a similar use of stamps for broad seals on small tubular seals, see under Colchester Seals (nos. 2491 etc.).

Medium-sized seals with a portcullis:

These have discs with diameters of 22 to 27 mm. The stamps are:

1385, 1386, 1940, 2203, 4108, 5613A & B

crown over portcullis [2 vertical and 3 horizontal squares]
C(IVIT)ATIS-NORWIC around // castle, lion passant below [arms of Norwich], C N to sides, +C(IVITAT)IS-NORWICI around

(fig. 48)

A) arms of Norwich, B) crown over portcullis

c) secondary stamps (drawings N Griffiths)

Presumably the initials to the sides of the arms echo the 'civitatis Norwici' legends. Nos. 5613A & B were excavated in Amsterdam.

195
Three of the above seals have small secondary stamps: (\(?\)\(\boxdot\) on no. 1386; \(\boxplus\) on first disc of no. 1940 (cf. no. 904, above); \(\boxdot\) on no. 4108. The TP/PT marks are similar to those on Essex (nos. 134 etc.) and Kent (nos. 1449 etc.) seals, which include some with CR for Charles I or II. On the present seals too, they probably indicate the alnager or searcher.

These seals have two rivets, like the seals for the Dutch communities' products from Colchester and Sandwich (q.v.), but in contrast they lack any specific reference to 'Dutch' in the legends. The textile imprints (e.g. on no. 1940) are from a fine, probably plainwoven fabric, similar to that indicated by the imprints on Colchester seals for says.

**Walloon seals:**

These have:

<table>
<thead>
<tr>
<th>No.</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1059</td>
<td>WAL/ON, NO(R)WICH*ALLIENS around // ship</td>
</tr>
<tr>
<td>3693</td>
<td>WOL/ON.</td>
</tr>
<tr>
<td>5882</td>
<td></td>
</tr>
<tr>
<td>1060</td>
<td>WAL/ON.</td>
</tr>
<tr>
<td>3476</td>
<td>WOL/ON.</td>
</tr>
</tbody>
</table>

There were several different dies - nos. 1060 and 3476 appear to be variants with WOL/ON.

(fig. 49)

A) Walloon Norwich Aliens  
B) ship  
(drawing N Griffiths)

The Walloons arrived in Norwich in 1565 (Allison 1960-1, 82). Their seals were described in 1616 as having a ship, and if the textile was defective, the word 'alien' in the middle (Moens 1887, 75). It seems odd that the community should advertise itself so
prominently on seals for sub-standard textiles (if indeed the above examples are what was loosely described in 1616). The Walloons' textile production was maintained on a sound footing up to the mid 17th century, but it then apparently declined (Allison 1961, 68).

Four-disc seals:

1388, 2231 -// 16/81, NORWICH+ around // crown //-

These, the only recorded four-disc seals for this city, which is exceptionally well-represented by the two-disc type, are the equivalent of the Lynn 1681 seals (nos. 3680 and 4651 below).

Norfolk, King's Lynn Seals

Two incomplete four-disc seals are possibly from Lynn. The indentification depends on illustrations of a lost stamp, which is shown as the missing part of one of these:

3680, 4651 (missing) // (missing) [16/81, LYN REGIS around, according to illustrations in the unpaginated Green Papers] // unicorn passant, ½ above //(/?) -

(fig. 50)
King's Lynn stamp, 1681
(from the Green Papers - scale not given)

The surviving outer parts appear to be lozenge-shaped. Though the two recorded fragments are in the Museum of London
collection (along with the majority of the seals found by Green),
the present location of the disc with the provenance is unknown.
The halfpenny subsidy is unusual on alnage seals; it is, at this
date, a paltry sum in this connection, suggesting that the textiles
involved were very cheap ones - cf. the narrow Norwich stuffs,
on which duty was ¾d at about this time (H.M.C. 1894, 43).
These seals correspond with those of the same date for Norwich
(nos. 1388 and 2231 above).
Northamptonshire, Historical Background

The alnage accounts of 1472-3 list 780½ cloths of assize for Northamptonshire, almost all of them examined in Northampton (Heaton 1965, 85-6). Although alnage was collected here in 1626, possibly on knitted stockings (Thirsk 1973, 61), the county was not among those listed by the Royal Commission on the Clothing Industry in 1640 as the main producers of cloth (Thirsk & Cooper 1972, 249-50). In the late 17th and the 18th century centuries there was some manufacture in Northamptonshire of new draperies - serges, tammies and shalloons - mostly at Kettering (V.C.H. Northamptonshire 1906, 333; cf. Kerridge 1972, 29). In the late 1680s an annual duty of £30 was collected by the alnager on broadcloths and serges in the county (H.M.C. 1894, 42).

Northamptonshire, Kettering Seal

One Kettering seal has been recorded:

4026 shield with: on a chevron between three leopards' heads, each holding a shuttle in the mouth, three roses [arms of the Weavers' Company], K(ET)TERIN(G N)OR(TH)AMP- around/-

This and some Kidderminster seals (nos. 2368 etc.) are the only ones recorded with the arms of the Weavers - here used for the local guild, but identical with those of the London Company.
Oxfordshire, Historical Background

Oxfordshire cloths were counted together with those of Berkshire in the later 14th-century alnage returns (Bridbury 1982, 114). There was apparently an eight-fold increase between the 1350s and the 1390s in the combined totals of cloths alnaged, if the figures are accurate. The production of cloth at Oxford declined in the late medieval period (V.C.H. Oxfordshire 1979, 46-7).

In the early 16th century, coarse kersies were produced in the county (Statute 33 Hen. VIII c. 18 of 1541-2). William Richardson was appointed alnager in Banbury in 1552, probably in response to Statute 5 & 6 Ed. VI c. 6 (1551-2), though Oxfordshire was not specifically mentioned there. The origins of the county's blanket industry, using the characteristic loose-spun wool, have been traced back to before the reign of Elizabeth I. The Fullers of Oxford were incorporated in 1572, with two wardens to act as searchers (Plummer 1934, 4; V.C.H. Oxfordshire 1907, 244). No reference to sealing in this context has been noted (but cf. the use of leaden seals by the fullers of Coventry - V.C.H. Warwickshire 1908, 253-4). Statute 27 Eliz. I c.17 (1584-5) altered the required width and weight for white cloths of Oxfordshire, as well as for other counties. An alnager was appointed in Witney in 1594 (Smith 1972, 248). The county was included in the area of responsibility of a commission to reform abuses in clothworking in the early 1630s, though Oxfordshire does not seem to have figured as prominently as Wiltshire (q.v.) in the recorded investigations. The Royal Commission on the Clothing Industry (a different body from that in the 1630s) recommended Burford and Witney to be centres of regulation of Oxfordshire's cloth production in the report in 1640 (Thirsk & Cooper 1972, 250). In the following year, the blanket makers of Witney complained that the local alnage-patent holder, William Howes, and for 30 years previously his late father of the same name, had been making themselves rich on the fees for sealing each bundle of blankets (which had been raised from 2d to 6d) and on
fines (V.C.H. Oxfordshire 1907, 248; Plummer 1934, 9). Perhaps the individual blankets were too small to warrant individual seals, or the seals for bundles may have been some extra imposition on the part of Messrs. Howes. It seems strange that such abuses were apparently not castigated by the commission in the early 1630s if they were really as exploitative as was claimed. Witney blankets were probably reaching native African markets by the middle of the century (V.C.H. Oxfordshire 1907, 248). Plot, writing in c. 1676, says that Witney blankets 'are esteemed so far beyond all others, that this place has engrossed the whole trade of the nation for this commodity'. There were at least 60 blanket makers, with 150 looms, in and around the town at this time. Duffields 30 yards long were also woven in Witney; these were probably not high-quality fabrics. The Indians in Virginia and New England used them as a kind of loose gown. The 'false colours' of the dyes in some of Witney's exports were the cause of concern in this later part of the century (Plummer 1934, 10, 13 & 75-6). Coarser wools were used for tiltcloths for barges and wrappers for blankets, and the best wool was used for hammocks (ibid. 4-5; V.C.H. Oxfordshire 1907, 248). The average annual profit on the subsidy and alnage on woollens for the county in the late 1680s was £35, levied on broadcloths (H.M.C. 1894, 42) - these textiles presumably included a large number of blankets.

The Company of Blanket Weavers in Witney was incorporated in 1711, and the Blanket Hall, where the textiles had to be weighed, measured and marked (presumably with a seal), was opened ten years later (Plummer 1934, 11; V.C.H. Oxfordshire 1907, 249 - the V.C.H. cites the year of incorporation as 1710). The Company paid an annual composition of £35 from 1711 to 1719, and of £50 from then until 1723, to the holders of the alnage patent (Plummer 1934, 18 & 266). Receipts in 1711 included £32/6/- 'for sealing blankets and fines', and in the list of expenses paid in 1720 was £25/10/3d for alnage duty and seals among other items (ibid. 187-8).
Regulations in 1720 included the requirement of 'some open mark' of the length and breadth of the textiles - these marks could have been seals, though coloured stripes in the fabric were sometimes used to indicate the length, and some other marks at a later date were sewn on (ibid. 64-7 & 129). The Company had 100 master weavers in 1725 (Smith 1972, 249). This late guild was founded to foster the trade, though its traditional approach to industrial regulation, with stipulated dimensions and weights, was falling out of favour elsewhere (Plummer 1934, e.g. 14-15, 22, 27, 61-64, 66-73, 112 & 151; V.C.H. Oxfordshire 1907, 249). New stipulations were made right up to the early 19th century, though by 1734 the number of recorded transgressions of length and weight requirements was diminishing; perhaps the wardens were already less concerned with this aspect than previously (Plummer 1934, 65-6 & 70-3). The last recorded fine for exceeding the stipulated length was in 1811, and was paid by a member of the Early family (which is still active in the industry in the town). Another Early had been fined for a similar offence in 1719 (ibid. 112 & 145).

The Company had a warehouse in London, in Goswell Street (and in the 1730s another at Snow Hill), to which blankets were sent for sale and export (ibid. 29, 76-7 & 79). Seals were used on textiles at the warehouse (though not demonstrably at Witney) - 1,000 seals cost the company 5/ in 1749 in London, the same number cost 6/- in 1766, and in 1772 1,4000 cost 7/- (ibid. 193, 200 & 205).

Witney's kersies and coarse woollen 'bear skins' were being traded to North America in 1768, while the best blankets went to Iberia (ibid. 43). The town was still producing blankets, kersies, coatings and duffels in the early 19th century. Trade was stimulated by government orders for ordnance blankets, and by other orders in the 1810s and 1820s from the Hudson's Bay Company, which had been buying Witney products since at least the 1730s. Major markets were found in America, Canada and India, as well as in Europe.
The Witney Company finally ceased to operate in the middle of the 19th century (Plummer 1934, 113).

**Oxfordshire Seals**

A crown-over-portcullis seal has:

1762 crown over portcullis, fleur de lis S'VLN!PAO!VEAI!. CO!(OXFSHR) around (Lombardic letter) //-

Though none of the individual letters of the county name is certain, the legible parts together admit of no other reading than an abbreviated version of 'Oxfordshire'.

From the reign of Charles II is a four-disc seal:

2500 -// 82 over ?EHMS in alphabetical order] //OXON/to left a bewigged man's head facing, wearing collar, second illegible device (?human figure) to right /6//- The letters below the date (16)82 are presumably the initials of two alnage officers. Sixpence was the sum asked for sealing bundles of blankets in Witney by 1641 - though this sum was contested as it was felt to be too high (V.C.H. Oxfordshire 1907, 248).

An undated inner disc has:

1071 4⅓ /OXO(N)/X

**Oxfordshire, Witney Seal**

An inner disc from a four-part seal has:

1979 W: H, WITNEY around

The initials presumably stand for William Howe, father or son, alnage officers for Witney c. 1610 to at least 1641.
Somerset, Historical Background

Alnage records for at least some years in the middle of the 14th century combined cloths from Dorset with those of Somerset. The county had two serving alnagers during the 1380s - Robert Blake and Robert Pope in 1386, and John Luwell and Roger Breghnok in 1388 (V.C.H. Somerset 1911, 409). Statute 13 Ric. II st.1 c.11 (1389) required West-Country cloths, specifically including those of Somerset, to be sold untacked, so as to allow inspection by the customer (V.C.H. Somerset 1911, 408). The annual average production for the county according to alnage figures from the middle years of the next decade was over 12,000 cloths - by far the highest at this time for any county (Bridbury 1982, 114). The collector of alnage for Somerset, Thomas Neuton, was killed, along with at least one of his retainers, when he tried to proclaim his duties at the Fair of Norton St. Philip in 1401. An annual grant of £31/4/- from the Somerset subsidy and alnage profits (which included money raised on the sale of forfeited cloths of inadequate standard) was made to a Thomas Bateman in 1439 (V.C.H. Somerset 1911, 409). Some cloths woven in Bath, Bridgewater and Wells were included in alnage figures for Bristol up to 1453-4, and perhaps subsequently, though this is not specified (Perry 1945, 62-3). The names of clothiers in the Somerset and Dorset alnage accounts for 1474-6 were transferred directly from the Devon lists of 1472-3; the reliability of these records is therefore open to question (Carus-Wilson 1967, 286-7). The West-Country broadcloth-producing area, of which Somerset was a part, can be considered the largest industrial concentration in the country by the early 16th century (Ponting 1971, 21).

In 1551, a colony of 70 Flemish refugees settled at Glastonbury, where they began to weave worsteds, says, and possibly kersies (though the latter seem unlikely textiles for immigrants to manufacture). A hall was requested, in
which they might seal their textiles under the governance of five of their number acting as warden and overseers. The colony seems to have come to an early end, without making much progress on the industrial front, when these foreigners departed from England in 1553 (V.C.H. Somerset 1911, 410-11). No seal has been identified from this short-lived enterprise.

Statute 5 & 6 Ed. VI c. 6 (1551-2) required white and red cloths manufactured in Somerset to be between 26 and 28 yards long, and to weigh at least 64 pounds if white, and at least 60 pounds if coloured; broad blue-dyed cloths were to be between 25 and 27 yards long, and to weigh at least 64 pounds; broadcloths called 'Taunton cloths' and 'Bridgewaters' were to be between 12 and 13 yards long, while narrow cloths from the same places were to be between 23 and 25 yards long, and to weigh at least 34 pounds. Statute 2 & 3 Phil. & M. c. 12 (1555) made it clear that the cloths woven in rural parts, and called 'Bridgewaters' and 'Chard cloths', should be searched and sealed in these two towns (cf. V.C.H. Somerset 1911, 415) - presumably the sealing of rural cloths had not been taking place systematically in response to the 1551-2 Statute. The minimum acceptable weight for Somerset white cloths was reduced by Statute 4 & 5 Phil. & M. c. 5 (1557-8) to 61 pounds. Further legislation in 1575-6 (Statute 18 Eliz. I c. 16) permitted rural weaving to continue; Statute 27 Eliz. I c. 17 (1584-5) was concerned with the width of Somerset and other West-Country cloths; Statute 35 Eliz. I c. 9 (1592-3) required Somerset blue-dyed cloths to weigh at least 68 pounds (an increase on the 1551-2 stipulation) and made the penalties for infringement of the specifications higher; Statute 43 Eliz. I c. 10 (1601) required Dunster 'cottons' (long-napped woollens) to be of the same dimensions and weight as Taunton cloths and Bridgewaters - these had previously to weigh at least 34 pounds, but now 30 pounds was acceptable; no foreign matter was to be introduced into any of these textiles to make up the weight.
Somerset produced some medley cloths from the late 16th century, but not as many as neighbouring Gloucestershire (Ponting 1971, 26; V.C.H Somerset 1911, 412). The traditional industry in the north of the county did not fully recover from the recession of the 1610s and 1620s, and in 1631 the trade of Frome (formerly a thriving textile-manufacturing centre) was much depressed (Ponting 1972, 235, 238 & 242; V.C.H. Somerset 1911, 412). An investigation in 1630 into the selling of cloths with false marks (probably seals) and false selvedges - which were also supposed to be distinctive - as 'Spanish' cloths, revealed two main culprits, who were based in Lullington and Beckington (Ramsay 1965, 104-5). The commission 'for the reformation of abuses in clothmaking' in Somerset and other western counties brought temporary improvements to quality control in the area in the early 1630s, but achieved nothing of permanence (ibid. 87-8, 91-4 & 96). Taunton and Chard produced 'cottons' (see above) in the early 17th century, most of which were exported to north and to south-west France (V.C.H. Somerset 1911, 415). The 1640 report of the Royal Commission on the Clothing Industry suggested Beckington, Chard, Shepton Mallet, Taunton, Wellington and Wincanton to be centres for the administration of the county's textile production (Thirsk & Cooper 1972, 250).

Taunton became the major centre of Somerset's cloth industry in the later part of the century, with the development of serge making; this was an extension of the important north-Devon manufacturing area, and some Taunton products were finished in Exeter (Ponting 1972, 242; cf. V.C.H. Somerset 1911, 416). The annual average profit from the subsidy and alnage in the late 1680s for Somerset was £800, levied on broadcloths and serges (H.M.C. 1894, 42). Markets in Africa took some of these textiles. Serges were also used by the women of Taunton for a distinctive type of cloak in the late 17th century. Somerset was described as 'a prodigy of trade' for woollens at this time.
Morris 1949, 243-4; cf. V.C.H. Somerset 1911, 415-6. Somerset's trade continued through the next century via London, Bristol and Exeter to the continent, with a number of cloths reaching south Germany and Spain (ibid. 413-4).

Industrial control too continued after the end of the alnage system. By Statute 13 Geo. I c. 23 (1727) medleys were to be measured at the fulling mill. Perhaps 15,000 were examined in Somerset in the first year of this system. The number of cloths sealed in the county was very similar in 1753. There was a slight rise from the 1780s to 1809, when the total was over 20,000 cloths sealed per year. Figures for the second quarter of the 18th century are incomplete (Mann 1971, 53 and 334-8). By the start of the 19th century inspection was probably not as important as it had once been. The searcher of cloths at Freshford at this time was a cobbler by trade (V.C.H. Somerset 1911, 409), suggesting that first-hand familiarity with clothworking was probably no longer considered essential for the office.

Somerset Seals

A late-medieval seal is probably for a Somerset cloth:

2191 crown over arms of England in ornately-shaped shield, rose to left, sun to right, rose S'SVBCIDII PANN(O)...RS around (Lombardic letter) // (bulbous Lombardic F)

The F indicates that this seal was for a faulty cloth (cf. Statute 4 Ed. IV c. 1 of 1464). The sun and rose may point to a date between 1471 and 1490 (see on Medieval Seals, and fig. 10A, above).

The earliest dated county seal (in fact the earliest seal with a date recorded so far) is from the suggested 1553 group:
crown over shield with arms of Tudor England, R/5/3 to right
// R, COM (S)OMERSET around

(fig. 51) Somerset 1553 stamp (no. 750);
see also fig. 12 (drawing N Griffiths)

This seal, like the others from the group (q.v.), was presumably
issued in connection with new arrangements in accordance with
Statute 5 & 6 Ed. VI c. 6 of 1551-2.

A portcullis-series seal is probably from later in the 16th
century:

3308 crown over portcullis, ..O(M)ERS(E)... around (Roman letter);
partly obliterated by a secondary stamp with a teasel cob, H to
right // (missing)

If the teasel was a trade symbol for Mr. H (cf. Bromley &
Child 1960, 47), he was presumably a cloth finisher. This
secondary stamp on a provincial seal may indicate finishing in
London (where it was found), or it could have been stamped in
the county of origin before the cloth was brought to the capital
for sale.

From the 1611-group are four-disc seals:

2085 -// H, 1611 around top, ...(S)OMERSE(T) around // 1611 over
shield with Stuart arms of Britain // S(ER)/CHE(D), 16(11
ALNE)GERx around (see fig. 14)

2261 A seal with similar inner stamps has XX/XII//(?) on the outer
discs.
Another seal has:

1893

P//1611, H SOMERSET stamp (as on no. 2085 above) // crown over fleur de lis, 16 13 to sides // (AV)

The different dates here are a reminder that these cannot be taken literally in every case (cf. Worcestershire no. 596, below).

453, 1766, 4365

Further incomplete examples have only the 1611/H, SOMERSET stamp surviving. No. 453 has been published (Egan 1978A, 671 and pl. IX no. 2; cf. Egan 1985, 3, fig. 12).

1803*

A related seal has:

S, SOM... around // S, (SOME)RSET around // crown over fleur de lis, 16 (13) to sides // +SER... around illegible device

Apparently from the year bracketed by the dates on no. 1893 (above) are seals with:

131, 764, 4368

-// S, SOMERSET around // crown over thistle, 16 12 to sides //-

(fig. 52)

S, SOMERSET,
crown over thistle, 1612
(no. 764)

* The weakly-registered date on no. 1803 was read as 1613, though it could be 1612, as on nos. 131 etc.
Number 4368 has D, ...E... around, and no. 1803 probably has 'searched', on the fourth discs. A further seal with similar inner stamps appears to have I R to the sides of a thistle on the third disc.

An enigmatic seal has:

\[4565\] -// S, SOMERSET stamp [as nos. 131 etc., above] // crown over rose, SAND(W)ICH around //-

The crown-over-rose stamp suggests that this seal dates to the reign of James I (cf. Essex no. 5545). There is no ready explanation for the apparently irreconcilable stamps for places with no known connection in the present context on no. 4565 (see also discussion on Kent, Sandwich seals).

Several seals, including some seemingly with the names of two counties, are for the alnager NB (see on Devon no. 594):

\[383, 744, \]
\[4376, (?)597\]

(missing) // NB, i.SOMER... around // crown over thistle, C R to sides // (illegible)

\[3337\] NB, + SOM... around // crown over rose (inner discs only)

\[593, 2102, \]
\[3995, 4597, \]
\[4664\]

NB, GLOSTe:(or R)SO(M)ERTSET around // 16 2.. over arms of Stuart Britain, C R to sides (inner discs only)

Nos. 2102 and 4597 respectively have (32) and 74 on the first discs, probably to indicate the cloths' weights in pounds.

Others with NB, + SO...DORS around on one inner disc, have a thistle, C (R) to sides, or a portcullis on the other, and no stamps on the outer discs. These Charles I-period seals, apparently for Somerset and Gloucestershire (nos. 593 etc.) and Somerset and Dorset (nos. 244 and ?247), were perhaps general issues for the same kinds of cloth produced in either of the respective pairs of counties (see also on Gloucestershire and Dorset seals). It may
be relevant that some Somerset cloths were exported via Dorset in the later 16th and early 17th centuries (V.C.H. Somerset 1911, 411), but the exact explanation of these seals remains elusive.

Of Commonwealth date is a possible Somerset seal:

XX/VIII/ portcullis, ...(ES)...ET 165. around // two shields, respectively with cross and harp [arms of the Commonwealth], THE COM(M)O(NWEALTH) around // two shields, respectively with cross and harp (cf. Manchester no. 2414 & Halifax no. 2763)

For 1674 is:

-//74, SOMERSET around // unicorns supporting coronet with three plumes through //- ('star'-shaped inner parts)

This seal, which was identified from a photograph, was excavated in Stockholm (Dahlbäck 1982, 273, fig. 255f).

An inner disc has:

734 \( \sqrt{W},+SOM...,SET \) around (recorded from a cast)

This post-Restoration alnager WP or PW is known on other seals from the west of England dated between 1665 and at least 1676 (see Devon nos. 2840 etc., and Wiltshire no. 1623).

An inner disc with a ligatured R and L for one of the Dukes of Richmond and Lennox (see on Devon, nos. 762 etc. and fig. 20) is undated:

2989 coronet over R & L ligature, SO(M)E(R)S(ET) around

**Somerset, Bridgewater Seal**

One seal has been recorded:

1298 (scratches) // crown over rose, (E) R to sides, BRI(D)...(W)... around

The monarch's initial may be for Edward VI or Elizabeth I (cf. the legislation concerning Bridgewater cloths from the late 16th century under Somerset, Historical Background).
**Somerset, Taunton Seals**

Four-part alnage seals have:

4111,(?)1819 -//⦁ / ⦿ 76⦁, TAVI/TON around top // crown in triple border

- (square-shaped inner parts)

No. 1819 is an inner disc with either 76 or 78.

2983 -//⦁ / ⦿ 77⦁, TAVI/TON around top // two unicorns supporting (coronet) with three plumes through // (square-shaped inner parts)

Similar (16)76 and (16)77 seals are known for Devon (nos. 1648 & 332), Exeter (nos. 1091 & 12) and Wiltshire (no. 4116) (cf. fig. 15A-C)

Two-disc seals for named clothiers are for serges:

993 ⦿23⦁/⦁ P, TAVI/TON SEARGE around // tun &⦁T,⦁ IOHY

⦁ PAVIATT around

Twenty three is presumably the length of the serge in yards, while the device on the second stamp is probably a canting reference to the town name, as used on local marks for plate (Cripps 1967, 123-4).

1381, 6732 RM ligature, TAVI/TON/SER/GES around //SER/GES,

R..B(E)..<.(T)... around [i.e. Robert M...]

These seals are unlikely to be earlier in date than the late 16th century.
Suffolk, Historical Background

A textile industry was apparently established in Suffolk by the early 13th century (Bridbury 1982, 51-5). By the end of the century, some of the county’s cloths were being exported (Pilgrim 1972, 252). In 1335, a number of Suffolk cloths were alnaged in Norfolk (Pat. Rolls 9 Ed. III, part II, 169, m. 19); this continued at least until the middle of the next century (see Statute 23 Hen. VI c. 3 of 1444-5). A petition of 1376 was successful in requesting that the white Suffolk and Essex strait cloths called cogwares and kersies should not be subject to the restriction on length in accordance with Statute 47 Ed. III (1373), which applied to coloured cloths (Pilgrim 1972, 252; V.C.H. Suffolk 1907, 255). The growth of the textile industry in the county through the 15th century was substantial, notably at Lavenham and Hadleigh. Suffolk apparently produced over 5,000 cloths in 1468-9, the highest recorded county total in the country (Heaton 1965, 85-6). Broadcloths and (in the east and north-east of the county) kersies and dozens were the main products (Pilgrim 1972, 255; V.C.H. Suffolk 1907, 253). A charter of incorporation was granted for a local Weavers’ Company at Bury St. Edmunds in 1477 (Pilgrim 1972, 252; V.C.H. Suffolk 1907, 256).

In the 16th century, the main markets for Suffolk cloths were at Ipswich and London. Many of the textiles sent to the capital were finished and coloured there, though blue cloths made with yarn already dyed were also important county products (ibid. 258-9). Statute 14 & 15 Hen. VIII c. 11 (1523) referred to cheap Suffolk cloths called vesses (‘set cloths’) made for export. In 1539, twenty nine Suffolk broadcloths were seized (by searchers from among the clothworkers) on board ship at London, since they did not conform to the legal requirements (V.C.H. Suffolk 1907, 259-60). There was a decline in demand for the county’s broadcloths during a more general depression in the middle of the century (Pilgrim 1972, 253).
The manufacture of new draperies was introduced to Glemsford and Sudbury by Flemish immigrants in the later 16th century. These two towns can be regarded as the northernmost centres of an area including north Essex, where the manufacture of new draperies was particularly successful. The new fabrics largely replaced the traditional broadcloth industry, which had mainly produced white cloths in the west of this area and coloured ones in the east (Pilgrim 1959, 36-7 & 39; Pilgrim 1972, 255 and maps 256-7). Bays woven at Sudbury in 1563 were apparently not of particularly good quality (Moens 1887, 76). Say was also produced there (Hoskins 1935, 39 & 67; Pilgrim 1959, 44-5; V.C.H. Suffolk 1907, 268).

It was claimed by Suffolk clothiers in 1575 that not one in sixty of their cloths finished in the capital was searched as required by law (ibid. 259). East Bergholt developed strong trade links (via Ipswich) with Spain, though the town's fortunes declined from the late 16th century (ibid. 261). Sailcloths of canvas began to be manufactured on a large scale in Suffolk towards the end of the century. A contemporary account provides some details of the local quality-control system, with two experienced workmen indicating specific faults to their fellow workers (the alnage is not mentioned):

'Ipswich sailcloths are like every day to be perfecter and better made than they have been by reason there is one Mr. Barber dwelling upon Tower Hill in East Smithfield who is the only buyer of all Ipswich cloths, and the Ipswich workmen and he by agreement hath two sealers, principal workmen indifferently chosen by themselves, the one by the workmen, the other by the said buyer, to survey seal and mark all true made sailcloths, being all brought to the said buyer's house in Ipswich by agreement, and there straight the workmen receive their money for all cloths that be sealed and marked, and the untrue made cloths rejected and unsealed, the workmen are fain to sell to loss, as they can agree, to the said buyer or otherwise.

The sealers being very good workmen, tell straight the faults of the cloths refused to be sealed, if the yarn lack bucking, pinching, beating, or well-spinning, or otherwise be faulty in workmanship upon the sealing day every week in the presence of all the workmen, whereby every man is made to see his own fault, and is told how to mend it by conference together, and a willingness the buyer keeps among them to teach one another and to win their cloths credit by true workmanship.
There be some sailcloth makers brought up there and gotten out from thence into Kent and somewhere else that be not under the like survey that make faulty cloths that would be brought home again to Ipswich by reason there is so much good hemp growing thereabout, where our sackcloth for coals and for corn hath been used to be made, and so are still of the refuse hemp, and the best yarn there and from Boston, Lincolnshire, and from Lancashire that can be gotten, is employed upon sailcloths. Our small ketches and vessels under 100 tons, and the Flemish sailors and Eastland sailors do commonly buy all Ipswich cloths, as they are serviceable enough for their price. So as, may it please her Majesty to continue their privileges to a greater number of years, and in this quiet plain manner of survey, sealing, and marking, I think in time this trade of making sailcloths will serve the realm or the most part of it.' (ibid. 271, citing B.M. Lansd. ms. 108, 78; probably post 1590).

The navy continued to use Suffolk canvas sailcloths and hammocks through the 17th century (ibid. 272).

Ordinances for a new company of clothworkers, shearmen and dyers of Ipswich were devised in 1590. In the 1610s, Suffolk coloured cloths were exported principally to the Eastland countries, Russia, Levant, Iberia and Barbary. It was claimed in 1613 that 90% of some 2,500 cloths exported annually to Muscovy were finished and dyed in Suffolk. Another, probably exaggerated, contemporary claim was that 30,000 cloths dyed in various shades of blue were exported from the county annually (ibid. 260 & 262-3). By the end of the reign of Elizabeth, white broadcloths were no longer woven in Suffolk, though coloured shortcloths were produced until the Thirty Years' War from 1618 began to disrupt the export trade. The last ship with traditional Suffolk cloths for Smyrna set sail in 1657 (Pilgrim 1972, 235; cf. V.C.H. Suffolk 1907, 266).

From 1607, the regulations governing cloth production at Bury required the attachment of a lead seal with the town's name and arms (three crowns, each transfixed by two arrows in saltire) - none of these seals has been recorded. Three years later, the clothiers and other textile workers of Bury were incorporated, followed in 1619 by the clothworkers and tailors of Ipswich. The corporation at Bury exercised its powers of regulation widely through the
county (ibid. 263). The Ipswich branch of the Eastland Company sent 3,346 cloths to Scandinavia and the Baltic in 1626, but this trade seems to have declined markedly in subsequent years (ibid. 266; cf. Pilgrim 1972, 253). The Royal Commission on the Clothing Industry's report in 1640 recommended Barford, Bury St. Edmunds, Hadleigh, Ipswich and Sudbury to be centres of regulation of the county's industry (Thirsk & Cooper 1972, 250). The average annual profit from the alnage and subsidy on Suffolk textiles was £250 in the late 1680s, levied on broadcloths and says (H.M.C. 1894, 42). Sudbury, together with Long Melford, continued as an important cloth-making centre through the 17th century, but after the 1720s the former's say and perpetuana trade seems to have gradually succumbed to the rival cheap calicoes and silks imported from India (Ramsay 1982, 16; V.C.H. Suffolk 1907, 269).

**Suffolk Seals**

Probably the earliest known Suffolk alnage-stamp design has been recorded from a matrix (Pigot 1863, 14-15; Proceedings of the Society of Antiquaries (? )1861, 228; Traill & Mann 1902, 325; Egan 1985, 1, fig. 4):

leopard's head over fleur de lis in tressure with two arches, S'VLNAG' PANNOR' IN COM' SVFF' around (Lombardic letter)

It was recorded from a photograph *. Despite Pigot's claim for a mid 14th - century date, the distinctive form of 'F' in the county name argues for a late 15th - or early 16th - century date (see on Medieval Seals with a Leopard's Head, and fig. 4 above).

* the matrix is in Ipswich Museum's collection (no. 1921-55.90). It could not be located during a recent visit.
The earliest recorded seal is of the late-medieval date:

5758 bulbous 'F', rose to left, sun to right, ...(SVBC)... (PA)NN(OR) IN COM (SVFF) around (Lombardic letter) // crown over fleur de lis, rose to left, sun to right, ...(DII PA)... around (Egan 1985, 1, fig. 5a & c) - see fig. 10A, above

The 'F' (which is of the same form as on the matrix above, and carries the same implications of date) shows that this seal was for a faulty cloth (cf. Statute 4 Ed. IV c. 1 of 1464).

Two crown-over-portcullis seals are likely to be of 16th-century date:

507, 523 -// crown over portcullis - the legends differ - no. 523 has ...(PA)N(O).VEA· SVFF, and no. 507 has ...(V)LN;PA.. (V)ENLI(V):SV(FFAE) around - both are in Lombardic letter

The former has the same style of F as no. 5758 (above); it may therefore be an early example of the portcullis series. No. 523 is to be published (Egan, forthcoming B).

For a possible early 17th-century seal, see under Buckinghamshire (no. 3938), but it is not until the reign of Charles II that closely-datable seals which are definitely for Suffolk appear again:

438, 1666 -// 16/7A·SVF rose FOLK rose around // crown over portcullis //-

No. 438 has lozenge-shaped parts, and no. 1666 has lozenge-shaped outer parts and irregular 'star'-shaped inner parts.

2492 rose // 16/76, S(V)FOL.. around (irregular 'star'-shaped inner parts)

4357 (incuse) IW// 16/77, SVF·FOLK rose around // (remainder missing) (lozenge-shaped outer part and irregular 'star'-shaped inner part)
Two types are recorded for 1680:

No. 1901 has lozenge-shaped outer parts, and no. 2155 has a lozenge-shaped first part and the other three parts are round.

No. 2668 (the only complete example) has a lozenge-shaped first part and the other three parts are round.

Here the different stamps for the same year are clearly for seals with different subsidy rates in pence. The reason for the difference in the shapes of the fourth parts of the 1½d seals (nos. 1901 and 2155) is not understood.

A 1688 seal is closed with a county stamp:

Undated seals for Charles I or II have:

Three variants are known for the alnager TB (who also appears on Essex seals - nos. 4315 etc.):

299, 2058 //TB, SVFFOLKE around // crown over rose, C R to sides //
Several seals, with inner stamps having:

5675, 5680-1, TB, SVFFOLKE* around // arms of Stuart Britain, C R to sides
5684-5,
5695-6,
5701-4,
5709,
5714-5,
5719, 5726, 5686A etc.) have been excavated (along with Essex TB seals - nos.
5714-5,
5719, 5726,
5686A etc.) from a wreck off the south coast of Norway (see Appendix 5).

These seals have been closed with stamps having at least three different searchers' marks on the outer discs:

SI/IS mark; 58//SI (no. 5703), 60//SI (nos. 5681, 5685,
5695-6 & 5701-2), (scratched) X (or illegible stamp) //SI
(nos. 5680 & 5684).

SE/W mark; 31//SE/W (nos. 5704, 5709 & 5728).

Possible TR mark (no. 5726); (5)61/ Tx (read by cataloguer as T x R prior to deterioration).

Numbers (probably for the weights of the cloths in pounds) on first discs of seals on which possible searcher's marks on the fourth disc are not legible, are: 56 (no. 5714), 58 (no. 5715), 6(O)
(no. 5719), (6)1 (no. 5675).

These seals all seem to have (?)arms of London // castle
secondary stamps on the inner discs. These small stamps may
possibly indicate that the cloths had passed through London prior
to export (see Appendix 5). No parallel secondary stamps with
these devices are known among the many provincial alnage seals
found in the capital and elsewhere.

Other seals for the alnager TB have:

2722, 3328 -//TB, SVFFOLKE* around // shield with cross/--

(fig. 53) TB Suffolk seal with cross (from the Green Papers)
The cross is probably that of St. George. It may, from the absence of royal initials, indicate a date during the Commonwealth. (On the dating of TB seals, see under Essex Seals as above, and Appendix 5.)

Probably from the reign of James I or James II are:

357, 2143 -//F, CO.. (S)VFFOLK+ around // crown over rose, I to left //S,SEARCHED+ around

766, 4051 -//F, CO (S)...eFOLK around //portcullis// rose, R to right;
   (incuse R on strip connecting discs one and two on no. 4051)

2093 -//F, *CO(M SVF)FOLK* around // crown over harp //-

Nos. 766 and 2093 have integrally-cast devices on the reverse sides of the inner discs:
crowned lion statant //crown

The presence of these cast devices on parts of the seals which would not be seen may be because old moulds were adapted for the production of blanks, which could then be stamped in the usual way (cf. Colchester nos. 2721 and 4787, and Cheshire no. 1251).

The stamp on the fourth disc of the first two seals is somewhat similar to the county-name stamp on Somerset seals dated 1612 (nos. 131 etc.), though this does not on its own seem a strong enough reason to regard the present Suffolk group as necessarily dating to the reign of James I. The 'F' on the second discs could perhaps stand for 'faulty', as on medieval seals (see on nos. 649 etc. above), but it seems rather unlikely that at least two variants should have been produced for sub-standard cloths, and that the poor quality of the textiles should not have been more explicitly labelled at this date (cf. Yorkshire seal no. 944) if that was indeed the meaning.
Without indication of date are:

2362, 3267, 4115, 4416, (?), 4928
-// RH, SVFFOLK around // crown over harp //-
No. 4115 has a windmill with A D to sides as a searcher's stamp on the fourth disc (cf. no. 2360D below).

808, 1995, 2604, 2723, 3669, 4926
-//RS, SVFFOLKE around // cock standing //-
A variant has the arms of Stuart Britain in place of the stamp with the cock. On further incomplete examples this disc does not survive. Nos. 2604 and 4573 have an AC privy mark on the fourth disc. Cf. Colchester no. 807 for another RS seal.

A cock also appears on different seals:

2636; 1957
cock standing // COM/SVFF/OLK (inner discs)

2360A-D, 4827, 4871
-// mark, COMSVFOL around [no K] //thistle//-
No. 2360D has a windmill on the fourth disc (cf. no. 4115 above), and no. 4827 has an incuse G on the third disc.

2361
-// coronet over R, ligature, (SVF)OLKE around // crown over two fleurs de lis, (? lion passant below)//-

1258
Another has an illegible crowned device on the equivalent stamp to that on the third disc of no. 2361, and a further variant has:

2993
(lion passant), (P)/I(H) to right // coronet over R & L ligature, ...
SVF...K.. around (lozenge-shaped inner parts)
The R and L ligature on these seals stands for one of the Dukes of Richmond and Lennox, holders of the national alnage patent (see on Devon nos. 762 etc., and fig. 20).

Suffolk, Ipswich Seals

Two-disc seals have:

684, 6223, 6916
-// crown over rose, SIG•GIPWIC•WOODERIGE (?or WOODBRIDGE) around
These seals may be for an alnager named Wooderige, though a reference to the town of Woodbridge (a few miles from Ipswich) is perhaps more likely. No reference to cloth production at Woodbridge has been located.

The Latin legend suggests a 16th-century date.

(fig. 54) crown-over-rose seal for Ipswich (no. 6223)
(drawing S Meyer)

Suffolk, Sudbury Seal

One probable Sudbury seal, with two large discs (having diameters over 40 mm) has been recorded:

-// (incomplete disc) lion passant over hound sejant [i.e. sitting]

The device is similar to the arms of Sudbury - talbot sejant, in chief a lion passant between fleurs de lis. The large size of the seal suggests it is in the same tradition as the broad seals used in the 17th century for new draperies in clothing towns of north Essex. Presumably this is a Sudbury seal for bay or say.
Surrey, Historical Background

The county produced over 100 cloths annually according to mid and late 14th-century alnage returns (Bridbury 1982, 114). Statute 15 Ric. III c. 10 (1391) required Guildford cloths, some of which were being exported as far as Italy at this time, to be fulled and sealed prior to sale. The alnage returns of 1469-70 suggest that production continued on a moderate scale, though the figure is combined with that for Sussex (Heaton 1965, 85-6), and the reliability of records from later in the 1470s has been questioned (Carus-Wilson 1967, 279 ff.). Kersies, including coloured ones from Guildford and blue ones from Godalming, were in the early 16th century produced mainly for export (Kerridge 1972, 24; V.C.H. Surrey 1905, 343). This trade apparently suffered a reverse because of the difficulty encountered in manufacturing the textiles to the specifications of Statute 27 Hen. VIII c. 12 (1535-6). These requirements for length and breadth were lifted by Statue 33 Hen. VIII c. 18 (1541-2). The weavers of the Godalming area were specifically exempted from Statute 4 & 5 Phil. & M. c. 5 (1557-8), which sought to concentrate cloth manufacturing in towns, but several prosecutions were brought under the Act against weavers in other Surrey villages - for example against Wonersh and Stoke kersey makers in 1606-7. The excessive stretching of cloths on tenters brought other cases to court at Farnham and Godalming, and a prosecution at Guildford in 1607 concerned one hundred over-tentered white kersies (V.C.H. Surrey 1905, 343-5). Fine kersies known as 'long cloths' were woven at all three centres, and also at Chiddingfold, Shere and Wonersh. Aubrey wrote in the 17th century of a long-standing fustian industry at Shere (ibid. 348). In 1574, 797 cloths from 15 weavers were sealed by the alnager for Surrey and Sussex. Four years later, there was concern at the number of cloths coming from these counties unsealed to London. The fulling of broadcloths at Wimbledon and the
increasing scale of textile manufacturing and trade in Southwark necessitated the appointment in 1578 of a deputy alnager to cope with sealing (ibid. 345). By 1630, the industries at Godalming and Wonersh were showing signs of decline. Some of the products of the former were being sold under the name of 'Hampshire kersies' to a London merchant for export. Godalming's mixed and blue kersies were finding a market in the Canary Isles, but those from Wonersh had sometimes been returned because they had been over-tentered (instances of 18-yard cloths stretched by as much as five yards are cited) and confidence in the products had been lost. A similar problem was among the reasons for the decline in the trade of Guildford's blue cloths (ibid. 347-8). Guildford was the only centre recommended for the regulation of Surrey's textile manufacture by the Royal Commission on the Clothing Industry in 1640 (Thirsk & Cooper 1972, 250). The county does not appear among those listed as paying alnage and subsidy in the late 1680s (H.M.C. 1894, 42). A few kersies were still woven in Godalming as late as 1850 (V.C.H. Surrey 1905, 348).

Surrey Seal

Only one probable county seal is known *. The surviving inner disc of a four-part alnage seal has:

3534  \[\text{IH} \text{ (i.e. TH or HT ligature) over SV(RR)}\]...

This alnager is also known on Essex and Kent seals, some of which have dates between 1628 and (?)1639 (see Essex nos. 1087 etc., and Kent nos. 126 & 1077 etc.). It seems appropriate that Surrey, lying between these two counties, should be included in the administrative area of the same alnage-contract holder.

* The third and fourth letters of the place-name, though weakly registered, seem to be 'R's for Surrey, rather than 'F's for Suffolk or 'S's for Sussex.
Surrey, Guildford Seals *

Two town seals have been recorded:

2212, 2213 castle, the port with a key and portcullised, (SIG)ILLV+DE+GV(ILD)EFORD around //...EA../..HE... (i.e. 'searched')

No. 2213 has a stamp from an apparently defaced die on the second disc.

The main device seems to be a simplified version of the Guildford town arms (on a mount a castle, an escutcheon quarterly of France and England on the central tower of three, two roses in fess, the port with a key and portcullised, on the mount a lion, in fess to each side of the castle a woolpack, at the base of the field, water).

The Latin legend along with the English 'searched' implies a late 16th - century date for these seals.

(fig. 55)
Guildford seal-stamp, with a version of the town arms (nos. 2212-3) (drawing N Griffiths)

* The seals formerly at the Guild Hall in Guildford, and claimed to be of local origin (Williamson 1928, 81–2), are probably among those now in the Guildford Museum. If so, the claim cannot be substantiated, since there are several places other than Guildford represented among the Museum's seals.
Sussex, Historical Background

The county produced broadcloths and kersies in the later medieval and post-medieval periods, though not in very large quantities. A clothier of Petworth was accused in 1463 of selling six kersies without alnage seals (V.C.H. Sussex 1907, 256). In the 16th and 17th centuries, Chichester was a textile-production centre. Sussex kersies are referred to in Statute 33 Hen. VIII c.18 (1541-2), and by Statute 5 & 6 Ed. VI c.6 (1551-2) the cloths and broadcloths woven here and in other counties were to be between 28 and 30 yards long, and to weigh 90 pounds or more. A weaver of 'Abberton' (?Yapton) was prosecuted in 1609 under Statute 4 & 5 Phil. & M. c.5 (1557-8), which sought to restrict the manufacture of textiles to cities, boroughs and towns (V.C.H. Sussex 1907, 257). The county was not mentioned in the report of the 1640 Royal Commission on the Clothing Industry (Thirsk & Cooper 1972, 249-50).

Sussex Seal

A late-medieval alnage seal probably for Sussex has been recorded:

3049 - // crown over rose, S'SV...IN COM SSEX around (Lombardic letter)  (cf. fig. 6)

It is presumably of late 15th-century date.
Warwickshire, Historical Background

Coventry paid a fine so that it would be exempt from the Assize of Cloth in 1202, presumably indicating that an established cloth industry was there (Bridbury 1982, 28-9). Warwickshire was counted together with Leicestershire in the mid-14th century alnage records; the combined annual total output one year reached 220 cloths. The average annual figure for Warwickshire alone between 1394 and 1398 was almost 3,250 cloths - the fifth-highest county total in the country (ibid. 114). The words 'panni sine grano in Coventre' ('undyed cloths in Coventry') after each recorded total implies that Coventry was then the main alnage centre in the county, just as in the late 14th and early 15th centuries it was the main market for cloths (Pelham 1950, 132-3). Cloth finishing, both fulling and dyeing, may have become more important at Coventry than weaving from the end of the medieval period. One of the rules from 1475 of the Fullers' Company of Coventry concerned the 'settynge of marks on cloth'. Every fuller was to put his privy mark on a leaden seal on each cloth he processed. A searcher checked the cloth to see that a seal had been attached. The counterfeiting of another fuller's mark incurred the fine of a noble (V.C.H. Warwickshire 1908, 253-4). No other reference to the obligatory use of seals by fullers has been located until the 18th-century legislation for Yorkshire, but the practice may have been more widespread at an earlier date. In 1485, and also in 1595, the alnage contract for Coventry and the surrounding district was valued at £23 (ibid. 252), the failure to keep pace with inflation presumably being an indication of the decline in the local cloth industry (cf. Ramsay 1982, 28).

Statute 5 & 6 Ed. VI c. 6 (1551-2) mentions coarse broadcloths known as 'long Worcesters' at Coventry. These were to be 29 - 31 yards long, and at least 84 pounds in weight if white, at least 80 pounds if coloured (cf. V.C.H.
Warwickshire 1908, 256). It is possible that, just as cloths woven in Gloucestershire were dyed in Coventry in the first quarter of the 17th century (ibid. 254-5), these earlier long cloths may have been woven in Worcestershire and only finished in Coventry (cf. Mann 1971, XIII).

The manufacture of Flemish types of cloth, known as 'ulterfynes' and 'crompelystes'*, was introduced into Coventry by 1568; these new draperies were presumably the precursors of over 60 bays alnaged at Coventry in 1595 (V.C.H. Warwickshire 1908, 252 & 256). The decline in weaving here was noted in 1608, and may have been one of the reasons for the inclusion of Coventry in a less restrictive limitation on the stretching of cloth with tenters. Coventry cloths were apparently among those exported to the Eastland area, Muscovy and Barbary around this time. In 1622 it was agreed that Coventry would only buy Gloucester cloths for finishing if they were 'marked' (presumably with a seal) with their place of origin, to avoid possible displacement of the 1,000 locally-woven cloths which were the total permitted to be exported each year (ibid. 254-5). There was a dispute on this same point in 1640, the year in which the Royal Commission on the Clothing Industry recommended Coventry as the only centre in the county for the regulation of standards in textile manufacture (Thirsk & Cooper 1972, 250).

Coventry's dyeing was much improved by the assimilation of skills developed in the Netherlands, and Coventry blue cloths became particularly sought-after (Heaton 1965, 392); cf. the petition which attempted to foster the dyeing industry here, and elsewhere, in 1674 (V.C.H. Warwickshire 1908, 255). A contraction in the 1680s and 1690s in trade to the Levant (the destination of some of Coventry's products) seriously affected the industry (Mann 1971, 27). The average annual profits for the alnage and subsidy on Warwickshire textiles in the late 1680s was £30, levied on broadcloths (H.M.C. 1894, 42).

* The precise meanings of both terms appear to be unknown.
In the early 18th century, 'Coventry wares' included striped and mixed tammies (some of which were made for negroes in the West Indies), and through the century shalloons and calimancoes were produced in some numbers (V.C.H. Warwickshire 1908, 256; Heaton 1965, 264).

Warwickshire, Coventry Seals

Two probable Coventry seals are known:

3175 crown over arms of England, E R to sides, ...PRO + CO(V)ENT(R)... around //((?) - *

This probably dates from the reign of Elizabeth I, though the initials could be for Edward VI. The design is similar to that for some London alnage seals (nos. 4982A-D etc.), which include examples dated to the early and middle years of Elizabeth's reign. The engraving for the present one is less confident, but confusion would have been possible at a glance, and this might perhaps have been the aim of some provincial clothiers in using seals like no. 3175 (cf. Essex, Bocking seal no. 1905).

The other seal has:

(?)(?)4876 MEN(II) (? complete) // elephant with castle on its back

Though the heraldic device is similar to that of the arms of Coventry, the apparent lack of a placename may mean that this is the personal device of a clothier - if so, the seal could be from almost anywhere.

See also crown-over-portcullis seal no. 2262, which could (a remote possibility) be a further Coventry seal.

* 'CO KENT' seems an unlikely alternative, in view of the spacing of the letters and the probability that the bracketed ones have been read correctly.
Wiltshire, Historical Background

Late 14th-century alnage accounts suggest that Salisbury was the most important clothmaking town in the country, providing between 11 and 16% of the national total of cloths of assize exported where corresponding customs figures are available. Textiles from 288 clothworkers were sealed in Salisbury in one year at this time, so the area of manufacture represented is likely to have been far greater than the immediate urban area. The manufacture of Salisbury's traditional narrow rayed (striped) cloths, possibly a kind of kersey (Ramsay 1965, 20), was threatened early in the 15th century, initially by Statute 7 Hen. IV c.10 (1405-6) - though an exemption was gained on that occasion - and subsequently by Statutes 11 Hen. IV c.6 (1409-10) and 13 Hen. IV c.4 (1411). This legislation required all cloths to be of the same dimensions as broadcloths. The alnagers at Westminster Fair seized rayed cloths narrower than this specification, causing consternation in Salisbury (where perhaps a quarter of the male population was then involved in the cloth industry). The business connections of Salisbury clothiers at this time were wide; those with London and the West (Gloucester, Bristol etc.) were particularly prominent. A proportion of the cloths sold and alnaged in Salisbury were probably woven elsewhere in this part of the country for Salisbury's clothiers, just as some Salisbury cloths were subject to the alnagers at Westminster (Bridbury 1982, 66-72). The number of cloths alnaged in Wiltshire according to the returns dropped in the late 14th to early 15th century, and the price of the county's alnage farm (£60 in 1362) dropped from £86/13/4d in 1390 to £80 in 1403. The level of Wiltshire exports, in contrast, rose. The discrepancy may have arisen from West-Country cloths being alnaged in London rather than where they were woven (ibid. 73-4). Bridbury assumes the Westminster scrutiny to have been the first and only one - perhaps the Westminster alnagers were checking
that cloths already sealed in Wiltshire, where there may have been more sympathy for a local problem, had been correctly examined (though the argument is as hypothetical for this date as some of those Bridbury uses). Just such a second searching and sealing was the subject of prolonged disputes in the late 16th and 17th centuries (cf. Ramsay 1965, 54–8, and see London, Historical Background). Medieval records do not provide answers to such detailed questions.

The Salisbury cloth merchant John Corscombe (who had himself been an alnager less that four years previously) was accused in 1418 of having twenty-one rayed cloths with counterfeit seals (Bridbury 1982, 75). The accuracy of late 15th-century alnage records for Wiltshire has been seriously questioned (Carus-Wilson 1967, 279–80, 282–3 & 288–9).

The textile industry in Salisbury did not decline in the late medieval period as it did in many other towns. The continuity here may have been because mechanical fulling was developed in the urban area (Ponting 1971, 22, & 1972, 236). In the early 16th century, the merchants of Salisbury traded textiles to France and Spain via Southampton, though following a recession during the reign of Henry VIII and after, exports came to be mainly through London by the 1570s (Ramsay 1965, 21–2).

For most of the 16th century, the Dauntsey family held the county alnage contract. Seals were apparently on occasion sold to clothiers without examination of the textiles during this period (ibid. 52–3). Undyed broadcloths became the main county products during this century, and there was a considerable export of these to the Low Countries (ibid. 24; Ponting 1971, 22; V.C.H. Wiltshire 1959, 138). Coloured cloths were produced for local consumption (Ramsay 1965, 23). Wiltshire broadcloths were reckoned to be the best in the country, apparently costing up to 26/- per yard in the 16th century (Pilgrim 1959, 52, & 1972, 263). Despite a crisis in this broadcloth trade in the middle years of the century (Ramsay 1965, 66–7), the 1560s saw
Salisbury begin to turn from the manufacture of kersies towards a successful broadcloth industry (Kerridge 1972, 25). Salisbury's weavers were incorporated in 1562, and were granted a new charter in 1590 (V.C.H. Wiltshire 1959, 149). In the 1580s, Wiltshire cloths were often finished in London and then traded to the continent, for example to Denmark (Ramsey 1965, 28).

In 1606, over 45,000 undressed Wiltshire broadcloths - over half the total exported - were shipped from London. This time of considerable prosperity for the county's textile industry ended in the recession in the 1610s and 1620s, which brought the end of the broadcloth production in north Wiltshire (ibid. 71-84; Ponting 1972, 238). A pack of ten sealed Wiltshire cloths was found in 1627 by the buyer in the Netherlands to be deficient in length, breadth and weight (Ramsay 1965, 86). Three years later, a commission 'for the reformation of abuses in clothworking' was set up to work in Wiltshire (and also in Gloucestershire, Oxfordshire and Somerset), investigating the efficiency of the local searchers (ibid. 87-8, 91-4 & 96). The commission was much resented, and one of its officials was, in a celebrated incident, thrown into the River Avon while inspecting cloths at Bradford upon Avon. Some searchers were found to be ignorant of their duties; seals were put on cloths without any inspection, etc. The situation was temporarily improved by the work of the commission, but there was no lasting effect.

There were moves towards new types of cloth with the gradual development of coloured and medley fabrics from early in the century (ibid. 91 & 101-3; V.C.H. Wiltshire 1959, 153). Some Salisbury weavers returned, with the decline in the broadcloth trade, to the manufacture of kersey-type fabrics ('Salisbury plains'). A few Wiltshire broadcloths were still being exported via Southampton or ports in Devon to France and the Canary Islands. The main market for the new 'Spanish' cloths (i.e. English cloth made with Spanish or similar wool) was in the Netherlands and Germany, and most of the Salisbury
plains went to the Mediterranean area - the majority of those exported in 1640, for example, were sent via London to Leghorn (Ramsay 1965, 109-10). The Royal Commission for the Clothing Industry in the same year recommended Salisbury, Warminster, Devizes, Chippenham and Calne to be the county's centres for regulating the textile industry (Thirsk & Cooper 1972, 250). Ramsay suggests that the formal searching of cloths in Wiltshire may have ended with the Civil War, and traces from that time onwards an increasing attitude of laissez-faire towards industrial quality control (Ramsay 1965, 124). Though Wiltshire post-Restoration seals have been recorded (see nos. 1600 etc. below), none that can definitely be attributed to this period has dimensions indicating that a search actually took place. After the disruption to the cloth trade during the Civil War, previously unknown clothiers became prominent in the county. Their products were traded over much of the known world (ibid. 112, 114-5 & 120). The manufacture of serge in Wiltshire began in the first half of the 17th century, but its importance increased during the second half. This industry was centred in Devizes, as well as in Calne and Slaughterford. Serge making was never as prominent in Wiltshire as it was in Devon (ibid. 110-11).

The broadcloth trade to continental Europe continued up to the end of the century, and became insignificant in the next (ibid. 117). The 'long westerns' and 'short westerns' of customs records were presumably medleys, and would probably have included some of Wiltshire origin. These were being exported in the 1660s and 1680s to the Levant along with 'short -' and 'long cloths' (again some were presumably from Wiltshire), which also went to the Baltic. A number of serges were traded to Portugal, France and Central Europe, and some reached the West Indies via Bristol - these too may well have included Wiltshire products (ibid. 118-9). The county's alnage and subsidy profits totalled an annual average of £300 in the late 1680s, levied on broadcloths and serges. The duty on each white cloth of Salisbury at this time was 5d
(H.M.C. 1894, 37 & 42). The authorities there were still using the water seal (which showed the length of the cloth after wetting to induce any shrinkage) in 1700, but the relaxation of industrial control continued. The cloth manufacturers at Wilton were, however, incorporated as late as 1699 (Mann 1971, 100). Though the important Levant trade had ended by 1711, the first twenty years of the 18th century was regarded as a period of expansion in Wiltshire. There were between 200 and 250 cloth manufacturers here and in east Somerset, as well as drugget and serge makers who continued the industry at Devizes (V.C.H. Wiltshire 1959, 159; cf. Morris 1949, 8), and from the 1680s there had been a flannel-making industry at Salisbury. Medleys were of decreasing importance by the 1740s, though thirty years later, some were still being traded to Germany and Portugal. Inspectors to measure them according to Statute 13 Geo. I c.23 (1727) were appointed in Wiltshire at least up to the 1790s, though no record survives of the number of these cloths sealed. Druggets continued to be made into the late 18th century. Fabrics called 'Salisburys' were exported from Gloucester in the 1760s. Salisbury's flannels were being marketed to Iberia in the 1780s, and these and linsey-woolseys continued to be manufactured here into the early 19th century. By this time, competition from Lancashire fabrics and a decrease in consumption in Iberia brought a final decline to textile manufacture in Wiltshire (Mann 1971, 32-3, 40, 43, 159 & 332-3; cf. Seward 1972, 46).
Wiltshire Seals

The only recorded medieval county-seal design is known from a copper-alloy matrix found near Warminster:

59A crown over ornately-shaped shiled with arms of England, rose to right, (? pierced) sun to left, S'SVBC'PANNOR'IN COM'WILTEC' (Lombardic letter) around

(fig. 56) Wiltshire subsidy-seal matrix (no. 59A)
(from Archaeologia 1787, pl. XXX, fig. 7)

[59B & C] Two modern impressions have been taken.

This is among the most frequently-published of all cloth seals (Gentlemen's Magazine 1787, pl. II, fig. 6; Archaeologia 1787, 450 and pl. XXX fig. 7; Proceedings of the Society of Antiquaries (?1861, 228; Tonnochy 1952, 12 and pl. IV, no. 33; (for the impressions) Birch 1887, 142, nos. 1062 & 1063).

Birch - who describes the devices to the sides of the arms as an estoile (star) and a cinquefoil - attributes the matrix possibly to the reign of Henry V, while Tonnochy places it more confidently in the reign of Henry IV. The distinctive 'U' in the legend, with its vertical serif at the right, appears on English coins from the reign of Edward III to Henry VII, and occasionally later; the serif is particularly prominent in the reign of Henry IV (e.g. Oman 1931, pl. XX, no. 10). The rose-and-sun motif may argue for a later date - a dimidiated and conjoined rose-and-sun motif was used on coins between 1471 and 1490 (North 1975, 74, 78-9
and 81). Archaeologia's attribution to the reign of Richard III (p. 450) may be correct.

Four-disc seals include an incomplete example from the 1611 series:

1300 (inner discs) 1611 over shield with Stuart arms of Britain // .. / E.(B or R) /R, ..fleur de lis WIL... around

Seals which correspond with those for the 1670s from Devon and other western counties are:

1674 ('star'-shaped inner part):

1600 -//\*74/ oo , o WILTS around top // (missing) //-

1677 ('star'-shaped inner part):

4116 \*/-77- , WILTS around top

1670s:

1623 -// .\*; , ...LTS around top // xx / xx three harps xx /7..//-

The harp design is similar to that on Exeter seals of 1674 (nos. 411 and 568), though no. 1600 for Wiltshire from that year has a different design. The devices appear, from the more extensive evidence of the Devon/Exeter series (nos. 493 & 2987 etc.), to have been changed annually. The possibility that more than one design was in use for a single location in the same year cannot yet be adequately assessed. The alnager WP/PW (no. 1623) is known on seals of Devon (nos. 2840 etc.) and Somerset (no. 734).

A post-Restoration seal has:

895 -// Charles II-type head, OF ENG LAND around // lion passant, (?)3 above // WIL/TS

Undated seals are:

3332 (illegible) //\*NB , WILTS\*\*\* ... around // (missing) // ...E... (i.e. 'searched'?)
The alnager NB is also known on Devon and other seals (nos. 594 etc.) with a date span at least from 1618 to 1625.

221

221

914, 2125, 5651

914, 2125, 5651

No. 5651 was excavated in Stockholm.

Wiltshire, Salisbury Seal

One Salisbury seal is known:

417

417

The inner discs are c. 30 mm in diameter and the devices are integrally cast. These devices are taken from the arms of Salisbury - four bars, the shield being supported on each side by an eagle displayed with two heads ducally gorged (i.e. having a coronet around each neck). The 58 has been added after measurement of the textile to which the seal was attached, and is probably the weight in pounds. The seal is likely to be of 17th-century date. Its large inner discs with their integrally-cast devices contrast with the struck ones on most alnage seals, so this may be a local corporation issue. The seal has been published (Egan 1980, 185-7, pl. 1 and fig. 1).

(fig. 57) Salisbury seal (no. 417)

two-headed eagle, SARVM

arms of Salisbury, 58 (probably weight in pounds), WILTS
Worcestershire, Historical Background

The alnage accounts suggest that in the late 14th century the county's industry was not large (Bridbury 1982, 114), and that in the late 15th century it constituted just over 1% of the national total (Dyer 1973, 94; cf. Heaton 1965, 85-6; and see Carus-Wilson 1967, 279 ff., especially 290).

In 1511, Worcestershire cloths were apparently being sold in the Low Counties (Dyer 1973, 106). Statutes 25 Hen. VIII c. 18 (1533-4) and 27 Hen. VIII c. 12 (1535-6) restricted the manufacture of cloths in the county to towns: Worcester (which in the 16th century produced high-quality broadcloths), Evesham (which became known for silks), Bromsgrove and Kidderminster (both producers of narrow cloths, and the latter of carpets and coverlets as well), and Droitwich. These were the county's traditional centres of long and short cloth manufacture (ibid. 113 & 117-9; V. C. H. Worcestershire 1906, 286). The textiles were to be sealed by the local searcher with a 'stamp conteyning the true nombres for the lengtit and brede of the same clothe being wette'. * The effective suppression of the rural industry by this legislation was seen by contemporaries as the main reason for the economic growth of the city of Worcester (Dyer 1973, 116-7). Leland wrote that Worcester 'standeth most by drapering, and no town of England ... maketh so many cloths yearly as this...', and that Kidderminster 'standeth most by clothing', while Bromsgrove 'standeth something by clothing' (ibid. 93; V. C. H. Worcestershire 1906, 287). The county at this time can be considered part of the same broadcloth-producing area as Gloucestershire, Somerset and Wiltshire (Ponting 1971, 21).

* Worcestershire cloths sealed by the searcher according to these Statutes were exempted from the requirements for the owner's (clothier's) seal giving the length.
By Statute 5 & 6 Ed. VI c. 6 (1551-2) long Worcester cloths were to be 29 - 31 yards long and to weigh at least 84 pounds if white, and 80 if coloured, while 'short Worcesters' were to be 23 - 25 yards long and to weigh at least 60 pounds - that is, they were somewhat heavier fabrics than the broadcloths woven in the other western counties (Dyer 1973, 113). The specification for long Worcesters was changed by Statute 4 & 5 Phil. & M. c. 5 (1557-8) so that they had to be at least 75 pounds in weight.

The majority of the county's traded cloths were sent overland to be sold in London, and some were taken along the River Severn to Bristol. Few cloths were dyed in Worcester - this process was carried out in London or Coventry, or on the continent (Dyer 1973, 100, 103, & 105; Mann 1971, XIII). A Worcester trader was punished in 1561 for having a cloth with good-quality wool at the edge and poor wool in the middle, where it might have escaped notice during a transaction. In the next year, the clothiers of the city were forbidden to put their marks (i.e. seals?) on rural cloths, suggesting that the legislation aimed at suppressing the textile industry outside the towns had not been fully successful (Dyer 1973, 114-5). New draperies were first represented in the county by frisadoes, which were produced from the late 16th century (Williams 1951-2, 354).

In 1590, the Weavers, Walkers, Fullers and Clothiers of Worcester were re-incorporated into a Clothiers' Company (Dyer 1973, 150; V.C.H. Worcestershire 1906, 290). The cloth industry there, which had gone through a slump in the 1550s, was faced with the further recessions of the early 17th century (Dyer 1973, 109 & 111). Though the former textile-based prosperity of the 16th century was not recovered, for a generation over 50% of the city's population was engaged in the cloth-manufacturing and finishing industries (ibid. 84-5; cf. Ponting 1971, 176; V.C.H. Worcestershire 1906, 292). In 1624, at a time of general stagnation in the textile trade, Worcester cloths remained - like many others - unsold at Blackwell Hall in London. There was another
period of slack trade in the 1630s (Dyer 1973, 111; V.C.H Worcestershire 1906, 292). The discovery of deficiencies in Worcester cloths at this time further diminished their chances of sale (van Ufford 1983, 75). Textiles known as 'Worcesters' were apparently being manufactured in Gloucestershire in the 1630s (Mann 1971, 43). In 1640, Worcestershire clothiers successfully petitioned against a prohibition on the manufacture of say-dyed (dyed-in-the-wool) cloths (V.C.H. Worcestershire 1906, 293). In the same year, the Royal Commission on the Clothing Industry recommended Worcester and Kidderminster as centres for the regulation of the county's textile industry (Thirsk & Cooper 1972, 250). The foreign trade in white Worcester cloths was mainly focussed on the Levant during the 1650s (Mann 1971, 20).

The manufacturers of Kidderminster stuffs were incorporated in 1671 by Statute 22 & 23 Chas. II c. 8, and given privileges of searching and sealing (cf. V.C.H. Worcestershire 1906, 294). This late example of a medieval-style system of regulation was based on the one in operation at Norwich (Cooper 1970, 92). The counterfeiting of a seal, or the transfer of a genuine one to a different cloth from that to which it was first attached, brought a fine of £20. Specifications for the linen thread to be used in mixed textiles were also given. The new draperies now manufactured at Kidderminster were mainly narrow worsteds, which were of poor quality and only sold locally. Heavier, better-quality linsey-woolsies, with a linen warp and a worsted weft, were also produced here, and were used for wall hangings (M. Dwight of Kidderminster Museum, letter of 23/6/1980 to the writer). Kidderminster stuffs also included moreens and damasks (Kerridge 1972, 29). Seals for cloths were also mentioned in the local Council's ordinances and byelaws in 1650 (Dwight, as above).
In 1678, it was decided that the porters at Blackwell Hall should be paid 1½d for carrying long Worcesters out of the building, showing that these were still being traded to the capital (V.C.H. Worcestershire 1906, 296). The average annual alnage and subsidy profit for Worcestershire in the late 1680s was £150, levied on broadcloths and Kidderminster stuffs. 'Kidderminsters' were assessed at 1d and 2d, and long and short cloths of Worcester at 6d each, at this time (H.M.C. 1892, 42-3).

Worcester sent about 4,000 cloths per year to London at the start of the 18th century (Mann 1971, 332). Fabrics known as 'anabasses', probably made from cotton together with wool, were woven in Kidderminster in the 1720s (Wadsworth & Mann 1965, 171). The 18th century saw an irreversible decline in the scale of Worcestershire's textile manufactures, as foreign markets (particularly the Levant) diminished in importance, and Gloucestershire's rival industry advanced (Mann 1971, 42).

**Worcestershire Seals**

One late-medieval alnage seal is known:

1129

crown over ornately-shaped shield with arms of England, rose to each side, S\*VLNAGII PAN(NORV)...I(R)C(E)S(T) around (Lombardic letter)// crown over dimidiated and conjoined sun and rose, S\*VLN(A)G...IN COM'WIRCES around (Lombardic letter) (cf. fig. 8A, above)

The sun-and-rose motif may, by analogy with its use on coins, indicate the period 1471–90 (see on Medieval Seals).

A series of seals with mainly angular letters, but including some Lombardic elements, has the place-name 'Worcester' in Latin, and possibly specifications too:

4979

(III)//WI(LL)/GORN
Another has IIII on the first disc.

Of less certain origin, but probably related, is a seal with:

1111/(balance of letters) (angular letters)

The legend ('?Ygonie') may be an attempt at the Latin 'Wigornia' for the placename.

If the thick strokes on the first discs of these three seals are specifications, it is unlikely that they are a direct reference to yards length or to pounds weight. The absence of any royal device suggests that these may be corporation seals (the same may apply to some of the later examples too - see below). These could be the seals used by the local searcher in accordance with Statute 25 Hen. VIII c. 18 of 1533-4. If so, the strokes could refer to the width ('brede' of the Statute), in quarter yards. This cannot be regarded as certain, since there is nothing to indicate the length of the cloths, which was also required to be on seals (but cf. nos. 2421 etc. below).

Crown-over-portcullis seals are known with Lombardic and also with Roman script:

-// crown over portcullis, ...(OMr)WI...R around (Lombardic letter)

Another has R/ to right, ...(OM WOR)... (Lombardic letter) around.

crown over portcullis, E R to sides, ...PRO • V(L)... NCO WORCE around (Roman letter) (see fig. 13B)

No. 1690 has (?)VI on the other disc, and no. 456 has illegible scratches here.

From the James-I crowned-thistle series is:

-// crown over thistle, I R to sides, ...WIGOR around (cf. fig. 36A)
From the 1610/1611 series are:

435, 596, 872, 4584, (? 158

B, 1611: around top, COM, WORCESTER around // arms of
Stuart Britain

No. 596 has (1)610 above the arms, and no. 435 has a crown in
this position.

Two-disc seals apparently continued in Worcestershire later than
in most other counties. From the reign of Charles I, or possibly
Charles II, are:

213, 731, 3694

shield with fess and three pears [former arms of Worcester *],
WORCESTER SE(ARCHED) around // crown over rose, C R to
sides (see fig. 58 A & B)

Since no corresponding seals are known for other towns in
Worcestershire, these and the 'Worcester' seals below may have
been used throughout the county.

(fig. 58) (drawings K Hayes)

A) 'Worcester searched' with city
arms (three pears and fess)

B) crown over
rose with CR

C) LXXVIII for weight in pounds, XXXIII for length in yards

* The fess appears as a bar or as a line (recte per fess) on
the seals, and the stalks of the pears point either to the
right or to the left.
Further undated seals with the arms, and (in the case of no. 2302 - the only complete example) the legend, have possible dimensions from X to XII on the other disc: ||||| (no. 2421), X (nos. 225, 2302 & 2495), (?) XI (no. 3709) and (?) XII (no. 617). Some of these could perhaps be as early as the 'Willgorn' seals above (nos. 4979 etc.). The numbers could be the lengths in yards of very short cloths. The legend with 'searched' (in the case of no. 2302) is difficult to reconcile with such an early date. This one, and further variants are presumably of late 16th or early 17th - century date:

arms of Worcester, WORCESTER SE(A)RCHED around //LXXVIII/XXXIII (see fig. 58 A & C, above)

There are several minor variants, shown by + in front of the legend in some cases, and a horizontal line (for the fess present on most examples) between the numbers can be solid, dotted etc.

No. 829 seems to have a series of vertical lines in the lower right part of the arms, possibly as the heraldic convention for gules (red). No. 828 possibly has an illegible date in the legend; it has an incomplete secondary stamp with (X)III//H, the significance of which is not clear. Two examples appear to have XXXII as the second dimension, and another has XXXIII here, with a possible plant motif above and below the numerals.

An example excavated in Amsterdam from a deposit dated to between 1575 and 1650 has LXXVIII/XXXI- (Baart 1977, 120-1, no. 80). The numbers, most frequently 78/33, are presumably for the weight in pounds and the length in yards respectively of a quite coarse kind of cloth. According to Statute 4 & 5 Phil. & M. c. 5 of 1557-8, woollen 'worcesters' were to weigh at least 75 pounds and to be between 29 and 31 yards long. An increase in length might be expected, as
statutory dimensional requirements were gradually relaxed (a longer cloth would sell for more, but might get away with paying the old subsidy rate).

Examples with only the arms surviving include one from Nya Lödöse in Sweden (Göteborgs Historiska Museet no. 1916, 2997; identified from a drawing). No. 3702 apparently has no stamp on the disc opposite that with the arms.

Similar seals have different legends around the arms:

- one apparently has WO(RCE)...RN here.
- Others have: 
  - ERIP...// XXVIII/XXXIII (apparently complete) on the first disc
  - T(HV): PAC///LXXVII/XXXIII on the first disc
  - ILINGSLYG (no stamp on first disc)
  - R..QQ..NG. WI(C)... (first disc missing)

These legends may be parts of the names of clothiers.

Further variants have:

- fess of three horizontal lines between three pears, (I) B to sides

The arms appear to be those of Worcester, but again these may be clothiers' seals.

**Worcestershire, Kidderminster Seals**

The four-disc type of seal is known here (though not for Worcestershire county seals):

- (T) S privy mark // shield with: on a chevron between three leopards' heads each holding in the mouth a shuttle, three mullets (i.e. stars) [arms of the Weavers' Company],
KIDERM(N)STER around// shield with (?)identical arms to those on disc three
(In the correct version of the arms there are roses instead of stars.)
No. 692 may perhaps be an incomplete two-disc seal. Another inner disc with the arms and place-name has been published as a token (Caldecott & Yates 321 1907, no. 3 *). These may be the seals mentioned in 1650 (see Historical Background), or they may be ones used from 1671 by the local stuff makers. The only other seal recorded with the Weavers' Company arms is from Kettering, Northampton (no. 4026).

* I am grateful to Dr. M. Mitchener for bringing this reference to my attention.
Yorkshire, Historical Background

The county is well-served by Heaton's detailed survey, which covers the whole period of governmental industrial regulation.

There was a Weavers' Guild at York by 1164, when cloth production may have been on a scale second only to that of London. A similar prominence (with York's industry second to Lincoln's) is attested at the start of the next century, if the scale of the payments for exemption from the Assize of Cloth in 1202 can be taken as an accurate indication. The reliability of these figures has, however, recently been questioned. (Heaton 1965, 3; Bridbury 1982, 50-1) A fine for making a cloth in Leeds which was found to be of the wrong width is recorded in 1275 (Heaton 1965, 5). The 14th-century alnage returns are divided into those for the city of York, and those for the rest of the county. The combined annual total around the middle of the century never exceeded 1,000 alnaged cloths, but by the end of the century, production had apparently risen four-fold, with York accounting for over 3,500 cloths (Bridbury 1982, 114). Yorkshire produced mainly narrow cloths (straits and kersies), which were not included in the alnage until Statute 17 Ric. II c. 2 (1393-4), and also blankets, 'Coggeshall' cloths, and some coloured fabrics. The alnager for 1394-5 was William Skipworth, and a year later William Barker held the office for the West Riding (Heaton 1965, 69-72).

Repetition of annual totals of cloths alnaged in Yorkshire centres in the recorded accounts for several years between 1468 and 1478 calls the accuracy of these figures into question (Carus-Wilson 1967, 280-1). By 1468, county production had seemingly declined by about half, but York was still apparently producing over 35% of the county's textiles, while Halifax and Ripon were each supposedly responsible for almost a further 20% (Heaton 1965, 60; M T Wild 1972, 199). York and Beverley were both specified in the 1315 appointment of an alnager, and at both places there were searchers among the
local Weavers'-Guild officers in the 15th century (Heaton 1965, 41 & 127). Ordinances also survive from Hull, where linen was the main product (ibid. 32-3). The 15th and 16th-century decline in the urban textile industries of York and Beverley went together with a rise in rural manufacturing and production in the smaller towns of the West Riding, such as Halifax and Ripon (ibid. 46-7, 54-5, 68 & 75-6). In 1533, it was found that a total of 542 Yorkshire clothiers had made cloths with additions of flocks. This sort of deception was probably still in mind when the cheaper Northern cloths were included in the alnage for the first time by Statute 5 & 6 Ed. VI c. 6 (1551-2). By this Act the following specifications were required to be observed:

<table>
<thead>
<tr>
<th></th>
<th>length (yards)</th>
<th>weight (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>northern whole kersies</td>
<td>23 - 25</td>
<td>66 +</td>
</tr>
<tr>
<td>northern dozens</td>
<td>12 - 13</td>
<td>33</td>
</tr>
<tr>
<td>'penistones'</td>
<td>12 - 13</td>
<td>28</td>
</tr>
</tbody>
</table>

Legislation was not effective in rural areas, despite the more specific emphasis on them in Statute 4 & 5 Phil. & M. c. 5 of 1557 (Heaton 1965, 133-7).

The industry of Halifax was given a boost by Statute 2 & 3 Phil. & M. c. 13 (1555), by which the small-scale clothiers of the area were permitted the convenience of purchasing wool from middlemen (ibid. 94-5; M T Wild 1972, 199-201). The advance of clothmaking here and at Leeds and Wakefield was certainly recognised by 1561 (Heaton 1965, 54-5). Statute 34-5 Hen. VIII c. 10 (1542-3) restricted the weaving of coverlets to York. Six years later, one of the local searchers there was found to have been selling coverlets without seals. Wider powers for searchers were sought in 1555, though in 1595 (when this branch of the industry was indeed only active at York) the original Statute was held to have exempted coverlets from the alnage and subsidy (ibid. 55-8; V.C.H. Yorkshire 1912, 413).

The alnage contract for Yorkshire and Hull was held by the Wentworth and
Waterhouse families under Edward VI and Mary I, for an annual rent of about £96 (Heaton 1965, 178).

In 1577, the alnager John Leake gave a catalogue of faults and deceits known in clothmaking, including 'flocks, chalke and other false oynementes cast uppon clothe', especially 'in the Northe partes, wher no true clothes are made' (Tawney & Power III, 1924, 214). Halifax concentrated on kersey production in the late 16th and early 17th centuries; these cheap textiles had originally been produced here, it was alleged, because (at that time) they were not subject to the alnage.

An enquiry revealed very few new draperies being made in Yorkshire in 1595 - 'cushions' at Halifax and Bradford, coverlets and carpets at York, and knitted stockings in Doncaster, Richmond and throughout the North Riding (Heaton 1965, 79 & 265; Thirsk 1973, 61; V.C.H. Yorkshire 1912, 413). Penistone and the surrounding area produced c. 1,000 white 'penistones', while Wakefield and Leeds produced broadcloths. Cheap Yorkshire kersies and northern dozens were traded to Germany, Poland and Russia in the later 16th century (Heaton 1965, 79-80).

The overstretching of northern cloths was a persistent complaint in the later part of century. According to Statute 39 Eliz. I c. 20 (1597), which applied to cloths made north of the Trent, 'Northerne clothes and kersies do yerely and dayly grow worse and worse ... in shorthe tyme like utterlie to overthrow the trade of clothynge'. All cloths manufactured here were to be of the dimensions required by the previous legislation, with a £5 fine for contravention; the clothier was to attach a seal with his name and the cloth's length; additional searchers were appointed, and tenters were forbidden absolutely (cf. Heaton 1965, 139-40). The uneven appearance of the untentered cloths proved unattractive to customers, putting the whole trade at risk, and a series of disputes on this point eventually led to the allowance of tentering by Statute 21 Jac. I c. 18 (1623-4), providing the stretching was kept within specified limits (ibid. 140-3).
Under the Duke of Lennox in the early 17th century, the alnage was subcontracted to Sir Thomas Vavasour, Sir John Wattes and Sir John Middleton, who in turn employed George Nixon and Thomas Snydall to deal with the actual administration (ibid. 178 & 180; cf. V.C.H. Yorkshire 1912, 413). Prior to 1610, seals were taken to the cloths in rural areas by the searcher or deputy alnager, but subsequently the clothiers had to go to them, and the deputy alnager began to insist on taking measurements, even if the cloths had already been examined by a local searcher. This was apparently connected with an attempt to raise the fee for examining kersies, which failed with a judgement in favour of the clothiers in 1613 (Heaton 1965, 179-84). Broadlist kersey, a cheap, poor-quality cloth between 16 and 17 yards long, was made in quantity for the poor of the Netherlands, Germany and Poland (ibid. 197). Some of Yorkshire's poorer-quality fabrics could not command a quarter of the price of those made in Suffolk and the west of England from the same wool (ibid. 205-6). There was a complaint from the deputy alnagers of Leeds in 1618 that the searchers did not carry our their measuring duties properly, that it was usual practice for them to seal deficient cloths, and that they included among their number clothiers who themselves produced faulty cloths (ibid. 178). In 1623, in the midst of a general depression in the textile trade (cf. V.C.H. Yorkshire 1912, 414 for the effect at Wakefield), Yorkshire merchants claimed to have exported over 50,000 kersies in just over a year (Heaton 1965, 150). York had some success in the 1630s with the manufacture of worsteds and 'Kendal' cloths, though even with other lines through the 17th century, it never matched the scale of production of the West-Riding towns (ibid. 65-7). It was claimed in 1637 that there were 2,000 cloth workers in the Halifax area alone, suggesting a substantial increase in the industry, despite the economic troubles of the past three decades (ibid. 210). The holder of the Halifax alnage seal matrices, John Crabtree, said in 1638 that 80,000 kersies were made in the West Riding each year, three quarters of
which were exported (ibid. 150; V.C.H. Yorkshire 1912, 416). Keighley had become known for the production of undyed 'Keighley kersies'. The markets abroad for poor-quality broadlist kersies had considerably decreased by this time, and they soon disappeared altogether (Heaton 1965, 197-8). Kersies of 19 or 20 yards in length now sold more readily than ones of 18 yards, which was the maximum length permitted by the 1623-4 Statute (see above), and pieces were regularly being made up to 23, and occasionally up to 30 yards long. Since the subsidy was, in theory, determined by weight of cloth, and some kersies were now double the length they had been when the penny rate was originally established, the Leeds alnager Thomas Metcalf tried between 1636 and 1638 to put up the subsidy payment by 1d to 1½d. Some Halifax clothiers refused to pay the extra 1d on kersies already packed for the journey to London, and these were seized en route at Wombwell, before they had left Yorkshire. Other seizures were made elsewhere. Metcalf was defeated in the ensuing court case, and the 1d rate continued (ibid. 198-202; V.C.H. Yorkshire 1912, 415).

In 1640, the report of the Royal Commission on the Clothing Industry recommended Halifax, Leeds, Wakefield, Keighley and Bradford to be centres of quality control for the county's industry (Thirsk & Cooper 1972, 249). The clothiers of the Leeds and Halifax areas complained in 1642 of 'illegal pressure and impositions' used in searching and sealing (Heaton 1965, 207). The Civil War caused disruption to trade, and though the situation in Yorkshire generally eased from 1644, the fortunes of Leeds did not revive for over a decade, and the textile industry at Bradford was not re-established until the next century (ibid. 208-11 and 214). The corporation of clothiers at Leeds, which tried to govern an area that was claimed to produce some £200,000-worth of broadcloths and northern dozens per year, complained in 1655 that rural clothiers were tentering cloths excessively, and requested that proper seals for length and breadth should be used there (ibid. 220, 222-3, 227 & 229-30).
Statute 14 Charles II c. 32 (1662) made provision for a corporation of broad-clothiers based at Leeds, and required searchers to use seals to indicate the length and weight of each cloth. This corporation lasted until 1685. Attempts to revive it seven years later were unsuccessful (Heaton 1965, 232-4).

In the late 1680s, the average annual profit on subsidy and alnage for Yorkshire and Lancashire together was £1,600, levied on broadcloths, kersies and bays (H.M.C. 1894, 42). At the end of the century, the broadcloth trade was centred on Leeds, while that in kersies was centred on Halifax (V.C.H. Yorkshire 1912, 417). The annual value of Yorkshire's textile production in 1700 is estimated at about one million pounds - about a fifth of the national total (Wilson 1973, 230). In the early 18th century, Joseph Holroyd, a clothier of Sowerby near Halifax, ordered alnage seals in thousands; they were seemingly delivered in barrels and bags. On one occasion in 1706 he ordered 3d, 2½d, 2d, & 1½d seals, and on another he apparently wanted 5,000 1½d, 3,000 1d and 10,000 ½d seals, as well as some 3d ones (Atkinson 1956, 34 & 52, letters nos. 2 & 140). Northern 'dozens' were being woven in lengths of up to 60 yards by the early 18th century. Statute 7 Anne c. 13 (1708) established a minimum breadth of 5½ quarter-yards and a maximum length of 46 yards for Yorkshire broadcloths. The fullers were supposed to attach a seal giving the cloth's exact length, but in practice they often simply put on what the clothier wanted; the seal's specification was supposed to be checked by the searcher (Heaton 1965, 405-7).

The arrangements for quality control in the Leeds area, involving the election of eighteen searchers, did not prove fully effective, and the corporation tried to put new vigour into the local Clothworkers' Company in 1720. This attempt too was unsuccessful, and regulation of the broadcloth industry in the West Riding was transferred by Statute 11 Geo. I c. 24 (1725) to the local Justices of the Peace (Heaton 1965, 235-6 & 240-1). According to this
post-alnage system, which governed the broadcloth area ten miles around Leeds, the clothier was to sew his name and address at one end of the textile, and the fuller was to attach a seal with the dimensions, and his own name and address, at each end. The cloth dresser added a further seal after finishing, giving his name too. Searchers carried out spot checks. This Act was renewed by Statute 7 Geo. II c. 25 (1733), and 16 Geo. II c. 35 (1741), and it remained in force until 1764 or 1765 (Heaton 1965, 408-10). Samuel Hill, a clothier of Soyland near Halifax seems in practice to have allowed his full name to be sewn only on those cloths which were of a high quality; for others his initials sufficed, and in the case of remainders he gave instructions that even these should be picked out (Atkinson 1956, 6-7). Control was extended to narrow cloths, which were allowed to be of any length and breadth, by Statute 11 Geo. II c. 28 (1738); a seal with the fuller's name had to go at one end, and a searcher's seal was put on the other - both seals were to give the cloth's dimensions (Heaton 1965, 278 & 411). In 1756, there were 48 searchers for broadcloths and 31 for narrow cloths. These Acts were not working by the 1760s. They were replaced by what was destined to be the last regulatory statute, 5 Geo. III c. 51 (1765), by which any dimensions were permissible, though they were to be marked on a seal by a searcher (Heaton 1965, 412-15). The worsted industry, which had not been of importance in Yorkshire until the middle of the previous century, grew remarkably during the 1700s - particularly around Bradford (ibid. 257-9, 264 & 266). Several cloth halls were opened for different kinds of woollen, mixed and worsted fabrics during the 18th century, at Bradford, Halifax, Huddersfield, Leeds and Wakefield, as new markets in America supplemented those in Europe. The need for the halls diminished through the century, as merchants came to be supplied directly from the producer with the development of the factory system (ibid. 271-3, 365-70, 380-2, 386-90). Sealing continued in Yorkshire until at least 1806. A commission in 1821 recommended abandonment of searching and sealing as it was no longer at all effective (ibid. 416-17).
Yorkshire Seals

The earliest stamp for county seals is recorded from a matrix found in Norfolk, and published in an 18th-century illustration (Gardner 1754, pl. 1 no. 2). Its present location is unknown. It has a crown over a fleur de lis in a two-arched tressure, S'SVBCIDII·PANNORV.IN COM·EBORV. around.

(fig. 59)
matrix with crown over fleur de lis, for subsidy in Yorkshire (from Gardner 1754, scale not stated)

Some of the legend is depicted as being in Roman letters, though this could be a distortion of original Lombardic lettering. A late-medieval or early 16th-century date seems appropriate.

The earliest actual county stamp recorded is on a 'spade'-shaped two-part seal integrally cast with set dimensions ...III/XXI(I). The secondary stamp (which is in the position usually reserved on this kind of seal for a confirming stamp reading 'searched' - cf. Endrel & Egan 1982, 61 & 63, fig. 9a-c) has:
crown over portcullis, ...EBOR around (Lombardic letter)
The cast dimensions (?) 18 or 19, since XV are likely to be the missing numbers - probably for length in yards - and (?) 22 - probably for weight in pounds - are appropriate for a kersey, though there are other possibilities. The portcullis suggests a late 16th-century date (cf. possible 1553-group seal no. 4011).
Less-complicated are incomplete two-disc seals from the crown-over-thistle series:

740, 3888  
//crown over thistle, I R to sides, COM:EBOR'S' around

One seal is dated 1611 (cf. no. 817 for the fourth stamp):

1757  
//W/I/I/G;:COM:EBOR around // crown over fleur de lis, two
dots to each side // SER/CHE../1611, ...(G)ER around

751  
A seal with similar inner stamps (but from different dies) has
XIII/XXIX// scratches, on the outer discs. These dimensions
probably indicate a 'dozen' cloth thirteen yards long (cf.
no. 4413, below).

An inner disc has:

2637  
YOR/K R /1642

Probably from 1688 is:

3333  
(obscured) // Charles II-type head, OF ENG LAND around,
incuse border of alternate • and ▲ // crown, 4 ½ to sides,
(8)8 below // YOR/KE

An undated seal has:

582  
(scratches) // Charles II-type head, (OF ENG) LAND around
//harp [? incomplete] // YOR/...

'York' here may mean the county rather than the city (cf. nos.
203 & 2650, below).

The most frequently-recorded Yorkshire seals are a series with
inner stamps (from a number of different dies) having:

216, 966, 1073, 3675

what appears to be a demi griffin, with its forelegs in the
rampant position, pointing towards an erased [i.e. torn off] head
of a bird of prey [sometimes the griffin is on the right,
sometimes on the left], COM:EBOR around // crown over fleur
de lis, on the inner discs  (cf. fig. 60, below)
Others have I R, for James I or II, to the sides of the fleur. Nos. 1874 & 2079 have a hunting horn in the place of the bird's head to the right of the griffin. No. 1883 has -(searched) around //...(V)II//...XII on the outer discs (? 17 yards and 22 pounds). No. 4413 has a shield with the arms of Stuart Britain, R to sides on the third disc, and XIIIY/XXIXP// (scratches) on the outer discs - the Y and P respectively indicating yards and pounds, and the figures perhaps pointing to the cloth having been a 'dozen'.

Several of these seals have no stamp on the outer discs; others have 'searched' here, in some cases with dimensions on the corresponding outer disc. No. 3603, which has XIXP/XAIY on the first disc, has a secondarily-stamped device like a cinquefoil on the second.

Another seal has FAL/(T)Y, ...ED (? 'searched') around on the first disc, with incomplete dimensions on the fourth (fig. 60).

This seal, which was excavated in London, is of particular interest in view of the many comments in the late 16th and early 17th centuries about the poor standard of northern textiles. On nos. 944 and 2555 the griffin appears to be issuant from a coronet. The significance, if any, of these variants in the inner stamps' devices is unknown. Since each of these elements of the design measures less than 5 mm, requiring minute observation to
pick out any differences, they would probably not have been very satisfactory as indicators to customers of varieties of textiles.

Undated seals are:

203, 2650 -// crowned lion statant // K,•COMIT:YORKE around //-

752 XX(I)/XVII//K/W P/C, COM:EBOR•* around // crown over fleur de lis // C/G, SERCHED around

753 Another seal with these inner stamps has (SE)A/(R)CH/(ED) // on the first disc.

An inner disc from an incomplete seal has:

1244 D/W(R)/O, •*•COM: EBOR around

Yorkshire, Halifax Seals

Two four-disc seals have been recorded:

2763 -// eagle displayed, (1652 HAL)IFA(X) around // two shields, respectively with cross (of St. George) and harp [arms of England and Ireland], (THE C)OMM(ONWEALTH) around //-

The second example was excavated in Amsterdam (Baart 1977, 118-19 no. 72, and 1981, pl. 17, 3a & b) from a context dated (perhaps on the internal evidence of the seal itself) to the third quarter of the 17th century. (Cf. Manchester no. 2414 & Somerset no. 2923.)

An incomplete four-disc seal (in Calderdale Museums Service collection, Halifax; recorded from a rubbing) has (?) an anchor, WH RAWSON MILL HOUSE HALIFAX around //75 on inner discs with diameters of c.35 mm. This is the only known Yorkshire seal with a possible mill owner's name and address, so it could be a seal of length, as required by Statute 11 Geo. I c. 28 (1725) or the subsequent legislation for Yorkshire. A length of 75 yards, however, seems extreme (though 'dozens' up to 60 yards
long were known in the early 18th century). In the 19th century, there was a mansion in Halifax called 'Mill House', which belonged to the Rawson family, who were active in the textile business in the 18th and 19th centuries (ex info. Mr. R. Innes of Calderdale Museums Service; cf. Endrei & Egan 1982, 72, note 129).

**Yorkshire, Leeds Seals**

Two seals have the town arms:

(scratched) .../303// shield, with: a fleece on a field of horizontal lines, in chief a bar with three mullets [i.e. stars], wings to sides of the shield

The horizontal lines are the heraldic convention for the azure (blue) field of the arms of Leeds. Presumably 303 is a consignment number.

Another seal (identified from a photograph) has these arms suspended from a ribbon, with a palm branch to each side (fig. 61).

![Arms of Leeds](photograph Nebraska Historical Society)
This seal was found on the site of a fur-trading post from the 1820s in Nebraska, U.S.A. (letter from Nebraska Historical Society to the writer, 17/3/1982). It is probably the latest seal which has been provenanced.

Further Leeds seals (recorded from photographs - Calver & Bolton 1950, 266 & pl. II, nos. 1 and 2) have:

28½ // Leeds, James Eyre & Co. around (italic letter);
(scratched) SG // EMAN/ELIM/LEEDS

The former was found near Fort Washington (181st St.), New York, and the latter at Pelham Bay Park, New York. The style of both is 18th or 19th - century. (The seals published by Calver & Bolton are said to be in the collection of the American Numismatic Society in New York, but enquiries to the Society reveal no recollection of them or knowledge of their whereabouts.)

Yorkshire, Wakefield Seal

One seal with the town name has been recorded:

(scratched) 3../24½ // WAKE/FIELD, EBENEZE(R)... around

The scratches probably give the length and weight of the cloth, while the name is presumably that of the clothier, or perhaps a searcher. The earliest-recorded person named Ebenezer so far located at Wakefield (who had no known connection with the textile trade) died in 1729 (letter from P. Judkins of Halifax Museum to the writer).
Conclusions

It is immediately clear from the corpus of seals described in this thesis that the survival and recovery of these objects is by no means as limited as would probably have been supposed a decade ago. The 1345 individually-examined items discussed here (1223 from nos. 1-5000, of which 1203 are seals) represent textile products from 25 counties over a period of almost 500 years. This archaeological evidence is a source of sometimes very detailed information on aspects of the trade of English textiles, both in this country and overseas. The following discussion complements the brief general survey of salient points in the introductory section on chronological developments, and considers specific points in greater detail.

The great concentration of finds of seals in London (approx. 70% of the total of the 1203 which have been considered were definitely found there, and upwards of a further 25% may have been found there) is a notable contrast with the quite small numbers known to have been found elsewhere in England (approx. 4%), and abroad (approx. 0.4%); just over 12% have no recorded provenance - see Appendix 4. Outside London, the next-highest total number of provenanced seals recorded in any one place in Britain is a mere five, at Bristol. Relatively few medieval seals are known, and close dating for them is particularly difficult. The result of all these factors is that, at present, only for London finds datable between the mid 1550s and the early 1680s can the pattern of trade which can be inferred from provenanced seals be considered representative, since the sample is only adequate here and for this period. The possible association with riverside dyers' workshops for the majority of the seals found in the Thames in the capital (over 61% of those included in this study and with findspots certainly being
found there), may mean that they are a sample largely of the particular aspect of the city's trade that fed its textile-finishing industry as well. The number of seals recovered from this location may perhaps be over 93% of the total (that is, seals from nos. 1-5,000 included in this thesis) with known findspots. It is fortunate for the study of English seals that the massive emphasis on those found in the capital does not mean that issues originating elsewhere in the country are poorly represented in this corpus. Twenty-four counties are represented among the London finds, places as distant as Devon and Yorkshire being quite prominent (see fig. 64). Most aspects of the trade to the capital that these seals represent are well known from documentary sources. The seals themselves are an unusually informative category of finds from the ground, and one which can, without reference to historical or structural information, indicate the complexity of trade connections, and hence the status of London at this period as the principal market of the realm. Ceramics are perhaps the only other category of find which, taken in isolation, could at present provide this level of information for the period under consideration.

The relative sparsity of recorded medieval seals corresponds, once they begin to be represented among finds, with the lower levels of production at that time, compared with the post-medieval period. The earliest known seals from the late 14th century (at least 30 to 50 years after cloths are first described as being 'marked' by alnage officers in legislation from 1328) coincide with the earliest known reference to sealing in lead in 1380, and with a great upsurge in English international trade. The fact that these earliest examples and the recorded English seals datable to the early 15th century are all London issues foreshadows the future development of the capital's trade, but in view of the great bias towards London finds in the recorded corpus, they can
hardly be taken on their own as evidence of a pre-eminent position at this earlier period (cf. Appendix 2A, where existing contemporary or near-contemporary alnage records would, if taken at face value, put London only tenth in the country in a table of places with the highest number of cloths alnaged).

The majority of the recorded seals correspond with the period when legislation for the textile industry was most frequently put on the statute book (mid 16th to first quarter of the 17th century) and the following seventy five years, during which the alnage system appears still to have been effective at least in ensuring that seals were attached to textiles. The decline in the administration's integrity from the late 17th century onwards (as the raising of money, rather than industrial regulation, became the main focus of effort) is perhaps reflected in the sharp decrease in the number of provenanced seals attributable to the first quarter of the 18th century. The paltry numbers of subsequent provenanced seals recorded can be attributed to the post-alnage change in the emphasis of the information given (the manufacturer rather than the place of origin usually being the most important item at that time).

A change in the trading patterns away from London as the overwhelmingly pre-eminent national market may also have an effect on the number of seals recovered - even though the quantity of seals actually used in the later 18th century was presumably vast (cf. Mann 1971, 334-8). Further work with trade records may help to date some of the later seals more closely (e.g. nos. 3162 etc.), and finds in the U.S.A., where archaeological excavation of 18th- and 19th-century deposits is often undertaken, are likely to provide other useful indications (see, for example, on Leeds Seals).

The provenances of the seals which have been found in London, and which can be assigned to specific periods that are well-represented in
the corpus, for the most part correspond closely with the broad pattern of regional production which can be inferred from documentary evidence. A number of points arise in this connection (cf. Historical Background sections, and Appendices 2-4).

The scarcity of recorded seals for Guildford (two only), and more markedly for Berkshire, Coventry (one definite example each), and Lincolnshire (represented in the corpus only by a medieval matrix), can be seen as a reflection of the decline in textile production levels in these places from the second half of the 16th century or earlier.

The prominence of Norfolk, with over a quarter of the seals recorded, mirrors the widespread popular market for the county's worsted stuffs in the 17th century. The extraordinarily close dating that is possible for many Norfolk seals shows that they are quite evenly distributed from the late 1590s to the early part of the first decade of the 18th century. There are few other categories of find where a date on the object can be taken to indicate use in that year only, and among cloth seals the annually-dated Norfolk series are the most extensive. If the Norfolk seals with dates before and those with dates after 1650 are considered as two groups, there are 49 in the earlier and 43 in the later one - there is no convincing indication from this limited information of different levels of production, despite the effort put into developing different (apparently new) kinds of fabric in the second half of the 17th century. The contrast with the lack of Norfolk seals definitely datable to earlier than the 1570s is notable (though see nos. 1673 & 2385). The recorded seals for this county correspond in time very closely with the period of production of the 'new draperies', which were developed at first by immigrant communities in Norwich. The absence of definite earlier Norfolk seals presents a much sharper break than might have been expected.
A similar phenomenon is evident for Essex, where Colchester's post-1571 bays and says are very well-represented, but there is no certain earlier seal for this county in the recorded corpus. The large-diameter new-drapery seals might, in some circumstances, be recovered more readily than others because they are easier to see, but since the metal detector (the main means of recovery of the examples discussed here) is effective for seals of all sizes, this may not be a significant factor. Colchester's bays and says are the part of the English cloth trade that is most widely represented by attributable seals, both in this country and in mainland Europe, though the number of textiles actually indicated by these finds is tiny (see Appendix 4). The major Iberian market has, as far as can be established, yet to produce one of these seals, though in Denmark (which is not a particularly prominent market in documentary sources) there are two examples. Most of the less-important new-drapery towns of N. Essex (Bocking, Braintree, Coggeshall and Halstead), and Sudbury in Suffolk, are represented among London finds, though there is still no recorded seal for Witham. Some Norwich and Sandwich seals for similar fabrics have also been found in London; seals for both centres' and for Colchester's new draperies are also represented among finds in Amsterdam, though the numbers are at present small. The Dutch-community seals from Colchester (nos. 5616-7), Halstead (no. 5621), Sandwich (no. 5619), and perhaps. Norwich (nos. 5613A & B and 5615) which have been found in the Netherlands, could represent trade links built on connections established before the immigrants came to England.

The large number of Devonshire seals recorded presumably represents the importance in the London market of Devonshire kersies in the first quarter of the 17th century, and the subsequent development of the
serge trade. The prominence of Exeter in this branch of the industry, particularly in the 1670s, is brought out by the annually-dated series of seals from the late 1660s to the early 1680s, which has six times more examples recorded for Exeter than those with the county's name. In contrast to the exceptionally informative Colchester seals, the more closely-dated Exeter and Devon county examples do not give direct information about the fabrics to which they were attached, and their significance in these terms must be inferred entirely from the historical evidence.

Kent's early 16th-century crown-over-rose seals, of which 13 examples have been recorded, are apparently the only group of this date (apart from London issues) with a design distinct from that for the other counties. There is documentary evidence for correspondingly large numbers of seal matrices for Kent (fig. 30), though no direct historical evidence of particularly high levels of broadcloth or kersey production in the county at this time has been located. Whether or not the 22 dies ordered in 1518 were those which produced the crown-over-rose stamps, the apparent anomaly merits further consideration. The large number of Canterbury C R seals (21 recorded - the largest number of single finds of a particular type) may represent the expansion in production in the 1670s of the city's silken textiles. The unusual feature of textile imprints occurring regularly on four-part seals also makes this group stand out (perhaps providing a further pointer that these were for unusual fabrics). It is suggested, therefore, that C R here was Charles II rather than Charles I; once again, this depends ultimately on inference from historical data.

Suffolk, one of the most productive counties in the realm for textiles at the end of the medieval period according to alnage figures (see Appendices 2A and 3A), has only one medieval seal recorded (no. 5758)
and nothing comparable to the crown-over-rose group for Kent at the same period. The great majority of the Suffolk seals are of 17th-century date.

The large number of Worcestershire seals recorded in England (and a few recorded abroad) would probably not have been anticipated from readily-available historical evidence. Many of the Worcestershire seals are difficult to date, but documentary sources suggest that textile production was probably especially prominent in the late 16th century. The seals which have been recorded include several which appear to be of 17th-century date (those with CR are definitely from this period). The long-distance trade in the county's coarse broadcloths, as indicated by this archaeological evidence, appears to continue from a possible high point in the previous century. Further closely-dated finds and more documentary research are needed for clarification.

The significance of London seals is difficult to gauge because of the possibility that they may have been applied to textiles of provincial origin traded through London. This is the only major provenance for which more than half of the recorded seals (from nos. 1-5,000) predate the 17th century; the reason for this variation is unknown.

Of the counties with between 11 and 50 seals recorded, Somerset does not give any indication from the finds of its prominence in alnage records from the late 14th to the late 17th centuries, possibly because the main markets may have been outside London, and Yorkshire's trade in northern kersies seems also to be under-represented by finds in the capital. It is perhaps premature to read any special significance into the few recorded later Leeds seals, other than to note their potential for indicating this aspect of transatlantic trade. The 'cotton' (i.e. woollen) trade of Lancashire (which came relatively late into the alnage system) is probably represented by the (?)late 16th- and
17th-century alnage seals found in London, though the later great expansion during the Industrial Revolution seems, with the exception of the one possible Rochdale seal recorded, to have no common ground with this corpus of archaeological data. Wiltshire, with only 10 seals recorded, might have been expected to have been more prominently represented, but otherwise the counties which appear in the corpus as traces (i.e. ten seals or fewer - less than 1% of the total with provenances), correspond in this respect with their known low production levels in the late 16th and 17th centuries. Witney's blanket industry shows up as one town seal (no. 1979), and it may also be represented among the few Oxfordshire county seals. Buckinghamshire's one definite and two possible seals (found in London) actually give it more prominence than would have been supposed from the claim (V.C.H. Buckinghamshire 1908, 128-9) that the county did not produce textiles other than for local consumption in the 17th century. Herefordshire and Sussex, only represented by one seal each, seemingly never had large-scale textile industries, and that they appear at all in the corpus must be regarded as a matter of chance.

The seal which refers to both Somerset and Sandwich on different stamps (no. 4565) remains an unsolved problem, the seriousness of which is only mitigated by the fact that it is, so far, unique.

All of the principal cloth-producing counties, of the post-medieval period at least, are represented in this corpus *, but the recorded seals by no means account for all the types used. No seals for Shropshire (cf. V.C.H. Shropshire 1908, 429), Hertfordshire (cf. V.C.H. Hertfordshire 1914, 249), or Nottinghamshire (cf. V.C.H.

* The first Westmorland seals (perhaps for Kendal 'cottons' - Kerridge 1972, 25), are recorded among seals nos. 5001 - 7500, as are one example each for Newbury and Reading in Berkshire.
Nottinghamshire 1910, 346) are yet known, and all the counties mentioned in Appendix 2B can be expected to have had specific seals with the provenance given in the legend. Further seals of types not yet recorded are known from contemporary descriptions - see Historical Background sections for Essex (Halstead), Kent (Canterbury and Sandwich), Lancashire, Norfolk (Norwich, Lynn and Yarmouth) and Suffolk (Bury St. Edmunds). Some major later categories, such as the late-18th and early 19th-century seals used in Somerset, are also not yet represented by identified examples. It can be anticipated that seals from some, if not all of these places and groups, may be found in due course. If the metal detector were to be adopted widely as an archaeological tool, the recovery of seals would probably be much greater (cf. Egan 1985/1986, 42-50, especially 46).

At this stage, it is felt that dating for most seals is not close enough to permit a more chronologically-based statistical breakdown to be attempted. Despite the difficulties, individual cloth seals are often among the most closely-datable objects when they are found in excavations (cf. Appendix 5). A number of seals from Norfolk (see above), some from the West Country in the reign of Charles II, and a few others can be dated to the year. In other cases dates may be misleading - e.g. the use of '1571' and '1618' respectively on Dutch- and English-community Colchester seals for a period of perhaps more than a century. A few seals have more than one date - Worcestershire no. 596 has 1610 and 1611, and Somerset no. 1893 has 1611 and 1613. While these discrepancies warn against taking every date at face value, the anomalies are not serious. The arms of England (as opposed to Britain) on some 17th-century Gloucestershire seals (e.g. no. 1626) are more likely to cause chronological confusion, by being interpreted as Tudor-period heraldry (see the Green Papers).
It is assumed that most of the provenanced seals were issued in connection with the alnage. This seems reasonable for almost all the medieval ones, and for the others with royal devices, such as crowns and arms or initials, though it is otherwise less certain. Alnage contractors can rarely be identified from initials alone. The names of principal alnage officers noted while researching this study are given in the Historical Background sections for each county. Originally this was in the hope that changes of personnel and other arrangements connected with sealing might readily be found to correspond with changes in seal matrices. The general lack of correspondence which has emerged, from secondary sources at least, is exemplified by comparing the dated late 16th-century London seals (nos. 1767 & 2615) and the recorded changes in the administration and personnel of Blackwell Hall during the same period (see London, Historical Background). The same holds true for Yorkshire, where, despite the many individuals mentioned in Heaton's detailed survey, there is not a single point of specific correspondence with either the dates or at least half a dozen probable sets of officers' initials which appear on the recorded seals from the 17th century. Apart from the remarkable instance of the initials on two or more series of Norfolk seals (nos. 2811 etc. & 1753 etc., see Appendix 6), there are only six cases even of possible correspondence of initials or names with the historical evidence so far considered. In four of these cases, as with the Norfolk data, it has been necessary to consult colleagues with specialised local knowledge. The initials on a Witney seal (no. 1979) can with some confidence be identified with one of two individuals (a father & son of the same name) known to have administered the alnage in the town in the mid 17th century. TB on some Essex & Suffolk seals (nos. 4315 & 299, etc. - see Appendix 5) may or may not have been Tobias Blosse of
Ipswich. John Maryan, presumably a clothier, on a Braintree seal (no. 2225) was almost certainly a member of a family prominent in the cloth trade in the town in the 17th century according to local records. WH Rawson on a Halifax seal (unnumbered) similarly appears to have been from a family known to have been involved in textile processing in the appropriate locality, but neither of these individuals has been precisely located in time. In two instances, men with the same name as those on seals have been found in 17th-century records - a James White (Exeter nos. 907 & 7196) and a John Watson (Norwich no. 542), though neither identification can be claimed to be definite. Detailed work with local records would doubtless turn up further instances of the same kind, and perhaps a few more definite identifications, but that is beyond the scope of this present thesis. Enquiries at local record offices have failed to produce any ready identification of WV on a Kent seal of 1614 (no. 756, cf. Endrei & Egan 1982, 61 & 73 note 164), or of the alnage officer WP/PW on many West-Country seals of the 1660s and 1670s, for example. Progress here is likely to depend as much on the chances of survival of documents as on the perseverance of the archive researcher. It is unlikely that future work along these lines will reveal anything else quite as impressive as the extensive pertinence to seal stamps of documentation in Norfolk Records Office, since the seals for this county are exceptionally informative over a long period.

It is regrettable, since identification of the types of textile is rendered difficult, that there is so little demonstrable correspondence between the specifications on a large number of later seals and those given in great detail in the statutes (see Historical Background sections). Two Yorkshire 17th-century alnage seals seem, from the figures given, to be for dozens (nos. 751 & 4413), and others from there may be for northern kersies (nos. 752, 1883 & 4772). The high numbers for weight (since
they seem too great for length) on two Essex seals of the 1610s and 1620s (nos. 1902 & 4369), and on some of the Suffolk seals from the Bamble wreck (no. 5685, for example), point to traditional heavy woollen broadcloths. Even in the case of the well-represented series of Worcestershire seals (nos. 13 etc.) with 78 (pounds) and 33 (yards), and similar figures of the same orders of magnitude, none of them precisely tallies with the statutory specifications for the very heavy woollens of this county. The degree of correspondence with the legal requirements does, however, at least seem consistently to be closer for this series than for any other group so far defined and considered against the relevant local figures. As indicated above, precise dating for these Worcestershire seals is not yet possible, but from the unusual requirement in the early 16th century that breadths of textiles manufactured there should be put on seals (as well as lengths and weights), one early group of seals (nos. 4979 etc.) can be identified as probably recording breadths, and a second group (nos. 2421 etc.) as being corresponding seals giving the other figures. If this is correct, it is the only instance of the use of pairs of provenanced seals for specifications. Even here, with an unusual requirement in the statutes, and a clearly-defined group of seals giving similarly unusual information - apparently of the appropriate category, for the right county, and at the right general period - there is no precise correspondence between the figures. A number of Norfolk seals have '27' (nos. 570 etc.), which is the length in yards mentioned in 17th-century references to worsteds produced there, but this specification was apparently not a statutory requirement. Tighter dating is required for several counties' seals which give numerical specifications, before they can begin to be identified from information in statutes with particular kinds of textile.
When a single specification figure is given on a seal it can often be difficult to decide whether it is for the weight in pounds, the length in yards, or even (as apparently with the above Worcestershire seals), the breadth in quarter yards (see The Sealing of Textiles in England: the system in operation). When two figures appear, it can be similarly difficult to decide which represents which specification, since there is rarely any clue on the stamp itself (though see Yorkshire no. 4413, and Egan 1985, 3, fig. 13A). In the case of very coarse fabrics, like the Worcestershire ones discussed above, the number for weight in pounds can be over double that for length. By contrast, for some particularly lightweight new draperies the ratios could be reversed— for example, says 10 yards long might weigh only 2½ pounds (Pilgrim 1972, 260). Although the Bamble-wreck group of seals (Appendix 5) shows that at least some cloths were examined individually in the second quarter or perhaps the middle of the 17th century, it is not certain how general a practice this was at that time of change in the alnage system. Future finds of contemporary groups of seals may help to answer these questions, and to throw light on the presumed gradual breakdown of individual scrutiny over the years between the Restoration and 1724.

Several county groupings within the administration of the alnage are implied by references to the same alnagers on the stamps of recorded 17th-century seals with different provenances. The groupings appear in some cases to change during this period. No relevant documentary information has been found, and at present it looks as if details of this aspect of the complicated sub-contracting of the alnage will only emerge from collating information from seal stamps. Dating is not easy within the 17th century in some cases, but a tentative framework can be suggested, which further finds will probably refine. Putting the present information together, in addition to the early 17th-century
crown-over-thistle and 1610-11 series of stamps (which have been discussed in a separate section) the following series of seals can be defined:

Crown-over-rose stamps (see fig. 21): Cheshire (no. 1251); Essex (no. 5545), also Braintree (no. 3507) and Colchester (nos. 853 etc.); Devon (nos. 200 etc.); ?Norwich (nos. 280 etc.); Somerset/Sandwich (no. 4565). This group comprises both two- & four-disc seals (the former being the Braintree, Colchester and Norfolk ones). Dating is provided by a 1611 stamp on the Essex seal, confirmed by IR on some Colchester and Norwich stamps. This series may (as is more clearly evident from the 1610-11 series of seals, with which Essex no. 5545 is connected) mark the transition between these two principal seal types in some of the counties - the evidence most strongly points towards this for Essex, though even in this instance there is not enough information to be certain. None of the above three early 17th-century series is confined to a particular region within England.

R-&-L ligature stamps (for one or more of the hereditary alnagers-general, the Dukes of Richmond & Lennox - see fig. 20): Essex (nos. 2174 etc.), Exeter (nos. 762 etc.) Somerset (no. 2989) & Suffolk (nos. 2361 etc.). Dating within the 17th century remains uncertain, though the series presumably post-dates the 1610-11 stamps, as all the R and L seals are of the four-disc type. Here too the seals are from several regions within the country. At present, other dated seals from some of the counties represented in this series seem to leave the 1630s and (?early) 1660s lacking datable seals, and so these two decades are the most likely periods for the R-and-L issues. The Civil-War period seems a less-likely alternative, given the disruptions to industrial regulation as well as to trade, and the Commonwealth authorities would certainly not have endorsed the continued involvement of royalist
nobility. The reassignment of royal favours in the immediate post-Restoration years would be an appropriate context, but firm dating evidence is needed.

Administrative regional groupings are indicated by the following series of correspondences of stamp designs or of initials:

Essex and Kent -
from similar stamps on seals of the 1610s and early 1620s (nos. 1902 etc. & 1892 etc., perhaps supported by the two 1614 seals which may have the arms of livery companies - nos. 1760 & 756);
from TH/HT seals of the later 1620s and perhaps the 1630s (nos. 1087 etc. & 126 etc.), and a Surrey seal (no. 3534) suggests that the grouping included this county too;
from the Charles I, or less likely, Charles II - period seals with the initials TP/PT (nos. 134 etc. & 1449 etc.), and secondary stamps on some Norwich seals (nos. 1386 etc.) have a very similar ligature as a secondary stamp.

Essex and Suffolk -
from seals of the 1670s and early 1680s (nos. 1247 etc. & nos. 438 etc.) with similar stamps;
from seals with TB stamps (nos. 4315 etc. & 11 etc.) from the reign of Charles I or Charles II, and possibly from the Commonwealth period too (nos. 2722 etc.);
from undated seals with cast devices (nos. 2721 etc. & 2093 etc.), and others with the initials RS (nos. 807 and 808 etc.).

The West Country -
from seal stamps of the late 1610s and the 1620s with NB, for Devon, Dorset, Gloucestershire, Somerset and Wiltshire (nos. 594, 244 etc., 593 etc., 383 etc. & 3332);
from seals of the late 1660s and 1670s with the initials WP/PW for Devon, Somerset and Wiltshire (nos. 1243 etc., 734, and 1623) – the later stamps with these initials appear on the seals with annually-changing designs from the 1670s to the early 1680s, which are known for the same counties (nos. 493 etc., 4111 etc., and 1600 etc.); from undated seals with the ligatured initials SL/LS for Devon, Dorset and Hampshire (nos. 331 etc., 1370 & 1401 etc.).

A possible further connection may be indicated by Berkshire and Hampshire seals with the initials TD (nos. 4102 & 1383), but more evidence is needed before this may be regarded as certain, since the two recorded TD stamps differ in design.

A few Commonwealth-period seals include the national arms on stamps for Manchester, Somerset and Halifax (nos. 2414, 2923 and 2763). The similarity of design here, in different regions, is presumably because the new administration's re-organisation of the alnage country-wide with its own appointees, would have involved centralised discussion and the provision of matrices by the centralised authority, at least in the early stages.

The stylistic uniformity of the very plain stamps, which give only a place-name, on the outer discs of Charles II-type head series seals for Exeter, Essex, Lancaster, Suffolk, Wiltshire and Yorkshire (nos. 4173 etc., 1098 etc., 1072 etc., 143, 895 and 3333 etc.) is presumably a reflection of the Duchess of Richmond and Lennox's tight, centralised administrative rein over a profitable source of income (nos. 1072, 143 and 3333 are dated 1688).

The pattern suggested by these series of seal stamps in the 17th century is a change from no discernable regional groupings in the first decade of the century, to two strongly-defined groupings, for Essex with Kent and Surrey, and for the West Country, in the 1610s to 1620s and perhaps
later; there was a change, which cannot be dated precisely, around the middle of the century to Essex being taken together with Suffolk, while the West-Country grouping seems to have continued much the same as it was previously. Seals from the Commonwealth- and early post-Restoration years (taking the R-and-L ligature seals to be of this date) provide no indication of regional grouping, and the same is true of seals used subsequent to the early 1680s. There is no evidence from stamps for any grouping in the part of the country north of Worcestershire and Norfolk at any time during the century.

Some indication of the use in the late 17th century of different stamps for textiles assessed at different subsidy rates is provided by the two variants of Suffolk seals dated 1680 (nos. 1901 etc. for 1½d tax, and nos. 2668 etc. for 6d). The 1½d seals also have two variants in the shapes of their parts (see nos. 1901 and 2155). This, and two shapes for Essex seals dated 1677 (nos. 1100 & 1805), could perhaps indicate different sealing centres in the county, but there must be another explanation for the two apparent types of Exeter seal dated 1674 (nos. 411 and 568), where the shapes of the inner parts differ, but the stamps are identical. Further complications of this kind may well emerge as future finds extend the range of known seals (see also Devon nos. 840 etc. and 2644 etc.).

It has been noted that the general trend of a change in fabric-types from rather coarse, plainwoven textiles to a greater diversity in thread thicknesses and kinds of weave (the difference between the mainstream medieval and post-medieval traditions for every-day fabrics in England during the period of sealing, to put it at a very simple level) can be deduced from the fabric imprints on the inside surfaces of some seals.
This complicated subject * requires detailed consideration elsewhere, but it is worth noting here that the imprints from Colchester-Dutch bays of two kinds ('crown' and 'cross'), and from says, on seals which specify the fabric names, provide the most accurate and reliable indication available of the appearance of these important 'new draperies' (see above, on Colchester Dutch-community seals). The diversity of the imprints on 17th-century Norfolk seals is remarkable, and has so far frustrated attempts to pinpoint any major chronological trends within this variability. The absence of indications of fabric names on Norfolk seals (apart from those identifiable with Norwich russels - though an example with a clear imprint has yet to be found) and on many other seals, sets a limit on the usefulness of this aspect of future work. The textile imprints on some four-part seals (nos. 113 etc.) from Canterbury are rare examples of the phenomenon on this major 17th- and early 18th-century type of alnage seal. In this particular case, the imprints can provisionally be identified with the city's silken fabrics (see above), but this is an instance of the unusual apparently defining the unusual. At present, there seems little immediate prospect of being able to find out what, for example, 17th-century Exeter serges looked like from imprints, because the four-part seals that can reasonably be identified with these textiles have no such impressions. The two-disc seals for Taunton serges, which actually give the fabric name (nos. 993 etc.), are more likely to be a useful source for this kind of information, though they are far less closely-datable than most Exeter seals, and none of those so far recorded has a satisfactory

* The work principally of my colleague at the Museum of London, Frances Pritchard.
imprint. Any temptation to infer the nature of Exeter serges from the Taunton-serge imprints would be dangerous, since the popularity of the former city's textiles may have been due to subtle refinements in the weave, fabric or finish. Similar general constraints will apply for imprints on other seals. Contemporary groups of seals could here too provide useful information that cannot be gained from single finds. Stylistic parallels between some alnage-seal stamps and designs on contemporary coins occur sporadically through the whole period for which these official seals are known, from the earliest medieval crowned-king's-head group to the head of George I on seals of the last decade of the alnage. The parallels are usually with elements of the design, rather than with the complete device, but there are general similarities with coin designs in the stamps of the arms of England on the London E R seals with fine engraving (nos. 4982A-D), and in the Commonwealth stamps with the national arms (nos. 2414, 2763 & 2923). Three crown-over-portcullis series seals (nos. 770 etc.) have, at the start of the legend, a fleur de lis, which may be comparable to coin mintmarks from the period 1554 to 1560 (see discussion on this group). Problems with the implied dating for other seals having apparent parallels with coin designs are discussed under each of the sun-and-rose dimidiated-and-conjoined, the Kent crown-over-rose, and the probable 1553 county groups (q.v.). In the latter two cases there are reasons to believe that the seal designs may have anticipated those of the coins by a few years. Further work on documentary evidence, particularly on the Exchequer Rolls (King's Remembrancer) may provide more evidence of the involvement with dies for alnage seals of those responsible for cutting coin dies (C. Challis, pers. comm.). Future detailed assessment of this connection could perhaps even provide closer dating for some of the coins than is at present available (M. Archibald, pers. comm.).
A few possible counterfeit seals have been provisionally identified in the corpus on the basis of the crudeness of the engraving of the matrices. The earliest examples are a late medieval sun-and-rose dimidiated-and-conjoined seal (no. 3614), and there are some 16th-century crown-over-portcullis seals which lack an edge legend (nos. 193 etc.) - three of these (nos. 2813, 2842 & 2878) hint at mass-production of false seals. The approximately 64 seventeenth-century London seals with blundered legends from the shipwreck group (nos. 5655/1-68, all from the same mould) are more dramatic evidence for the same practice. Colchester Dutch-community seals (q.v.) are known, from the penalties laid down in legislation in 1660 for the offence, and from other historical evidence, to have been widely counterfeited. While the use of false alnage seals would have meant the avoidance of quality checks and of subsidy payment, the false Colchester seals were intended primarily to deceive the customer into believing that the textiles to which they were attached were the expensive, high-quality products of a particular group of workmen whose renowned products carried a high premium. The difficulty with the recorded Colchester Dutch-community seals is that so few are either clearly genuine or clearly counterfeit. Seals for '2300 say' textiles (nos. 916 etc.) are consistently from poorly-engraved matrices, while those with the town arms for other says (nos. 541 etc.) all exhibit high-quality engraving, but it would probably be rash to use these criteria as absolute indicators respectively of counterfeiting and authenticity. Many of the recorded Colchester-Dutch seals would probably have presented even contemporaries trying to decide whether they were genuine or not with considerable difficulty. The designs for the large-diameter Colchester English-community seals (nos. 530 etc.) are very close to those for some of the Dutch immigrants' seals. It
seems likely that there was intent to deceive on the part of the English, by using seals that could easily be confused with the ones for the immigrants' textiles which had gained a high reputation. The possible imitation of London seals by provincial issues (Bocking no. 1905 and Coventry no. 3175) may be further examples of the same kind of practice. The radiating scratches across the rivet and disc on Kent seal no. 1335 (fig. 32, bottom) may have been to discourage any attempt to transfer this genuine seal from the cloth on which it was originally put to an unexamined one, perhaps of inferior quality. Though the rivet could have been prised open, and the seal reattached to another cloth quite easily, it would have been very difficult, if not impossible, to make the scratches re-align precisely.

The development of the forms of the seals themselves can be summarized briefly as a change from the small-flan, two-rivet, two-disc type of the late 14th century to the large, single-rivet or double-rivet two-disc form in the early 15th century. The use of two rivets was reintroduced on large-diameter seals used by Dutch immigrants in the late 16th century. The tubular, one-part rectangular seals used by these communities of settlers in Colchester, Sandwich and Norwich (nos. 2491 etc., 2306, and 904) appear also to be a continental type introduced at this time. The background for these changes, and the origins of the four-part seals of the 17th century and later in England, and of the practice of gilding some large-flan London seals (e.g. no. 4711, also known on some imported seals), may be clarified by comparison with continental examples when closer dating is possible for finds abroad.

The provenanced seals from imported textiles and the London dyers' series are two groups of seals which merit further detailed study in the future.
It is worth considering what might have been inferred from the seals if the legends had been indecipherable. The prehistorian might well have seen evidence of national, and, perhaps, of international trade. Though the central role of London would have been evident from the findspots, it would probably have been interpreted as that of primary manufacturer, rather than of centre of consumption, secondary processing and redistribution; the extent of the catchment area throughout England would almost certainly have remained completely hidden. The connection with textiles might well have been missed - as indeed it has been by many of those who have previously tried to interpret the seals.

To sum up, the various strands considered in this thesis demonstrate the richness of a long-neglected field of study, which could probably only have been successfully tackled from a London base. The correspondence and the lack of correspondence with historical evidence can each be emphasised; their respective importance to the researcher will depend on the nature of the questions asked. The anomalies may, in the long term, prove the more interesting, since they are manifestations of a far wider problem. From other recent attempts to compare a large body of archaeological evidence with documented trade in the post-1066 period, it has become evident that these two sources of information focus on substantially different aspects of the phenomenon of trade (cf. Allan 1984, 355 & 357, on the ceramic trade of Exeter; also H. Clarke, pers. comm.). The very fact that correspondence is not precise means that the archaeological evidence has a contribution to make. The application and validity of this information is, however, open to debate, particularly because most excavated finds from the period in question were not ordered by the original users at the time of deposition in a way which was intended to
convey any specific data. To suggest that one source gives a picture that is in some way more valid than the other is an unnecessary judgement (pace Allan, loc. cit.).

It is hoped that the archaeological information presented in this thesis about a trade considered particularly well-served by documentary evidence, will deter archaeologists tempted to regard as fully representative other evidence from the ground relating to more poorly-documented aspects of trade, just as it can remind historians that the artifacts are far more varied than written evidence alone suggests. The wider realisation that cloth seals survive in large numbers may in itself stimulate new lines of enquiry by both archaeologists and economic historians. At the very least, this study has been brought to the point where a category of object, which was a preoccupation in the working lives of many individuals, over a period of almost half a millennium, has for the first time been defined and described, and the available information on the extent of survival collated.
APPENDIX 1

Seals Recorded from First-Hand Examination

Details are given in the following order:
Number of parts; complete (+) or incomplete (-); shape of parts (round unless specified); inner or outer parts (only for incomplete four-part type seals); diameter(s) or other dimension(s) at widest point(s) in order of parts; findspot; collection code letters (see list at end of Appendix: private collection if not specified); page(s) on which principal discussion of the seal appears; description of stamp(s) etc. (Lettering is in Roman style unless stated). First, second etc. parts of seals are sometimes referred to as 1, 2 etc. For other conventions, see Introduction. No attempt has been made to represent letters etc. which do not appear on the particular seal. Minor differences between descriptions here and those in the main text are because of the higher level of interpretation in the text sections.

Further details - orientation of stamps, private owners etc. - are recorded on cards held at the Museum of London (see Appendix 10).

Number

7) 2-, 25mm, ? Thames, London, WHS no. 25A; p 115; two coronets in ornately-shaped shield //COL/ESTE(R)

8) 2-, 25mm, ? Thames, London, WHS no. 25B; p 115; two coronets in ornately-shaped shield //ISH/COL/EST(ER)

9) 4- inner disc, 11mm, ? Thames, London, WHS no. 26A; p 218; SVF/FOL*/(K)

10) 4- inner disc, 13mm, ? Thames, London, WHS no. 26B; p 218; (SVF)/FOL*/K

11) 4- inner disc, 12mm, ? Thames, London, WHS no. 26C; pp 218, 274; TB, SVFFOLKE around

283
12) 4- square inner part, 14mm, ? Thames, London, WHS no. 27; pp 73, 212; *77, EXO\H around top

13) 2-, 27mm, ? Thames, London, WHS no. 28; pp 244, 271; LXXVIII/XXXIII // two pears & fess in shield (legend around)

15) wax impression, 26mm, BL add. mss. Ch. 55247, red wax impression on Monmouth property - transfer deed of 1380; pp 18, 33, 401; crowned king's head facing, (illegible device) S:SVBSI(D)II:PA:NNO RV(M) around (Lombardic letter)

18) 2-, 19mm, ? Thames, London, WHS no. 33A; pp 173, 192, 194; castle, (lion) below // D/IT(A)/(R)T

19) 2+, 18//18mm, ? Thames, London, WHS no. 33B: p 183; castle // (C)/..NR(L or C)/(B, P or R)T(L or N)

20) (?)2-, fragment, ? Thames, London, WHS no. 34; p 108; two coronets in shield // griffin segreant (i.e. rampant)

34) cast, 26mm, BL no. A56; pp 18, 33, 34; (modern sulphur cast from matrix for no. 44)

44) cast, 26mm, BL no. XXXV 71; pp 33, 34, 35; crowned king's head facing, (?) raspberry S:SVBSIDII PANNORVM around (Lombardic letter) (modern wax impression)

45A) copper-alloy matrix, 27mm, Pyx Chapel, Westminster, BM No. 87, 11-27, 1; pp 18, 33, 34 (fig. 3A), 401; crowned king's head facing, star or sun with curved rays S:SVBSIDII PANNORVM around (Lombardic letter)

45B) cast, 27mm, BL no. CLV 42; p 33; (modern wax impression from no. 45A)

47) 4- inner disc, 11mm, ? Thames, London, WHS no. 54C; p 69; 64/NP

48) 4- inner disc, 12mm, ? Thames, London, WHS no. 54D; pp 71, 75; £, IOB E(X)ON around

59A) copper-alloy matrix, 28mm, Warminster, BM no. 51, 11-12, 1; pp 44, 235 (fig. 56), 401; crown over ornately-shaped shield with arms of England, (?pierced) sun to left, rose to right, SSVBC\PANNOR\IN COM\WIL\TEC\ around (Lombardic letter)
(59B) **cast**, 27mm, 'received from Dept. of Antiquities', BL no. XXXVII 34;  
p 235;  
(modern wax impression from no. 59A)

(59C) **cast**, 27mm, BL no. A84;  
p 235;  
(modern grey sulphur cast from no. 59A)

64) **copper-alloy matrix**, 27mm, findspot unknown, BM no. 32. 5-12.1;  
pp 36, 126, 127, 401;  
crowned king's head facing, with part of bust, feather with scroll to  
each side, SVBSIDIVM: PANNORVM: SVT[T][S]: around (Lombardic  
letter)

65) **copper-alloy matrix**, 32mm, findspot unknown, BM no. 1915, 12-8,  
153;  
pp 43, 153, 401;  
crown in 6-arched tressure, $'SVBSIDII$-PANNORV$IN$  
COMITATV$-LINCOLN$ around (Lombardic letter)

66) **copper-alloy matrix**, 32mm, findspot unknown, BM no. 1920, 4-15,  
18;  
pp 40, 136, 153, 401;  
crown over fleur de lis in 8-arched tressure, $S$'SVBSIDII$  
PANNORV$IN$ COMICANTE$ fleur de lis $ around (Lombardic  
letter)

96) 2+, 20//20mm, Thames, London;  
p 192;  
RO/GNH/(/?)- or illegible

110) 4-, 16//11mm, Thames, London;  
p 69;  
(1 & 2 missing) // lion couchant on upturned portcullis, (8) left //(/?)-

111) 2-, 26mm, Thames, London;  
p 244;  
"-//LXXVI/XXXIII// shield with three pears & fess

113) 4-, 16//16mm, Thames, London;  
pp 142, 143, 277;  
(missing) // CAN/TERBV/RI/T+ // crown over fleur de lis, C R to  
sides // (missing)

119) 2-, 18mm, Thames, London;  
pp 54, 55;  
XXX//(/crude) crown over portcullis

120) 2+, 20//20mm, Thames, London;  
pp 175, 190;  
BW/..HH(I)/CW(T) // (N)O/(R)WI/C

126) 4+, 15//18//15//15mm, sub-square parts, Thames, London;  
pp 93, 141, 142, 224, 274;  
-// SER/HED/ rose 1628//$F $, rose left, over KEN(T)///(illegible)
131) 4+, 12/15/15/12 mm, Thames, London; pp 145, 209, 210, 220; 
- // S,(S)OMERSE(T) around // crown over thistle, 16 12 to sides // -

132) 4+, 15/17/17/15 mm, Thames, London; p 218; 
- // crown over rose, C R to sides // SVF/OLK//-

133) 4+, 10/12/12/12 mm, Thames, London; p 75; 
(illegible) // - // crown over thistle, R right // EX•/(O)N

134) 4-, 11/14 mm, Thames, London; pp 93, 142, 196, 274; 
-// above, ESEX around base // (3 & 4 missing)

135) 4-, 11/14 mm, Thames, London; p 221; 
-//RS, SVF...E around // (3 & 4 missing)

136) (?) 2-, 20 mm, Thames, London; pp 49, 121; 
G, +COM- GLOCEST around // (?) arms of England

137) 4-, 15 mm, scallop-shaped inner part, Thames, London; p 122; 
crown over arms of England, C R to sides

140) 2+, 40/40 mm, Thames, London; p 106; 
3 crowns, 15 7(1) to sides, BAYE·100 DVYT around // griffin passant, 1571 around

141) 2-, 47+mm, Thames, London; p 108; 
(?) griffin passant //(missing) (cut to make a strainer)

143) 4+, 13/14/14/13 mm, Thames, London; pp 218, 275; 
-// Charles II-type head, OF ENG LAN(D) around // lion passant, 
1½ above, 88 below // SVF/LK

149) 4-, 11/14 mm, Thames, London; p 218; 
-// TB, SVFFOLKE* around

157) 2+, 18/18 mm, Thames, London; p 49; 
crown over shield with arms of England //-

158) 2-, 17 mm, Thames, London; p 243; 
B, 1611 around top, (legend around) // arms of Stuart Britain

159) 2+, 17/13 mm, Thames, London, ML no. 78.43/1; p 77; 
crown over fleur de lis, R right (TIVE)RTON around //-

286
160) 2+, 17/15mm, Thames, London, ML no. 78.43/2; p 77; fleur de lis, TIVERTON around //-

161) 2-, 18mm, Thames, London, ML no. 78.43/3; p 77; crown over fleur de lis, (E) R to sides, TIVERTON around //

165) 2-, 16mm, Thames, London, ML no. 78.43/112; p 54; XXVII // (?) portcullis

186) 4-, 13/14/15mm, Thames, London, ML no. 78.43/26; p 143; lion rampant // IE(R)/+RI+/+F+ // crown over fleur de lis, C R to sides // A..

187) 4+, 11/13/12/12mm, Thames, London, ML no. 78.43/27; p 75; (illegible) // // crown over thistle, I R to sides // EX /ON

190) 2-, 15mm, Thames, London, ML no. 78.43/30; p 51; crown over portcullis //-

193) 2+, 16/17mm, Thames, London, ML no. 78.43/33; pp 54, 55, 279; XV // (crude) crown over portcullis (no legend)

200) 4- inner disc, 16mm, Thames, London, ML no. 78.43/40; pp 28, 70, 77, 273; crown over rose, DENSHERE around

201) 4+, 13/16/16/13mm, Thames, London, ML no. 78.43/41; p 70; (?) III // // crown over rose, DENSHI(RE) around // (E)/ON

202) 2+, 26/25mm, Thames, London, ML no. 78.43/42; p 115; two coronets in ornately-shaped shield, 18 right // ENG/LISH/ :: COL :: /(C)HEST(E)R

203) 4+, 13/16/16/14mm, Thames, London, ML no. 78.43/43; pp 255, 257; // crowned lion statant // K, COMIT-YOR around //-

213) 2-, 20mm, Thames, London, ML no. 78.43/53; p 243; shield with 3 pears, WORCESTER (S) around // rose

216) 4- inner disc, 15mm, Thames, London, ML no. 78.43/56; p 255; demi griffin left, erased head of bird of prey right, *COM around
221) 4-, 13//12mm, Thames, London, ML no. 78.43/61; p 237; (1 & 2 missing) //4/oo, + WILLS around //-

225) 2-, 18mm, Thames, London, ML 78.43/65; p 244; X// shield with three pears

227) 2-, 22mm, Thames, London, ML no. 78.43/67; pp 57, 68; C, (EVON$\phi$ around // arms of Stuart Britain

231) 2-, 20mm, Thames, London, ML no. 78.43/71; p 150; XXXIII // rose, ...A... around

238) 2-, 25mm, Thames, London, ML no. 78.43/78; p 192; (scratches) // HO/...G/FR

239) 4- inner disc, 15mm, Thames, London, ML no. 78.43/79; pp 29, 71; crown over thistle, I R to sides, •DENSHERE• around

240) 2-, 26mm, Thames, London, ML no. 78.43/80; p 163; -// arms of England, R right, II(P)...(O)N around

243) 2-, 19mm, Thames, London, ML no. 78.43/83; p 192; N(O)/RW/C(H) // (missing)

244) 4+, 9//10//12//12mm, Thames, London, ML no. 78.43/84; pp 68, 80, 121, 210, 274; -// NB, SO...DOR around // thistle, C left //-

247) 4+, 8//13//13//12mm, Thames, London, ML no. 78.43/87; pp 80, 210; -// NB, + S(O)...RS around // portcullis //-

260) 2+, 22//22mm, Thames, London, ML no. 78.43/100; p 51; -// portcullis, ...OL... around (Lombardic letter)

271) 4+, 10//13//13//12mm, Thames, London; p 73; -/\$, EXON around top // crown over two lions passant, 7 2 to sides //-

280) 2-, 15//15mm, Thames, London; pp 176, 177, 273; castle, P left // rose

281) 4+, 15//17//17//18mm, Thames, London; p 100; -// crown over 3, COLC(H)ESTER around // head of Anne, MAG around //-

288
287) 2-, 19mm, Thames, London;
p 188;
R/HDR/16.57/CSP/I //(missing)

290) 4+, 11//15//15//12mm, Thames, London;
p 74;
-//-\*-\*, E-X-O-N around top // coronet with 3 plumes through, 80 below //-

295) 4+, 15//18//18//15mm, Thames, London;
p 99;
-// (? ) head of monarch, (illegible legend around) // rose,
(C)OLCHEST(E)R around //-

299) 4-, inner discs, 15//15mm, Thames, London;
pp 94, 218, 269;
crown over rose, C R to sides // TB, *SV around

301) 4-, outer discs, 15//13mm, Thames, London;
p 151;
44 // LAN/(C)AST

303) 2+, 45//47mm, Thames, London;
pp 104, 105;
3 coronets in ornately-shaped shield, (CO)LCHESTER 100 CRONE
DVTYS around // (griffin) passant; secondary stamp with EB privy
mark

319) 2-, 20mm, Thames, London;
p 54;
(incuse) SR // portcullis

331) 4-, 8mm, Thames, London;
pp 71, 80, 126, 275;
(scratches) //Z, DEVON IOB around // (3 & 4 missing)

332) 4-, square inner parts, 13//13mm, Thames, London;
pp 69, 212;
*/-77-,DEVOArourund top // 2 equine beasts supporting coronet with
3 plumes through

337) 2+, 22//22mm, Queenhithe (London) 1866, BM no. 71/7-14, 119;
p 51;
portcullis, IA.VEA...OE around (Lombardic letter) //-

341) 2+, 23//25mm, Queenhithe (London) 1866, BM no. 71/7-14, 124;
p 259;
(scratched) 3/ 24½// WAKE/FIELD, EBENEZE(R) around

357) 4+, 13//14//14//13mm, findspot unknown, BM no. S19;
p 220;
-// (illegible device), OLK+ around // crown over rose, I left
//S, EARCHED+ around
371) 2-, 29mm, findspot unknown CW;  
pp 43, 136, 161, 162;  
bearded, balding head facing, in 6-arched double tressure with  
trefoils at two of the points, (OR)VS IN: CIVITAT (Lombardic letter)  
// (obscured device in arched double tressure ?with trefoils at two  
of the points)

376) 2+, 16//15mm, Thames, London, ML;  
p 51;  
crown over portcullis, 'MPA(O) around (Lombardic letter) //-

377) 2+, 16//14mm, Thames, London, ML;  
p 51;  
crown over portcullis, AO:... (Lombardic letter) //-

378) 2+, 25//25mm, Thames, London, ML;  
pp 163, 164;  
crown over arms of England, VLI"PAO"VI(ALL)E"LON around//arms  
of London in ornately-shaped shield, DI(I) fleur PRO fleur PANNIS  
fleur LAN.. around

383) 4-, 17//16mm, Thames, London, ML;  
pp 68, 210, 274;  
(1 & 2 missing) // (N)B, + SO around //-

392) 4+, 12//13//12mm, Thames, London;  
p 74;  
-\sqrt{X}, EXOM around top // 3 fleurs de lis //√\*\* 

395) 4-, 14//16mm, Thames, London;  
pp 100, 101;  
(1 & 2 missing) // crown over 6 or 3, COLCHESTER around // (?)-

405) 4-, 11//16mm, Thames, London;  
pp 71, 126;  
-\sqrt{P}, SHEIR around // (3 & 4 missing)

407) 2+, 12//13mm, Thames, London;  
p 184;  
(illegible device) // castle, (?) beast below

411) 4-, 15//12mm, Thames, London;  
pp 73, 236, 276;  
(1 & 2 missing) // 3 harps //-

417) 4+, 16//29//30//15mm, Thames, London, ML;  
pp 237 (fig. 57), 458;  
-\sqrt{(cast) two-headed eagle displayed, SARVM below // (incuse) 58-,  
over (cast) shield with four bars, WILT-S below //-

418) 2+, 48//46mm, Thames, London;  
p 106;  
3 crowns in ornately-shaped shield, 15 (71) to sides, ESTER 100 C  
around// griffin segreant (i.e. rampant), DVTS+CO(LCH)ES around
419) 2+, 18//19mm, Brill, Buckinghamshire, BCM;
   pp 111, 397, 398, 399;
   (scratches) // 3 coronets & cross raguly in ornately-shaped shield

430) 2-, 45mm, Thames, London;
   p 104;
   3 crowns in ornately-shaped shield, 15 71 to sides, CR(ONE D...TS)
   COLCHESTER 100 around // legs of beast

435) 2+, 25//24mm, Thames, London;
   pp 57, 243;
   (B), 1611 around top, ∂ COM:W.. around// crown over arms of Stuart
   Britain

438) 4-, 12//10mm, lozenge-shaped parts, Thames, London;
   pp 217, 274;
   (1 & 2 missing) // 16/7?, SVF rose FOLK rose around //-

440) 4+, 13//13//13/14mm, Thames, London;
   p 75;
   (scratches) // - // crown over thistle, I R to sides // EX: /ON-.

442) 4+, 15//16//17/17mm, Thames, London;
   p 94;
   29 // ESEX/TB, (secondary stamp obliterated by scratching) //dragon
   rampant, C R to sides, (secondary stamp obliterated by scratching)
   //RP privy mark

446) 2-, 20mm, site at East Bankside, London;
   p 47;
   king enthroned, holding sword & sceptre, arms of England on his
   tunic, (ORVMx) (Lombardic letter) around // shield with arms of
   England .

451) 4-, inner discs, 18//18mm, Thames, London;
   p 221;
   RS, wSVFFOL around // arms of Stuart Britain

453) 4-, 14//18mm, Thames, London;
   p 209;
   -// H·1611· around top, (S)OMERSET· around // (3 & 4 missing)

456) 2+, 21//23mm, Thames, London;
   pp 51 (fig. 13B), 52, 53, 242, 459;
   (scratches) // crown over portcullis, E R to sides, ...PRO...ORC(L)
   around

457) 2+, 21//20mm, Thames, London;
   p 150;
   34 // (? crown) over thistle, (C) R to sides, COM:LANCES... around

459) 4-, 13//17mm, Thames, London;
   p 122;
   -// 16/B/37, CO...SHIRE around // (3 & 4 missing)
463) 4-, 12//17mm, Thames, London;  
  p 122;  
-// GLOS/TER/16(98) // (3 & 4 missing)  

468) 2+, 20//20mm, site at East Bankside, London; 
  pp 47, 48 (fig. 11);  
  king enthroned, holding sword & sceptre, arms of England on his 
tunic, (Lombardic-letter legend) around // crown over arms of Tudor 
England, (Lombardic-letter legend) around  

469) 2-, 22mm, Thames, London;  
  p 115;  
two coronets in ornately-shaped shield, 16 18 to sides // (I)SH/COL 
fleur de lis/ EST..//(AY)  

470) 2-, 21mm, Thames, London;  
  p 51;  
crown over portcullis, SIV...M'...RS+ (Lombardic-letter legend 
around)//?- 

474) 4-, 49mm, inner disc, Thames, London;  
  p 97;  
bird of prey rising, wings displayed & inverted, +BRANTREY 100 
BAYS 1619 around  

475) 2-, 34mm, Thames, London;  
  pp 106, 107;  
cross raguly & 3 coronets in ornately-shaped shield, 15 71 to sides, 
D(YTS COLCESTER) 100 CROS 1571 // leg of beast  

493) 4-, 14mm, inner disc, Thames, London;  
  pp 69, 236, 275;  
**/72/**, D-E-V-O-N around top  

495) 4+, 12//14//12mm, Thames, London;  
  p 256;  
-// demi griffin left, erased head of bird of prey right, ...O(R) 
around //crown over fleur de lis //-  

496) 2+, 25//28mm, Thames, London;  
  p 244;  
LXXVIII/XXXIII// shield with 3 pears, (legend around)  

505) 4-, 15//17mm, lozenge-shaped parts, Thames, London;  
  p 140;  
-// /.*,COM-K(E)NT* around // (missing) // incomplete letters 
(? B/I)  

506) 4-, 16mm, lozenge-shaped inner part, Thames, London;  
  p 141;  
COM/KEN/T, (similar inverted stamp adjoining)  

507) 2-, 23mm, Thames, London;  
  pp 52, 53, 217;  
(missing) // (edge legend) (V)LN:PA... (V)ENL(V):SV(FFAE) around 
(Lombardic letter)
509) 2-, 44mm, Thames, London; p 106; 2 coronets in ornately-shaped shield, 15 (71) to sides, I COLCH around; secondary stamp with shield, arms: ermine, on a bend dexter a lion rampant between two escallops // (missing)

510) 2-, 37mm, Thames, London, ML no. 81.24/4; p 111; crown in ornately-shaped shield, (edge legend) // (incomplete (?) griffin)

511) 2-, 45mm, Thames, London ML no. 81.24/2; pp 104, 105; (missing) // 3 crowns in ornately-shaped shield, 15 (71) to sides, (LCHES)TER 100 (CR) around; (incomplete privy mark as secondary stamp)

519) 2+, 41//41mm, Aldgate site, London, context 1241, ML (DUA) AL74 no. 24; pp 106, 107, 400; 3 coronets & cross raguly in ornately-shaped shield, (15) 71 to sides, (LCEST)ER around // griffin rampant, +DVYTS+ CO around

520) 4+, 15//16//16//16//mm, findspot unknown, CO; pp 99, 103; // Charles II-type head, OF ENG LAND around // rose, COLCHESTER 83B (or 838) around //-

523) 2-, 25mm, Middleborough site, Colchester, COAT, MID 78, pit 14, A, A 32; pp 47, 52-3, 217, 397, 398, 400; // crown over portcullis, (PA)N(O).VEA·SVFF around (Lombardic letter)

530) 4-, 41mm, inner disc, findspot unknown, CO; pp 85, 113, 279; three coronets & vertical stave raguly in ornately-shaped shield, (ENGLISH COL(C)HESTER S)AYE around

531) 2-, 41mm, findspot unknown, CO; p 106; three crowns in ornately-shaped shield, 15 71 to sides, OLCH...R·IO around // (missing)

532) 2+, 37//38mm, findspot unknown, CO; pp 103, 106, 107; griffin segreant, S·BAYE·VAN·CO around //((1)00·C(R)/AYE (V).../COLCESTER/157(1)

533) 2-, 46mm, findspot unknown, CO; pp 99, 102, 103; (missing) // DVYTS/(O)LCES//(B)AY/157(1); secondary stamp with (?) rose, COLC around

535) 2-, 18mm, findspot unknown, CO; p 150; XXXVII//(?) crown over rose

293
537) 2-, 33mm, findspot unknown, CO; p 108; two coronets in ornately-shaped shield //-

538) 2-, 41mm, findspot unknown, CO; p 109; three coronets & cross raguly in ornately-shaped shield, 1571 to sides, 1571...(L)S(E)S(TE)R...Y around // (missing)

539) 2-, 34mm, findspot unknown, CO; p 103, 104; CRUIS/AYE VA(N)/(C)OLCESTE(R) 11571 // (missing)

540) 2-, 44mm, findspot unknown, CO; p 104; two coronets in ornately-shaped shield, 1571 to sides, CRONE-DVYTS:CO around // (missing)

541) 2-, 45mm, findspot unknown, CO; pp 107, 109, 279; three coronets & cross raguly in shield with scrolls, H COLCESTER SAY around // (missing)

542) 2+, 19//19mm, findspot unknown, CO; pp 193, 270; IOHN/WATSON/ // NOR/WI(CH) plant motif with (?) berries

543) 2-, 25mm, findspot unknown, CO; p 163; arms of England, PAO'VIAL around // arms of London in ornately-shaped shield

554) 2-, 18mm, Thames, London; p 245; -// pear over horizontal band (? in shield), B right

567) 4+, 11//14//14//11mm, Thames, London; pp 100 (fig. 22), 459; -// head of George I, DEFEN FIDEI around // crown over 3, COLCHESTER around //-

568) 4-, 14//15//15mm, first disc & 'star'-shaped inner parts, Thames, London; pp 73, 236, 276; -//0/74/o0, oEXONo around top // 3 harps// (missing)

569) 2-, 40mm, Thames, London; p 117; crown over rose in ornately-shaped shield, ˌSŒZIˌA... around //(missing)

570) 2-, 19mm, Thames, London; pp 180, 184, 271; ..49/XXVII, (?) plant motif below // (missing)
575) 4-, 16//18mm, Thames, London;
   p 122;
   -// (missing) // 16/I(P)/37, +GLOS around // IB, (S)ERCHED around

579) 2+, 20//21mm, Thames, London;
   p 150;
   30// thistle, C R to sides, COM:L(ANCES) around

582) 4+, 14//16//16//13mm, Thames, London;
   p 255;
   (scratches) // Charles II-type head, (OF ENG) LAND around //harp
   // YOR/...

584) 1+, 24mm, subrectangular, Thames, London;
   p 112;
   coronet on vertical stem raguly // CO(I) (part of edge legend)

585) 2+, 18//19mm, Thames, London;
   pp 57, 60, 61, 90;
   A* ,1611 around top, (C)OM! BVCKIN(GHAM) around // 61 over
   arms of Stuart Britain

587) 2+, 18//18mm, Thames, London;
   p 190;
   (N)O/R WI/CH//CC/(H)PB(C)/GBLL/CG
   (the warden list suggests the last letter should be C, see
   Appendix 6A)

588) 4+, 16//15mm, Thames, London;
   p 94;
   (1 & 2 missing) // dragon rampant, C R to sides, crown over the R
   // -

592) 4+, 12//11//11//14mm, lozenge-shaped parts, Thames, London;
   pp 91, 140;
   -// lion passant over 1614 //ESS/EX//-

593) 4+, 17//17//14mm, Thames, London;
   pp 68, 121, 210, 274;
   (missing) // N6B, + GLO(S)...SET around // 16 2 over arms of Stuart
   Britain, C R to sides //-

594) 4+, 10//12//12//10mm, Thames, London;
   pp 68, 121, 237, 274;
   NB , ER· CH around // NB, 6 : DE : VEN around // crown over fleur
de lis, (1)6 18 to sides //-

596) 2+, 17//18mm, Thames, London;
   pp 60, 68, 209, 243, 268;
   (B), 161(1) around top, CESTE(R) around // (1)610 over arms of
   Stuart Britain

597) 4+, 10//12mm, Thames, London;
   pp 80, 210;
   -// NB, + SOM..RS around // (3 & 4 missing)
604) 4-, 13//17mm, Thames, London;
   p 123;
   // 2:\1:8, GLOSTER around // (3 & 4 missing)

606) 2+, 19//19mm, Thames, London;
   p 150;
   37// crown over (thistle), R right, COM LANCESTE(R) around

617) 2-, 21mm, Thames, London;
   p 244;
   // (? ) 3 pears

624) 4-, 17//15mm, Thames, London;
   p 94;
   (1 & 2 missing) // ESEX/TB // 25

628) 2+, 19//21mm, Thames, London;
   p 150;
   crown over thistle, C R to sides, LANCESTE around // 31

647) 2+, 17//18mm, Thames, London;
   p 190;
   P(B)/GBH(E)/GBC../R/WI/CH

649) 2+, 17//17mm, Thames, London;
   pp 45, 46, 220;
   crown over arms of England in ornately-shaped shield, sun right,
   rose left // (?) ornate F, rose left, sun right

657) 2-, 47mm, Thames, London;
   pp 104, 105;
   three crowns in ornately-shaped shield, S COLCH...RON around;
   secondary stamp with \( \text{R} \) // (?part of beast)

658) 2-, 54mm, Thames, London;
   p 117;
   three crowns over rose in ornately-shaped shield, HALSTED 100
   around; secondary stamp with \( \text{R} \) mark // (?part of beast)

660) 2-, 17mm, Thames, London, ML (DUA) MFS 76, 18/+, no. 12;
   p 184;
   // castle, (? ) lion passant below

661) 2-, fragment, Thames, London, ML (DUA) MFS 76, 18/+, no. 95;
   p 51;
   crown over portcullis, CO...V(C) around (Lombardic letter)
   // (missing)

662) 4+, 12//14//13//12mm, outer disc & inner square-shaped parts,
   Thames, London, ML (DUA) MFS 76, 16/+ no. 93;
   pp 73, 74 (fig. 15C);
   -//\( \text{X} \)/-77-, EXON around top // two unicorns supporting coronet
   with 3 plumes through

665) 2-, 40mm, findspot unknown, GF no. 29;
   p 106;
   three coronets & cross raguly in ornately-shaped shield, 15 71 to
   sides, DVY.. around // missing

296
667) 4-, 14mm, inner disc, findspot unknown, GF no 29; p 142; xI/KENT/...

674) 2-, 20mm, findspot unknown, GF no 29; p 137; crown over double rose, (letters to sides), AL' I around (Lombardic letter) //-

676) 2-, 18mm, findspot unknown, GF old no. 270; p 49; -// crown over (?) arms of England, E/1 left

683) 2+, 16//17mm, findspot unknown (Sporle sale lot 244), NO no. 22.08, 133; p 183; (C/WM/N)(large letters) // castle

692) (? ) 2 or 4-, 20//20mm, Floating Harbour, Bristol, BSL no. T9414; pp 246, 397, 399; (disc 1) shield with chevron, TER around // (remainder missing)

693) 2-, 38mm, Floating Harbour, Bristol, BSL no. T9417; pp 109, 397, 399; (missing) // 2 coronets & cross raguly in ornately-shaped shield, 15 left, R.SAY.. around; one secondary stamp with (?) T/W, another is (illegible)

695) 2+, 28//22mm, Floating Harbour, Bristol, BSL no. T9412; pp 258, 397, 399; (scratched) illegible over 303 // shield, with a fleece on field of horizontal lines, in chief a bar with three mullets, wings to sides of shield

704) 2+, 23//22mm, (? ) Bristol, BSL (?1978); pp 38, 41, 123, 124, 397, 399; ship issuing from (?) a port (in a tower), D...(COM P) around //crown over sun & rose dimidiated & conjoined, COM around (Lombardic letter)

710) 2-, 18mm, findspot unknown, AS (drawer 9); p 137; crown over rose B (L or D) to sides, (EAM)l:CO:Ken..A:o around (Lombardic letter) // (missing)

713) 2+, 19//19mm, findspot unknown, AS (drawer 11); p 189; HC/BS/HG/ (NO)/RW1/CH

723) 4-, 12//12mm, inner discs, findspot unknown, AS (drawer 12); p 71; crown over rose // £ , DEVON around
727) 2+, 18//20mm, findspot unknown, AS (drawer 12); p 188; RO(W) /{(1)6*5 /BBMW/PP//((I)OR(V)ICH/165

731) 2+, 24//24mm, findspot unknown, AS (drawer 12); p 243;
three pears in shield, ORCESTE(R) SE(A) around // crown over rose; C R to sides

734) (? ) 4-, 14mm, plaster cast of (?) inner disc in private collection (findspot unknown), AS;
pp 70, 211, 236, 275;
\sqrt{2}, +SOM...SET around [counted as a seal for totals]

736) 2+, 18//19mm, Bardney Abbey, Lincs., LI;
p 51;
crown over portcullis, (Lombardic-letter legend around) //-

738) copper-alloy matrix, 51mm, findspot unknown, ERO Museums class, no. 37;
pp 96, 401;
sheep lying on a ground, cross and bifurcate banner behind, Ioo FINE· BOCKING· HVNDREDS· around (holed)

740) 2-, 23mm, findspot unknown, SW;
pp 56, 255;
thistle, 1 left, (IB)OR'S· around // (missing)

744) 4-, 14//13//14mm, Thames, London, ML no. 78.227/2;
p 210;
(missing)/ // NB, +SO around // crown over thistle, C R to sides // (offstruck stamp)

747) 4-, 16//13mm, (? Thames), London;
p 70;
(1 & 2 missing) // crown over rose, DENSIRE around // (? )-

750) 2+, 24//26mm, Thames, London, ML no. 78.722/18;
pp 49, 208 (fig. 51);
shield with arms of England, R/5/3 right // :[ , COM(S)OMERSET around

751) 4+, 15//18//16mm, Thames, London, ML no. 78.227/17;
pp 255, 270, 460;
XIII/XXIX// W/I-I/G,·:COM··EBOR around // (? ) crown over fleur de lis, two dots to each side // (scratches)
752) 4+, 14/15/14mm//folded, Thames, London, ML no. 78.227/15; 
pp 257, 270, 460; 
XX(I)/XVII // K/W-P/C, COM+EBOR+* around // crown over fleur de lis // C/G, SERCHED around

753) 4-, 12/18mm, Thames, London, ML no. 78.227/16; 
p p 257; 
(E)A/(R)CH/(ED) // K/W P/C, ...COM+EBOR around // (3 & 4 missing)

755) 2+, 20/21mm, Thames, London, ML no. 78.227/21; 
p 48; 
king enthroned facing, holding sceptre & (?) orb, and wearing mantle, Lombardic H right, all below pointed canopy // privy mark

756) 4-, 20/20mm, Thames, London, ML no. 78.227/13; 
pp 91, 139, 140 (fig. 33), 270, 274; 
-// shield with three covered cups, mullet in chief, W V to sides, COM*K*KE*KNT 1614 around // (3 & 4 missing)

757) 4-, 13/16mm, Thames, London, ML no. 78.227/12; 
p 122; 
(scratches) // 16/IB/37, G...SHIR around // (3 & 4 missing)

758) 4-, 15mm, inner disc, Thames, London, ML no. 78.227/11; 
p 122; 
• 6 • /GLOS/TER/1658, all in wreath

762) 4+, 13/13//13/11mm, Thames, London, ML no. 78.227/6; 
pp 76 (fig. 16), 94, 211, 221, 273; 
-// rose // coronet over L & R ligature, EXON around base //-

764) 4+, 11/L5//15/12mm, Thames, London, ML no. 78.227/4; 
p 209 (fig. 52); 
-// S, SOMERSET around // crown over thistle, 16 12 to sides //-

766) 4-, 13/13/14mm, Thames, London, ML no. 78.227/7; 
pp 63, 100, 220; 
(missing) // F, FOLK around; (reverse integrally cast with lion ? statant) // portcullis; (reverse integrally cast with crown) // (?) -

770) 2-, 22mm, Thames, London; 
pp 53, 278; 
portcullis, fleur de lis, 5... fleur de lis IN*CO* around (Lombardic letter) // (missing)

776) 4+, 12/14//14//12mm, Thames, London; 
p 143; 
lion rampant // CAN/TERBV/+RI+ // crown over fleur de lis, C R to sides // A-

784) 2-, 20mm, Thames, London; 
p 165; 
arms of Stuart Britain // arms of London in ornately-shaped shield
791) 4+, 16//17mm, Thames, London; ML no. ER 1279A no. 2; p 93; "P", (?ESEX) around base // (3 & 4 missing)

792) 2+, 46//45mm, Thames, London; p 102; */*DVYTS/COLCreste(R)/*BAEY/*157(1)/*//(? griffin, S around

800) 4+, 10//11//11//11mm, findspot unknown, HCM; p 75; - // - // crowned lion rampant, I (R) to sides // X/N

801) 2+, 16//14mm, findspot unknown, HCM; p 178; castle, G right, 16 5 below // crown over rose, I (R) to sides, OR(W)I around

802) 2+, 17//17mm, findspot unknown, HCM; p 183; G(M)/RW/ // castle, lion passant below

803) 2+, 19//23mm, findspot unknown, HCM; p 181; NO/RW/.. // NS/GB/S

804) 2+, 16//15mm, findspot unknown, HCM; p 183; RWRK/(T)BHR/\ // castle, (illegible device below)

805) 2+, 21//20mm, findspot unknown, HCM; p 189; N/RW/CH//FH/BWR/W(W(C)SP

806) 2-, 12mm, findspot unknown, HCM; pp 171, 178; castle // (?) crown)

807) 4-, 17mm, inner disc, findspot unknown, HCM; pp 100, 221, 274; RS, *COLCHESTER around

808) 4+, 10//12//10//10mm, findspot unknown, HCM; pp 221, 274; -// RS, S around // cock standing // S

817) 4-, 17//13mm, findspot unknown, HCM; pp 56, 60, 255; (1 & 2 missing) // SER/CHED/1611, +(AV)LNEGER+ around //-

828) 2+, 33//33mm, findspot unknown, HCM; pp 60, 244; three pears in shield, ER (? date S)ER around //LXXIII/XXXIII; secondary stamp with (X)III//H
829) 2+, 28//27mm, findspot unknown, HCM;  
p 244;  
LXXVIII/XXXII..// three pears in shield, (?) field of vertical lines in fourth quarter, EA around

833) 4+, 10//13//14//12mm, findspot unknown, HCM;  
p 75;  
- // - // crown over rose, DENSHERE around // EX//O

837) 2-, 15mm, findspot unknown, HCM;  
p 51;  
crown over portcullis, E left //-

840) 4+, 9//9//10//9mm, findspot unknown, HCM;  
pp 69, 276;  
- // VON /...[b] // crown over fleur de lis //-

843) 2+, 18//17mm, findspot unknown, HCM;  
p 115;  
coronet in ornately-shaped shield, 6 left // (N)G/ISH/COL/ESTER

851) 2-, 19mm, Beredens site (M 25 layer 6, 27/8/76, sq. J 7 no. 19),  
Havering, London, PEM;  
pp 190, 400;  
(missing) // BB/W/(LB)

852) 2-, 24mm, Thames, London;  
p 115;  
two coronets in ornately-shaped shield, 18 right // COL/HEST/SAY

853) 2-, 21mm, Thames, London;  
pp 97, 98, 100, 103, 111, 273;  
-// rose, ESTE around

861) 4+, 12//12//13//12mm, Thames, London;  
pp 142, 143;  
lion rampant // CA/TERB/*/R/\P/ // crown over fleur de lis, (C) R to sides // A+D

862) 4-, 17mm, inner disc, Thames, London;  
p 93;  
\P, ESEX around base

869) 2-, 19mm, Thames, London;  
p 54;  
XXXVI// portcullis

872) 2-, 12mm, Thames, London;  
p 243;  
B, 1611 around top, COM:WOR around // arms of Stuart Britain

883) 4-, 12//13mm, Thames, London;  
p 71;  
(1 & 2 missing) // crown over thistle, I to left,  
*...*(S)HERE* around // -
885) 2+, 18//18mm, Thames, London; p 191; .../BBT/GBB/HR//((N))/IWI/CH

886) 2+, 18//18mm, Thames, London; p 192; RW/CH//((D))/R/C(C)

892) 2-, 20mm, Thames, London; p 190; NO/RWI/CH//....//G(C)/C

893) 4-, 15//17//17mm, Thames, London; p 94; - // ESEX/TB// crown over rose, C R to sides//A

894) 4+, 9//10//10//9mm, Thames, London; p 69; -//VO/64//JP// crown over fleur de lis //-

895) 4+, 13//16//16//13mm, Thames, London; pp 236, 275; -// Charles II-type head, OF ENG LAND around // lion passant, (? )3 above //WIL/TS

904) 1+, 30mm, rectangular, Thames, London; pp 112, 195, 196, 280; crown over portcullis, NG around // castle, (C) left; two secondary stamps with P

907) 4+, 17//20//20//17mm, Thames, London; pp 76, 270; A // 25 // shield with on a dexter bend wavy three mullets, IAMES ...TE OF EXON around // C(F or P)

914) 4-, 16//16mm, Thames, London; p 237; (disc 3) EB/illtes (black letter) /RB

916) 2+, 30//30mm, Thames, London; pp 110, 279; griffin // DWTS/COLCHESTE/SAEy • 230° / PRAET/157(1)

919) 2+, 15//15mm, Thames, London; p 181; castle // RB/1632

920) 2+, 15//15mm, Thames, London; p 178; -// crown over rose, I R to sides, COM:NORWISI around // (missing)

921) 4-, 15//47//47mm, ? Thames, London, ML no. 79.428/4; p 116; -// shield with cross, sword in first quarter, FINE 100 BAYES OF IOHN DRAP(E)R around // shield with a chevron between in chief two havettes and in base a teasel cob, MAKING IN DVNMAR 1638 around // -
922) 4+, 17/43/43mm//folded, ? Thames, London, ML no. 79.428/3; pp 87, 97-98, 116; 
-// ship, WALTER N(ICH)OLE(S) MAKING around // cock, 100 BAYES 1621 COXALL around // (distorted)

923A-L) 4-, 16/43/43/17mm, group of twelve fragments, representing at least seven incomplete or broken seals, found in well, Gracechurch Street, London, ML nos. A9630 (discs 1 & 2), A9635 (three discs 1 & 2), A9636 (discs 3 & 4), A9637 (discs 1 & 2, two discs 3 & 4), A9638 (discs 3 & 4), A9639 (discs 3 & 4), A9640 (discs 3 & 4), A9641 (discs 3 & 4); pp 87, 98, 116; 
- // stylised star, 1640 A COXALL MINIKIN BAYES around //cock, + WILLIAM TA4YER HIS MAKEING around //-
[counted as seven seals for totals]

933) 2+, 15/15mm, Thames, London, ML no. 80.121/15; p 178; (stamp from ? defaced die) // crown over rose

936) 2-, 22mm, Thames, London, ML no. 80.80/2; p 54; 
XX/(scratched)III// crown over portcullis

943) 2x, 20/22mm, Thames, London, ML no. 80.80/9; p 191; MT/BADL/...(G)C//NO/RW/I

944) 4-, 13/14mm, Trig Lane site, London (layer 78, find 82), ML, DUA no. 3036; pp 220, 256 (fig. 60), 400; 
FAL/(T)Y, ED around // demi griffin issuant from crown, illegible device right, M EBO around // (missing) //VIII/VIII

947) 4+, 13//15//14/12mm, Trig Lane site, London (layer 78, find 82), ML, DUA no. 3066; pp 71, 400; 
- // star, DEVON around // arms of Stuart Britain, star right //-

966) 4-, 15//14mm, inner discs, Trig Lane site, London (layer 78, find 82), ML, DUA no. 3086; pp 255, 400, 461; 
fleur de lis // demi griffin, OM around

969) 2-, 25mm, findspot unknown, BSE no. FC; p 44; 
crown over arms of England in ornately-shaped shield, (LN)A(GII) around (Lombardic letter) // crown over illegible device

982) 2+, 23//24mm, Winchester City Bridge, WI no. 649.749; pp 54, 398; 
- // crown over portcullis, *THE* (SOL)(E)...(G)A(RN)... around (Lombardic letter)
990) 2-, 43mm, Thames, London;  
   p 104;  
   three crowns, 151 to sides, *DVYTS CO...CRONE around // (missing)

992) 2+, 35//36mm, Thames, London;  
   p 114;  
   3 coronets & vertical member raguly in ornately-shaped shield,  
   LISH-COLCI...(E)R..AYE around; secondary stamp with P // castle,  
   figure in entrance, & wearing hat, holding unclear object

993) 2+, 31//31mm, Thames, London;  
   pp 212, 277;  
   *23/-P, TAVNTON SEARGE around // tun and •T,  
   •IOHN•PAVIATT• around

994) 2-, 25mm, Thames, London;  
   p 244;  
   LXXVI/XXXII..// three pears in shield, (C)H around

1008) 2+, 21//21mm, findspot unknown, BSE 'old stock';  
   p 191;  
   NO/RW/CH//M(I)/BAD/LB

1016) 2-, 20mm, Rougham Hill, Bury St. Edmunds;  
   pp 190, 397;  
   (missing) // C(S(P)).P

1017) 2-, 19mm, Rougham Hill, Bury St. Edmunds;  
   p 54;  
   XXVI/ portcullis

1024) 2+, 24//25mm, Thames, London, ML, DUA;  
   p 51;  
   -// crown over portcullis, (Lombardic-letter legend around)

1041) 4+, 10//15//15//14mm, Thames, London;  
   p 99;  
   -// head of George I, (GEOR)GIV(S) R(E)X around // crown over 3,  
   COLCHESTER around //-

1043) 2+, 42//39mm, Thames, London;  
   p 104;  
   three crowns in shield, 15 left, DV...CRO(NE) around // (beast)  
   rampant, CO around

1044) 2+, 42//42mm, Thames, London;  
   p 106;  
   three crowns in shield, (1)5 71 to sides, YT(S)•COLCHESTER•100  
   around, // griffin segreant (i.e. rampant), COL around

1045) 2-, 42mm, Thames, London;  
   p 102;  
   DVYTS/OLCESTE/CRONE/•BAYE/1571 // CE (edge legend)
1046) 2+, 39/37mm, Thames, London; p 103; "O CRUJAYE VAN/COLCESTER/1571 // (beast), 1571 DVYTS... STER around

1059) 2+, 18/17mm, Thames, London, ML no. 80.121/11; pp 171, 196; WAL/ON, H*... E(N)S around // ship

1060) 2+, 16/16mm, Thames, London, ML no. 80.121/10; p 196; (W)OL/(ON), *... around // (illegible)

1064) 2+, 20/20mm, Thames, London, ML no. 80.121/6; p 54; (?) G or TA privy mark // (?) portcullis

1065) 2+, 17/18mm, Thames, London, ML no. 80.121.5; p 180; (?) bird // escallop : escallop /XVII/ escallop escallop

1071) 4-, inner disc, 14mm, Thames, London; p 203; 4½/OXO(N)/*

1072) 4+, 13/15/15/13mm, Thames, London; pp 151, 275; (offstruck) // Charles II-type head, OF ENG LAND around //1½/ lion passant/ 88 // LAN/CAST/ER

1073) 4-, inner disc, 13mm, Thames, London; p 255; demi griffin left, erased beast's head right, COM:EBOR around

1074) 4+, 13/16/16/13mm, Thames, London; p 256; (scratches) // beast's head left, demi griffin right, COM:EBOR around // fleur de lis //-

1077) 4+, 14/18/18/14mm, Thames, London; pp 141, 142, 224; - //2/, rose right /KENT// crown over arms of Stuart Britain, C R to sides, 16 (?39) to sides of crown //-

1080) 4-, 18/19mm, Thames, London; p 93; 53 //</ESS// (3 & 4 missing)

1081) 4+, 14/15/15/14mm, Thames, London; p 141; - // COM/KEN/T// arms of Stuart Britain, C R to sides //-

1083) 4-, 14/15mm, Thames, London; p 141; (scratched) 25½ // (C)OM/(K)ENT; secondary stamp with R // (3 & 4 missing)
1084) 4-, 11/12/12mm, Thames, London; 
p 218; 
- // 16/79, *SVF* FOLK around // (missing) ///</-

1087) 4+, 13/15/15/14mm, Thames, London; 
pp 93, 141, 224, 274; 
64//14, rose right /ESEX/ rose // crown / CR//-

1088) 4-, inner discs, 12/12mm, Thames, London; 
p 93; 
lion statant on (?base), (C R) to sides // * over F, ESEX around base

1091) 4+, outer discs, inner square parts, 13//15//15//15mm, Thames, London; 
pp 73, 212; 
- // * /76, EXON around top // crown in triple border // 

1092) 4-, inner disc, 14mm, Thames, London; 
p 218; 
80, SVFFOLK around

1097) 4-, outer discs, inner 'star'-shaped parts, 14//14//13mm, Thames, London; 
pp 123, 152; 
-//*/EP, R..GGS around //-'I/-TN,*GLOSTER...G(S) around //</-

1098) 4+, 17//17//17//15mm, Thames, London; 
pp 93, 275; 
- // Charles II type head, OF ENG LAND around, incuse cagged border // 3/rose, cagged incuse border //*/ESSEX/*

1099) 4+, 15//14//15//13mm, Thames London; 
p 151; 
64/ Charles II-type head, OF ENG LAND around //24 // (L)AN/(C)AST

1100) 4+, outer discs, inner square parts, 11//11//11/12mm, Thames, London; 
pp 92, 276; 
- // 3 crown star/ portcullis // 16/77, E·S·E·X around //</-

1105) 2-, 45mm, Thames, London; 
p 102; 
*/DVYT/OLCESTE/ flower BA/ Y/* 157(1) // (missing)

1106) 2-, 40mm, Thames, London; 
p 102; 
(missing) // DVYT/OLCEST(E)/ flower BA/ Y/1571*/*

1107) 2-, 55mm, Thames, London; 
p 106; 
three crowns in shield, 15 71 to sides, (S·COLCESTER·I) around // (missing)
1108) 2-, 47mm, Thames, London; p 106; three crowns in shield, 71 right, (OLCES) around // (missing)

1109) 2-, 41mm, Thames, London; p 109; three crowns & cross raguly in shield with scrolls, (legend around) // (missing)

1111) 4-, 16/15mm, Thames, London; p 143; lion rampant // (CAN)/TERBV/+RI+/+F// (missing) // (A) D

1118) 2-, 19mm, Thames, London; p 189; AD/LNSC/LGB// (missing)

1123) 4+, 12/15/15/12mm, Thames, London; p 77 (fig. 18), 78; - // -// crown over rose, DEN(SHIR)E around // O, ★ TIVERTON around

1128A) 2+, 29/29mm, (?) Coventry, CV no. 49/227/257; pp 37-8, 41, 123, 124, 397; ship issuant from a port, (S x VLNA) around // leopard, fleur de lis below (close to mouth) (N)O(RV: I)N around (Lombardic letter)

1128B) copper-alloy matrix, 30mm, Yatton (Somerset), BSL (on loan); pp 37, 123, 124, 401; crown over leopard's head, with tongue out, in six-arched treasure, S: VLNAGII PANNORV: IN BRISTOLLIA around (Lombardic letter)

1129) 2+, 25/25mm, (?) Coventry, CV no. 49/227/327; pp 32, 41, 241, 397; crown over arms of England in ornately-shaped shield, rose to each side, S: VLNAGII PANN(ORV)...I(R)C(E)S(T) around // crown over sun & rose diminidated & conjoined, S VLN(A)G...IN COM'WIRCES around (Lombardic letter)

1137) 2+, 17/16mm, Thames, London; pp 180, 185; bird standing (wings closed) // (?)2

1148) 4+, 11/13/13/12mm, Thames, London; p 75; (scratched) (?AE) // -// crown over thistle, I R to sides // EX/ON

1150) 2+, 18/17mm, Thames, London; p 178; castle, (?) lion passant below/crown over rose

1151) 2+, 15/16mm, Thames, London, ML no. 81.522/44; pp 171, 174, 175, 177; castle, P left, 1615 below // crown over rose
1152) 2+, 17//18mm, Thames, London, ML no. 81.522/56; p 183; castle // GNR/RW· F (all reversed)

1153) 2-, 16mm, Thames, London; p 183; castle // (S)

1154) 2+, 13//14mm, Thames, London, ML no. 81.522/64; p 178; castle, (lion) passant below // crown over rose

1155) 2+, 15//16mm, Thames, London, ML no. 81.522/47; p 181; A(G), plant motif above // castle

1156) 2+, 15//15mm, Thames, London, ML no. 81.522/41; p 178; castle, (lion) below // crown over rose

1157) 2+, 18//19mm, Thames, London, ML no.81.522/61; p 178; (stamp from ? defaced die) // crown over rose

1158) 2+, 16//16mm, Thames, London, ML no. 81.522/54; p 182; castle, (lion) passant below // (162)2 / (R)WR·(K)

1159) 2+, 17//17mm, Thames, London; p 183; castle //MP

1160) 2+, 15//15mm, Thames, London, ML no. 81.522/57; p 183; castle, (tail of beast below) //·(t)C·/MP·

1161) 2+, 15//19mm, Thames, London, ML no. 81.522/51; p 181; R./163..// castle

1162) 2+, 15//15mm, Thames, London, ML no. 81.522/63; p 178; castle // crown over rose

1182) 2+, 15//16mm, Thames, London, ML no. 81.522/45; p 180; (? bird) //((XX)VII

1190) 2-, 21mm, Thames, London; p 192; NORW/(t)CH // M

1194) 4+, 16//16//16//16mm, Thames, London; p 143; - // ERBV/+RI+/+T+/+ // crown over fleur de lis, C R to sides // C/ A· D
1195) 4-, 17//17mm, lozenge-shaped inner parts, Thames, London;
p 140;
shield with arms of Stuart Britain, IR to sides, (1614) above
//</COM\*KENT* around

1196) 2+, 15//16mm, Thames, London, ML no. 81.522/42;
p 177;
castle, 161(5) below // (illegible)

1197) 2+, 16//18mm, Thames, London, ML no. 81.522/4;
p 178;
castle // crown over rose

1199) 2+, 15//15mm, Thames, London, ML no. 81.522/68;
p 181;
*escallop*/ (B or R)*S / 7 // castle

1200) 2+, 19//19mm, Thames, London;
p 183;
(A) RH// castle, (lion passant) below

1201) 2+, 16//15mm, Thames, London;
p 186;
O/(A)R// castle

1202) 2+, 16//17mm, Thames, London;
p 178;
crown over rose // (?) castle (stamp from ? partially defaced die)

1203) 2+, 15//15mm, Thames, London, ML no. 81.522/65;
p 178;
castle, lion passant below // crown over rose

1204) 2+, 16//17mm, Thames, London, ML no. 81.522/59;
p 178;
crown over rose // (stamp from ? defaced die)

1205) 2+, 15//15mm, Thames, London;
p 178;
crown over rose // (?) castle, lion passant below (stamp from
? partially defaced die)

1206) 2-, 30mm, Thames, London;
p 244;
LXXVI/XXXII..// shield with fess and three pears, WOR around

1207) 2-, 20mm, Thames, London;
p 245;
- // three pears, three horizontal lines between, B (I) to sides

1222) 2-, 19mm, Thames, London;
p 51;
- // portcullis

1223) 2+, 19//19mm, Thames, London;
p 150;
34 // thistle, C left, NCE..TERY around
1229) 2-, 19mm, Thames, London; 
p 54; 
(X) XVI // crown over portcullis

1230) 2+, 18/20mm, Thames, London; 
p 192; 
D(E)/(IT) // castle, (lion) passant below

1242) 4+, 13/17/18/14mm, Thames, London; 
p 93; 
- //F, * ESEX around // lion statant on chapeau, C R to sides //-

1243) 4-, 15/15/12mm, Thames, London; 
pp 72, 275; 
(missing) //\ , * EXON** around base // crown / * * / two crowns / 6(3 or 5) //-

1244) 4-, inner disc, 18mm, Thames, London; 
p 257; 
D/W(R)/O, * * COM: EBOR around

1245) 4-, 14/15mm, Thames, London; 
p 69; 
(scratches) // \ /79, DEVON around top // (3 & 4 missing)

1247) 4-, lozenge-shaped parts, 13/11mm, Thames, London; 
pp 92, 274; 
(missing) // two stars / crown / (? two stars), I B to sides // 16/74, E·S·S·E·X around //-

1248) 4-, lozenge-shaped parts, 14/14mm, Thames, London; 
p 95; 
(missing) // coronet over R & L ligature, COUNTY OF ESSEX around // rose, 5 (?2) to sides / two fleur de lis //-

1251) (?) 4-, 20/16mm, Thames, London; 
pp 62, 63, 220, 273; 
crown over rose, A · · HESHIRE around // portcullis// (? 3 & 4 missing); reverse of 1 & 2 cast with crown over portcullis //XXX/III

1252) 4+, outer discs, square inner parts, 13/13/12/12mm, Thames, London; 
pp 73, 74 (fig. 15A & B); 
- // \ /7.6, * EXON around top // crown in triple border //\n
1253) 4+, outer discs, 'star'-shaped inner parts, 13/18/18/13mm, Thames, London; 
pp 73, 74 (fig. 15A & B), 461; 
- // \ /7.5, * EXON around top // crown in triple border //-

1255) 4+, 10/16/15/11mm, Thames, London; 
p 69; 
- // \ / 81*, * DEVON around top // lion couchant on inverted portcullis, 8 1 to sides //-

310
1256) 4-, 17//14mm, Thames, London;  
   p 95;  
   (1 & 2 missing) // coronet over R & L ligature, (ES)E•••XE around //-

1257) 4+, 10//15//15//11mm, Thames, London;  
   p 74;  
   -// X\X, •E•X•O•N• around top // three plumes through coronet / 80 //-

1258) 4-, 13//12mm, Thames, London;  
   p 221;  
   (missing) // crown over illegible device // coronet over R & L ligature, S(V)FOLKE around // (?)-

1264) 2-, 34mm, Thames, London;  
   p 106;  
   (missing) // DVYTS•CO (edge legend); ◇ (secondary stamp)

1273) 4-, 12//12//12mm, Thames, London;  
   p 76;  
   -// rose// coronet over R & L ligature, EXON around // (missing)

1277) 2+, 19//20mm, Thames, London;  
   p 189;  
   R/MTB/SPB/..C//(O)/WI/H

1281) 2+, 22//21mm, Thames, London;  
   p 150;  
   32 // crown over thistle, C R to sides, CO..LANCESTERY around

1283) 4+, 10//17//16//11mm, Thames, London;  
   p 70;  
   - // - // crown over rose, DEN(SH)IRE around //-

1291) 2-, 16mm, Thames, London;  
   p 182;  
   castle // B/MM.

1292) 2+, 16//19mm, Thames, London;  
   p 183;  
   castle, lion passant below // • fleur de lis • / (T)C•RK/P•T

1298) 2+, 24//23mm, Thames, London;  
   pp 27, 211;  
   (scratches) // crown over rose, (E) R to sides, BRI(D)...(V) around

1299) 4+, 13//15//15//14mm, Thames, London;  
   p 143;  
   lion rampant // CAN/TERBV/+ RI↑/↑T↑ // crown over fleur de lis, C R to sides // C/ AD

1300) 4-, inner discs, 21//21mm, Thames, London;  
   pp 57, 236;  
   1611/ shield with arms of Stuart Britain //../E.(B or R)/R, ...fleur de lis WIL around
1301) 2+, 18/18mm, Thames, London; p 184; 1649/XVII/ plant motif // castle

1308) 2-, 30mm, findspot unknown, BM no. S6; p 244; LXXVII(I)/XXXIII// incomplete arms with pears, (WO)R around

1322) 2-, 24mm, ?London, BM no. S129; p 165; crown over arms of Stuart Britain, DON around // arms of London

1323) 2+, 20/21mm, London, BM no. S130; p 189; NOR/W(I); stamped over N/BD/SRR/6/S

1324) 4-, inner disc, 24mm, London, BM no. S132; p 165; arms of London, ·DE·LONDI·NO· around, wreath below

1326) 4-, inner disc, 42mm, Bunhill Row, London, BM no. S143; p 165; angel facing, holding palm branch at right, illegible device at left, rose GLORIA·rose; IN: rose·EXCELSIS: rose around (two holes pierced at top)

1328) 2-, 27mm, London, BM no. S140; p 161; bearded, balding head facing in six-arched tressure, AGII'PANNORV: around (Lombardic letter) // (illegible)

1329) 2+, 17/21mm, findspot unknown, BM no. S142; p 51; portcullis, (legend around) // crown over portcullis, (Lombardic-letter legend around)

1330) 2+, folded/22mm, findspot unknown, BM no. S143; p 51; - // crown over portcullis, G·PA·VENI around (Lombardic letter)

1332) 2+, 27/27mm, findspot unknown, BM no S145; p 160; bearded head facing, inverted sword to left, ΙΔΟΙ around //crown, IGILLVM around

1335) 2+, 20/20mm, 'Fore Street Allworthy' [? does not exist], purchased in London, NMW no. 20.420/14; pp 39, 54, 137, 138 (fig. 32), 139, 280; crown over rose, R right, Π*CO*KEN{T)} around // (scratches) (on fragment of cloth)

1336) 2-, 21mm, Caerleon (unstratified), NMW; pp 47, 48, 398, 400; king enthroned holding sword & (?sceptre), wearing tunic with arms of England, CVS... around (Lombardic letter) //crown over arms of England in arched tressure, C around (Lombardic letter)
1350) 2+, 16//15mm, Thames, London, ML(DUA); p 178;
(stamp from ? defaced die) // crown over rose

1351) 2+, 16//17mm, Thames London, ML (DUA); p 178;
castle, (lion) passant below // crown over rose

1358) 2+, 21//21mm, Thames, London, ML (DUA); p 178;
- //crown over rose, R right, (edge legend)

1370) 4-, 11//13mm, Thames, London, ML (DUA); pp 71, 75, 275;
- // £, IOB EXON around // (3 missing, 4 incomplete)

1374) 4-, 44mm, (?) Thames, London, ML no. 79.62/1; p 104;
three crowns in rudimentary shield, 15 7(1) to sides,
10...COL...RONE DVYTS: around // (missing)

1378) 2-, 22mm, findspot unknown, BM no. S148; p 137;
crown over rose, E H to sides, SV'PAO...ICOx(KENT) around
(Lombardic letter) // (illegible)

1379) 2+, 28//28mm, findspot unknown, BM no. S149; pp 64, 161;
(?) head in six-arched tressure, GII: PANNORV: IN: CIVITATEx
around //crown in six-arched tressure, SxSVBSIDIx(PANNORV:IN:
CIVITATExLONx) around (Lombardic letter)

1380) 4+, 13//14//14//14mm, findspot unknown, BM no. S150; p 143;
-// CANTERBV/RI/*T:* around // D/E/L

1381) 2-, 29mm, findspot unknown, BM no. S151; p 212;
RM, (T)NW/TON/SE(R)/GES around // SER/GES, B(E) around

1383) 4-, inner discs, 14//15mm, findspot unknown, BM no. S153; pp 59, 126, 275;
shield with cross, (? 69 above) // T*xD,*HAMSHIERE around

1384) 4-, inner disc, 16mm, findspot unknown, BM no. S154; p 221;
RS,SVFFOLKE around

1385) 2+, 23//23mm, findspot unknown, BM no. S155; p 195;
crown over portcullis // castle, C N to sides

1386) 2+, 22//21mm, findspot unknown, BM no. S156; pp 142, 195, 196, 274;
crown over portcullis; secondary stamp // castle, lion passant
below, C N to sides; secondary stamp
1387) 2-, 19mm, findspot unknown, BM no. S157; p 191; N/R/(V)I(C)//F/HC/W

1388) 4+, 6//10//10//8mm, findspot unknown, BM no. S158; pp 197, 198; -// 16/81/NORWICH around // crown //-

1389) 2+, 20//20mm, findspot unknown, BM no. S160; p 192; castle, (lion) below // ID/LITAS/ARTE/ALIT

1390) 2-, 43mm, findspot unknown, BM no. S164; p 106; shield with crown, 71 right // (missing)

1391) 2+, 40mm, findspot unknown, BM no. S166; p 106; three crowns in shield, CH around // (?) griffin segreant (i.e. rampant)

1392) 2-, 40mm, findspot unknown, BM no. S167; pp 102, 103; griffin segreant (i.e. rampant) // LC (in centre)

1393) 2-, 33mm, findspot unknown, BM no. S168; p 110; (missing) // griffin segreant (i.e. rampant), * above left

1394) 2-, 30mm, findspot unknown, BM no. S169; p 110; DWTS/CO(LC)EST(ER)/SAEY-23O/DRAET/15// (missing)

1395) 2-, 20//18mm, findspot unknown, BM no. S170; p 99; crown over rose, I R to sides, COLCH(E)S around // £

1396) 2+, 15//16mm, findspot unknown, BM no. S171; p 98; - // rose, (C)OLC around

1401) 4-, 9//13//12mm, findspot unknown, BM no. S175; pp 71, 126, 275; - // £ ,HAMS.IOB-around // crown over rose // (missing)

1411) 2-, 22mm, findspot unknown, BM no. S195; p 165; shield with arms of Stuart Britain // (?) arms of London

1412) 2-, 26mm, findspot unknown, BM no. S196; p 42; crown over ornately-shaped shield with arms of England, sun (or sun & rose dimidiated & conjoined) left, VL...PA(NN)OR' VE(N)A(L)'I around (Lombardic letter) // rose, sun & (?) flag with cross
1430) 2+, 16//17mm, Thames, London; pp 175, 179, 180; 1619/XXVII/ * escallop // bird (?) rising

1438) 2+, 19//19mm, Thames, London, ML no. 81.522/33; p 191; BH/CCMD/MDPH/C//O R/WIC/H

1440) 2-, 21mm, Thames, London; p 77; fleur de lis, (E) (lower) left, *TIVE around // mark

1449) 4+, 12//14//13//13mm, Thames, London, ML no. 81.522/27; pp 71, 93, 142, 196, 274; lion rampant // , flower above, KENT around base // lion statant on chapeau, C R to sides // C/A·D

1470) 2+, 16//16mm, Thames, London, ML no. 81.522/62; p 177; (crown) over rose // castle, P G to sides, (6)15 below

1471) 2+, 17//17mm, Thames, London, ML no. 81.522/1; pp 180, 186; bird rising // TO/S HOR/TE·

1472) 2+, 16//17mm, Thames, London, ML no. 81.522/43; pp 175, 179; (bird) // XXVII/628

1473) 2+, 17//17mm, Thames, London, ML no. 81.522/60; p 178; (stamp from ? defaced die) // crown over rose

1474) 2+, 15//15mm, Thames, London, ML no. 81.522/58; p 179; bird // 62/VII

1475) 2+, 16//17mm, Thames, London, ML no. 81.522/55; p 186; castle, lion passant below // ΦΑ(RO)/WE

1477) 2+, 16//17mm, Thames, London; p 178; (stamp from ? defaced die) // crown over (rose)

1478) 2+, 15//16mm, Thames, London; p 180; XVII/ bird

1479) 2+, 15//15mm, Thames, London; p 182; castle, lion passant below // DM·W(I)/* /D·1A/162

1480) 2+, 17//16mm, Thames, London, ML no. 81.522/2; p 186; bird (? rising) // TO/(S)H
1481) 2+, 17/17mm, Thames, London, ML no. 81.522/33; pp 176, 180, 181; castle (no room for lion) // 1627 / A (escallop) H

1484) 2+, 16/16mm, Thames, London, ML no. 81.522/36; pp 174, 180, 181; 1630/W B //lion passant

1490) 2+, 40/40mm, Thames, London; p 102; */DVYTS/COLCESTE/* BAYE// griffin segreant (i.e. rampant)

1492) 4+, 9//13//11mm, Thames, London; p 75; - // - // crown over thistle, I R to sides // E(X)/ON

1508) 2+, 16/15mm, Thames, London, ML no. 81.522/49; p 178; rose// (stamp from ? defaced die)

1515) 2-, 40mm, findspot unknown, BM no. 1915, 12-8, 168; p 108; cross raguly and three coronets in ornately-shaped shield, 15 71 to sides, DVYTSH CO around // (missing)

1518) 2-, 47mm, findspot unknown, BM no. S162; pp 105, 106; three crowns in ornately-shaped shield, 15 71 to sides, E2TER 100 CRONE around // (missing)

1519) 2-, 48mm, findspot unknown, BM no. S165; p 106; (missing) // two crowns in ornately-shaped shield, 15 left, DV...H..S...E around; secondary stamp with RF

1526) 4-, inner disc, 45mm, findspot unknown, BM no. 53.5-2,9; p 166; angel facing, 16 33 to sides of head, GLO(R)...IS around (two pinholes)

1527) 2+, 18//18mm, findspot unknown, BM no. 71.7-14.115; pp 51, 54, 139; -// (? portcullis, edge legend); (on scrap of cloth)

1540) 2-, 20mm, Thames, London; p 51; crown over portcullis, (Lombardic-letter edge legend) //-

1564) 2+, 15//14mm, Thames, London; p 186; castle // OO/HO(I)/T:

1568) 4-, 15//17mm, Thames, London; p 142; -// , rose to each side/ KENT // (3 & 4 missing)
1569) 4+, 7/13/12/8mm, Thames, London;
   p 93;
   - // H I / SEX// lion passant / CR//-

1571) 2+, 15/15mm, Thames, London;
   p 178;
   (stamp from ? defaced die) // crown over rose

1575) 2+, 14/17mm, Thames, London;
   p 183;
   castle, lion passant below // (P • PH/R)W|H/ illegible device between pierced stars

1577) 4-, 16/15mm, Thames, London;
   p 143;
   lion rampant // CAN/TERB/V/ +R I +/ P F // (missing) // A

1580) 4+, 17/16/16/16mm, Thames, London;
   p 143;
   lion rampant // CA/TER(B)V/ +R I +/ P F // crown over fleur de lis, C R to sides // C/A • D

1583) 4-, 15/16mm, Thames, London;
   p 143;
   -//CAN/TERB/V/+RI/+F+/ (missing) // C/ A • D

1586) 2-, 41mm, Thames, London;
   p 114;
   castle, hatted figure in entrance // (missing)

1588) 2-, 21mm, Thames, London;
   p 244;
   LXXV/XXXII../ // three pears & fess in shield

1593) 2+, 16/16mm, Thames, London, ML no. 83.410/2;
   p 176;
   RW/1599 // lion (rampant)

1597) 2+, 18/21mm, Thames, London;
   p 191;
   BH/CCMD/MDP/((OR)/WIC/H

1598) 2+, 23/25mm, Thames, London, ML no. 83.410/1;
   pp 51 (fig. 13A), 52, 53, 67, 68;
   crown over portcullis, fleur de lis S'VL(N)AG' PAN'O'VENA'L: I'COM'D(EV)O' around (Lombardic letter) //-

1600) 4-, outer discs, inner 'star'-shaped part, 13/15mm, Thames, London;
   pp 233, 236;
   - // X/74/00, oWILLTS around top // (missing)//-

1604) 2+, 20/20mm, Thames, London;
   p 189;
   WI/CH//HC/BS/G

317
1609) 2-, 16mm, Thames, London;
p 189;
Lombardic 'F', fleurs de lis to sides, VEA around (Lombardic letter) // (scratches)

1623) 4-, 11/16/16mm, Thames, London;
pp 70, 211, 236, 275;
- //¥, LTS around top // three harps, xx above, xx to sides, 7 below //-

1624) 2+, 20/20mm, Thames, London;
p 189;
D/(N)SC/LGB/(C)//(NO)/RWI/CH

1626) 4+, 11/17/17/12mm, Thames, London;
pp 122, 268;
- // (II)/(?)III, 167GL... around // crown over arms of England, C R to sides //-

1629) 2+, 20/22mm, Thames, London;
pp 52, 67;
- // crown over portcullis, PAO...(D)E(V)O around (? Lombardic letter)

1635) 4+, 13/13/13/13mm, Thames, London;
p 76;
- // rose // coronet over R & L ligature, EXON around base //-

1643) 4-, inner disc, 14mm, Thames, London;
p 95;
R heart L / ESSE(X)

1646) 4-, 10/15mm, Thames, London;
p 74;
- //[text]/78, EXON around top // (missing) //-

1647) 4-, 15/13mm, Thames, London;
p 256;
(1 & 2 missing) // erased head of bird of prey left, demi griffin right, COM:EBOR: around // H,EARC around

1648) 4-, outer disc, inner square parts, 13/13/15mm, Thames, London;
pp 69, 212;
(missing) // crown in triple border //¥/76, DEVON around top //-

1650) 2-, 19mm, Thames, London;
p 191;
BH/CCMD/MDPH/AC// (missing)

1651) 2-, 23mm, Thames, London;
p 245;
shield with three pears, (E)R・SEARC around // (missing)

1653) 2+, 25/27mm, Thames, London;
p 152;
- // Roche (italic letter)
1665) 2+, 20/21mm, Thames, London;
p 51;
-// crown over portcullis, (G)VEAL'TCOM around (Lombardic letter)

1666) 4+, outer lozenge-shaped parts, inner irregular 'star'-shaped parts, 10/13/13/12mm, Thames, London;
p 217;
- // 16/7(?), •SVΦFOLK around // crown over portcullis //-

1673) 2+, 17mm, Moreton Hall, Bury St. Edmunds;
pp 179, 184, 263, 397;

 // castle, (illegible device below)

1679) 2+, 20mm, Thames, Fulham;
p 137;
- // crown over rose, S left, V around (Lombardic letter)

1690) 2+, 22mm, Thames, London;
pp 52, 54, 242;
crown over portcullis, V(l)...NCO WORCE around // (? incomplete) VI

1699) 4+, 12/15/15/12mm, Thames, London;
p 143;
lion rampant // CAN/TERBV/+RI+/+Φ+// crown over fleur de lis, C R to sides // C/A•D

1701) 2+, 46mm, ? Thames, London;
p 104;
three crowns in shield, 15 7(1) to sides, ER 100 CR around // (missing)

1702) 4+, 12/12/12/13mm, ? Thames, London;
p 93;
- // crown over RL, demi (?)lion passant below // coronet over R & L ligature, ESE XE around //-

1704) 2+, 25mm, ?Thames, London;
p 137;
- // crown over rose, C B (Lombardic letter) to sides, (edge legend)

1709) 4+, 11/15/15/12mm, ? Thames, London;
pp 70, 75;
(offstruck) // (?) - // crown over rose, DENSIR(E) around //EX/ON

1711) 4+, 13/14/14/13mm, ? Thames, London;
p 143;
lion rampant // CAN/TERBV/+RI+/+Φ+// crown over fleur de lis, C R to sides // (illegible)

1716) 2+, 17/15mm, Thames, London;
p 51;
-// crown over portcullis

1728) 2+, 19/20mm, Thames, London;
p 163;
crown over arms of England, E R to sides, •StVLLPAO-VIALLE'LON around // arms of London in ornately-shaped shield, (R)D...I* PRO...NNIS•LAN(IC)IS around
1729) 2-, 25mm, Thames, London;
p 45;
crown over arms of England, (?) sun to right // sun

1734) 2+, 18/18mm, Thames, London;
p 137;
crown over rose, (M) left, S(I)....CO'E: KENT(OL)' around (Lombardic letter) //-

1738) 2+, 21/21mm, Thames, London;
pp 48, 52;
crown over arms of England, *HENR around (Lombardic letter) //crown over portcullis

1745) 4-, inner discs, 16//17mm, Thames, London;
p 122;
RN/V•I, STER•S•A• around // crown over arms of Stuart Britain in ornately-shaped shield, C R to sides

1753) 2-, 18mm, Thames, London;
pp 173, 175, 188, 269;
ORW/ICH+/1654//N

1755) 2-, 33mm, Thames, London;
pp 106, 107;
three crowns in ornately-shaped shield, 15 left; secondary anchor stamp // (missing)

1756) 2-, 33mm, Thames, London;
pp 144, 145;
lion passant & hulk dimidiated and conjoined, S above, W below, (L)...A around // beast passant

1757) 4+, 15//18//15mm, Thames, London;
pp 57, 255;
-// W/I•I/G, M•EBOR around // crown over fleur de lis, : to each side // SER/CHE/1611, (G)ER around

1760) 4+, lozenge-shaped parts, 18//18//18/18mm, Thames, London;
pp 91 (fig. 19), 140, 274;
6•4// shield with quarterly, first & fourth a leopard's head, second & third a covered cup between two buckles, COM•ESSE•X•••• around // 1614 over arms of Stuart Britain, I R to sides // S/ARC/HE

1761) 2+, 23//24mm, Thames, London;
p 165;
(? defaced die) // arms of London in ornately-shaped shield, fleur de lis to each side, LONDINI PRO•PANN...NICIS around

1762) 2-, 23mm, Thames, London;
pp 52, 53, 203;
crown over portcullis, fleur de lis SVLN!PAO!VEAL!I.CO! (OXFSHR) around (Lombardic letter) //-

320
1763) 2+, 22/22mm, Thames, London;
   p 51;
   - // crown over portcullis, SVLN!PA(O)..'VEAL!'I:CO around
     (Lombardic letter)

1766) 4-, inner disc, 18mm, Thames, London;
   p 209;
   H*, 1611 around top, ERS(E)T around

1767) 2+, 23/24mm, Thames, London;
   pp 163, 269;
   crown over arms of England, E R to sides, 'S:VLII'..A...VIALLE' LO
   around // arms of London in ornately-shaped shield, #LONDINI
   fleur de lis P...AN...I(C)..S.1564 around

1772) 4, 10/13//13//10mm, Thames, London;
   p 94;
   - // */T*, ESEX around base // crown over harp, C R to sides //-

1775A) 2+, 18/14mm, Thames, London;
   p 77;
   crown over fleur de lis, E R to sides, S(I)...ON around //-

1775B) (as 1775A)
   p 77

1777) 4-, inner 'star'-shaped part, 17mm, Thames, London;
   pp 30, 122;
   RN/III, 1648 • GLOSTERS around

1802) 2+, 45/45mm, Thames, London;
   pp 104, 105;
   three crowns in ornately-shaped shield, 15 left, (ER):100 (CRO)
   around; secondary stamp, with T* in ornately-shaped shield //griffin
   segreant (i.e. rampant), (T)ER around; (possible illegible secondary
   stamp)

1803) 4-, 13/15//15mm, Thames, London;
   pp 209, 210;
   S,SOM around // S,(E)RESET around // crown over fleur de lis, 16 (13)
   to sides // +SER around illegible device

1804) 2+, 15/16mm, Thames, London;
   p 179;
   XXVII/1629// (illegible)

1805) 4-, inner disc, 12mm, Thames, London;
   pp 92, 276;
   16/77, (E)'S'S'E around

1812) 2-, 48mm, Thames, London;
   p 106;
   three crowns in ornately-shaped shield, 71 right, I around //(missing)

1813) 2-, 51mm, Thames, London;
   pp 104, 105;
   (missing) // griffin rampant, ER•BA around; secondary stamp with
   privy mark
1819) 4-, inner disc, 14mm, (?) Deal beach, Kent, DL;  
pp 212, 397, 399;  
* 78 (or 6), TAVITON around top

1821) 2+, 13//13mm, (?) Deal beach, Kent, DL;  
pp 176, 397;  
(?) 8, * NOR* FOLKE around // (?) crown

1869) 4+, 9//12//13//9mm, Thames, London;  
p 218;  
/- SVF/FOL* /K/ crown over thistle, C R to sides //-

1874) 4-, 14//14//13mm, Thames, London;  
p 256;  
(missing) // demi griffin (?)issuant from coronet left, hunting horn  
right // crown over fleur de lis, I R to sides // (?)-

1876) 4-, 11//13//12mm, Thames, London;  
p 70;  
- // - // crown over fleur de lis, I R to sides // DE/VON

1877) 4+, 12//13//13//mm, Thames, London;  
p 143;  
lion rampant // CA(N)/TERB/+RI/+P// crown over fleur de lis, C R  
to sides // D

1878) 4+, 10//16//16//11mm, Thames, London;  
p 70;  
- // - // crown over rose, DENSHERE around // -

1879) 4+, 12//15//15///14mm, Thames, London;  
p 71;  
- //* , *: * ... (D)EVOVI around // arms of Stuart Britain, * to  
sides //-

1880) 4+, 11//13//14//13mm, Thames, London;  
p 94;  
-//ESEX/TB// crown over fleur de lis, C R to sides // (?)-

1883) 4+, 12//15//15//13mm, Thames, London;  
pp 256, 270;  
: : : : SEA(RCH)ED around // demi griffin left, erased head of bird  
of prey right, '... EBOR around // crown over fleur de lis, I R to  
sides // (V)II/XII

1886) 4+, 10//11//11//10mm, Thames, London;  
p 69;  
- // (O)EVO/6(4)// crown over fleur de lis //-

1888) 2-, 28mm, findspot unknown, ML no. 79.428/1;  
pp 90, 161;  
bearded balding head facing, * to sides, in six-arched tressure,  
SIVLNAGII: PA...RV(M or 'I) : CIVITATE!: LONDON around  
(Lombardic letter) // crown in arched tressure, (edge legend)
1889) 4+, 13/17/18/13mm, Thames, London; p 141;
   - // +/+ , rose to sides, /NT// crown over arms of Stuart Britain, 16/C left //-

1890) 4+, 13/14/14/13mm, Thames, London; p 71;
   -// * , * * C(O)...EVOH around // arms of Stuart Britain, * to sides //EAR/...

1891) 4+, 11/13/12/13mm, Thames, London; p 75;
   (scratches) // (scratched) W // crown over thistle, I R to sides //X·/ON

1892) 4+, lozenge-shaped parts, 15/16/16/15mm, Thames, London; p 93, 140, 274;
   -// +/ COM/KENT/1616/+// arms of Stuart Britain, I R to sides // (3)3

1893) 4+, 14/19/16/15mm, Thames, London; pp 57, 68, 209, 268;
   P/ (16)11 around top of illegible device, S(C) around // crown over fleur de lis, 16 13 to sides // (LV)

1896) 4+, 12/14/15/13mm, Thames, London; p 70;
   - // - // crown over fleur de lis, I R to sides // DE/VON

1901) 4+, outer lozenge-shaped parts, inner discs, 9/12/12/12mm, Thames, London;
   pp 69, 73, 218, 276;
   - // 80, · SVFFOLK around // fleur de lis / 1 ½ // -

1902) 4+, lozenge-shaped parts, 10/13/14/10mm, Thames, London; pp 92, 271, 274;
   59(1) //:COM/ESSEX/1616/ :· // three lions passant //-

1904) 4-, inner discs, 15/14mm, Thames, London; p 76;
   rose // coronet over R & L ligature, EX around

1905) 2-, 56mm, Thames, London;
   pp 96, 166, 229, 280;
   (missing) // angel facing, illegible devices to sides, rose :THE rose PRIME rose BA(Y)· OF· ..WCING! around

1906) 2+, 20/20mm, London Bridge 1846 (? Thames), CU; p 189;
   W/TPRR/HPCS/PA///N(O)/RW/CH

1910) 2-, 20mm, London Bridge 1846 (? Thames), CU; p 192;
   RW/(CH) // (missing)
1920) 4-, 12/13mm, near London Bridge 1846 (? Thames), CU: p 144;
- // R: B, ★ CANTERBVRI around // (missing) // P

1921) 2-, 25mm, Thames, London, CU; p 45;
crown over ornately-shaped shield with arms of England, rose to each side, L(N)II PAO around (Lombardic letter) // (Lombardic F), rose right

1923) 2+, 18/19mm, Guy's Hospital site, London, TI L4a, CU; pp 45, 400;
crown over ornately-shaped shield with arms of England, rose left // Lombardic F, rose left

1925) 2-, 41mm, Thames, London, CU; p 108;
(missing) // griffin passant

1927) 4-, inner disc, 14mm, near London Bridge 1846 (? Thames), CU; p 70;
" F", DEVON around top

1928) 4-, inner square part, 13mm, findspot unknown, CU no. C13952; p 73;
★ / 77", EXON around top

1929) 4-, 11/14mm, findspot unknown, CU no. C13952; p 73;
- // 7 · 3/ two flowers, E·X·O·V around top // (missing) //-

1933) 2-, 44mm, London Bridge 1846 (? Thames), CU; pp 104, 105;
three crowns in ornately-shaped shield, 1(reversed 5) 71 to sides, E...CRONE around // (missing)

1934) 2-, 45mm, ('1846', findspot unrecorded - possibly Thames ?), CU no. C13922; pp 104, 105;
three crowns in ornately-shaped shield, 1(reversed 5) 71 to sides, (RONE· DV) around // (missing)

1940) 2-, 27mm, findspot unknown, CU; pp 195, 196;
crown over portcullis, ATIS·NORWIC around; secondary stamp @// (edge legend)

1941) 2-, 47mm, Thames, (? London), CU; p 106;
three crowns in ornately-shaped shield; secondary stamp GAN, (8 holes around edge) // (missing)

1943) 2+, 20/19mm, findspot unknown, CU; p 189;
NO/RWI/(H)//PR/RMTB/HS.B
1944) 2+, 20/mm, findspot unknown, CU;
p 189;
DRS/PL(E)/AW/WIC/H

1945) 2+, 19/mm, findspot unknown, CU;
p 189;
W/(E)RH/BABS/HG/WI/H
(E on first disc misread?, cf. Appendix 6A)

1946) 2+, 18/mm, findspot unknown, CU;
p 187;
MAR/ROW/castle, lion passant below

1947) 2+, 20/mm, near London Bridge 1846 (? Thames), CU no. C13964;
p 189;
NO./RWI/CH/WC/TPRR/HPCS/R
(last letter misread? - cf. Appendix 6A)

1948) 2+, 22/mm, findspot unknown, CU;
p 189;
WB/RHC/S/(N)/RWI/CH

1949) 4-, inner disc, 13mm, Thames 1846 (? London), CU;
p 221;
COM/SVFF/OLK

1950) 4-, inner disc, 12mm, findspot unknown, CU;
p 72;
crown/×/two crowns/65

1951) 2-, 25mm, findspot unknown, CU;
p 115;
two coronets in ornately-shaped shield, 618 to sides
//COL/EST/SAY

1952) 4-, inner disc, 17mm, findspot unknown, CU;
pp 203, 267, 269;
WH, WITEY around

1953) 4-, inner disc, 13mm, findspot unknown, CU;
p 72;
EXON around base

1954) 4-, 12/mm, findspot unknown, CU no. C13966;
p 221;
(missing) // RS, SVFFO(LK) around // cock standing // (?)-

1955) 4-, 12/mm, (? Newgate Street, London), CU;
p 126;
- // HA(M) / SHE // (missing) //-

1956) 2-, 19mm, (? Newgate Street, London), CU;
p 190;
WCBB/CEB/WL // (missing)
2037) 2+, 18/18mm, (? Newgate Street, London), CU; p 190; 
(?) - // BW / MHHL / DCW

2039) 2+, 18/18mm, (? Newgate Street, London), CU; p 191; 
RW/ (C) // B/LB(L)/CG/H

2041) 2-, 25mm, (? Newgate Street, London), CU; p 108; 
griffin segreant (i.e. rampant) // (missing)

2058) 4+, 4/13/13/4mm, findspot unknown, CU; p 218; 
- // TB, SVFFOLKE around // crown over rose, C R to sides //-

2060) 2+, 26/28mm, findspot unknown, CU; p 244; 
LXXVIII/XXXII// three pears & fess in shield, (ER)·SEARCHED around

2079) 4-, 12/15mm, Thames, London; p 256; 
- // winged beast left, hunting horn right, (COM)·BO around // (missing) // ? -

2080) 2+, 16/17mm, Thames, London; p 186; 
(castle), lion passant below // (T)/SHO/TE

2085) 4-, 20/24/24mm, Thames, London; pp 56, 57, 208; 
(offstruck) // H, ·1611· around top, (S)OMERSE(T) around //1611 over shield with arms of Stuart Britain // S(E)/CHE, 16...GERx around

2088) 4+, outer discs, inner square parts, 13/14/13/13mm, Thames, London; p 73; 
- // * /·7 : 6·, EXON around top // crown in triple border // (illegible privy mark)

2087) 2+, 17/18mm, Thames, London; p 180; 
bird rising, wings addorsed // XXVII / escallop

2089) 2+, 12/16mm, Thames, London; p 51; 
- // crown over portcullis

2093) 4+, 11/14/13/13mm, Thames, London; pp 63, 100, 220, 274; 
-// F, ·CO(M SVF)FOLK· around // crown over harp // -; reverse side of inner discs integrally cast with crowned lion statant // crown
2094) 2+, 24//25mm, Thames, London;
p 115;
two coronets in ornately-shaped shield, 1(8) right
//ENG/lish/COl/(H)EST(E)

2095) 4-, inner lozenge-shaped part, 17mm, Thames, London;
p 140;
+/com/kent/1616/+ 

2096) 4-, lozenge-shaped parts, 13//15mm, Thames, London;
p 141;
-// CO/KEN/T// (missing) //

2099) 4+, 15//19//18/16mm, findspot unknown;
p 93;
-// Charles II-type head, OF ENG LAND around, border of large
dots // 6 / fleur de lis, cogged incuse border // ESS /EX:

2102) 4-, 13//17mm, findspot unknown;
pp 121, 210;
(32) // n.b, loste:S:O..(E)RS around // (missing) //

2111) 2-, 21mm, findspot unknown;
p 165;
- // arms of London in ornately-shaped shield

2113) 2+, 22//22mm, findspot unknown;
p 54;
(crude) crown, 1 right // portcullis 

2114) 2+, 15//15mm, findspot unknown,
p 182;
IDE/TE/6 // castle

2116) 2-, 18mm, findspot unknown;
p 54;
XXIX // portcullis

2120) 2-, 43mm, findspot unknown;
p 104;
(missing) // griffin segreant (i.e. rampant), STER* BAYL around

2125) 4-, 16//14mm, findspot unknown;
p 237;
(1 & 2 missing) // willte (black letter) / (R B) // -

2132) 2-, 18mm, findspot unknown;
p 46;
- // (? Lombardic F)

2134) 2-, 19mm, findspot unknown;
p 53;
crown over portcullis, C W to sides, ...+ (edge legend) //

2135) 1+, rectangular, 32X15mm, findspot unknown;
p 112;
crown over crown, C below right; (?) secondary stamp with crown)
// D
2140) 2+, 17/17mm, ? Thames, London;  
   p 184;  
   castle // (stamp from ? defaced die)

2143) 4+, 13/14/14/13mm, ? Thames, London;  
   p 220;  
   - // (F), CO...VFFOLK around // crown over rose, I left // S,  
   SE..RCHED around

2145) 4-, 10/14mm, findspot unknown, CU no. Cl3952;  
   p 74;  
   - //* /*, E·X·O·N around top // (3 & 4 missing)

2148) 2-, 35mm, Thames, London;  
   p 103;  
   UYTS/O: CRUI(S) / F: VAN / CESTE(R) // (missing)

2154) 4+, 14/18/18/13mm, Thames, London;  
   p 99;  
   - // Charles II-type head, (OF ENG LAND) around, possible  
   •▲▲▲ • etc. border // rose (possible crown above), COLCHESTER+  
   around //-

2155) 4+, lozenge-shaped first part, remainder are discs,  
   9/12/11/10mm, Thames, London;  
   pp 218, 276;  
   - // 80, ·S...FOLK around // fleur de lis / 1 1 //-

2156) 4+, 10/15/15/15mm, Thames, London;  
   p 74;  
   - //*/81*, EXON around top // (lion) couchant on inverted  
   portcullis /81

2159A) 4+, lozenge-shaped parts, 10/16/16/13mm, Thames, London;  
   p 95;  
   - // coronet over R & L ligature, *THE·C..VN(T)...F (ESSEX)X  
   around //crown over arms of England, 5 ..(illegible device) to sides

2159B) as 2159A, but parts 1 & 2 missing  
   p 95

2174) 4-, lozenge-shaped parts, 11/14/13mm, Thames, London;  
   pp 76, 95, 273;  
   - // coronet over R & L ligature, COVNTY OF ESSEX around  
   //crown over arms of England //-

2176) 2+, 21/22mm, Thames, London;  
   p 54;  
   R mark // (crown over portcullis, edge legend)

2191) 2-, 25mm, findspot unknown, BM;  
   pp 45, 207;  
   crown over ornately-shaped shield with arms of England, rose left,  
   sun right, rose S'SVBCIDII PANN(O)...RS around (Lombardic  
   letter)//(bulbous Lombardic F)
2197) 2-, 24mm, findspot unknown, BM;  
   crown over arms of England, E R to sides, ALL around // arms of London

2200) 2-, 23mm, findspot unknown, BM;  
   pp 56, 129;  
   (incuse) A (?)F/M// crown over thistle, L (S) to sides, ERBOR(O) around

2203) 2-, 25mm, findspot unknown BM (? no. S159);  
   p 195;  
   (?) - // castle, (illegible device below), N right, +... around

2212) 2-, 23mm, Thames, London;  
   pp 77, 225;  
   castle, the port with a key and portcullised, (SIG)... G(VILD)EFORD around // EA/HE

2213) 2+, 19//19mm, Thames, London;  
   pp 77, 225;  
   castle, the port with a (key), ILLV+DE+GV around // (stamp from ? defaced die)

2215) 2+, 19//19mm, Thames, London;  
   p 167;  
   - // BAYS over shield with arms of London, (7) 6 to sides

2216) 4-, inner disc, 17mm, Thames, London;  
   p 167;  
   ornately-shaped shield with arms of London, (?F & wreath) around

2225) 4-, inner disc, 50mm, findspot unknown, BM;  
   pp 97, 116, 270;  
   lion rampant, (O)HNMARYANSMAKEIN(G)INB(R)...Y around

2226) 2-, 46mm, findspot unknown, BM;  
   p 106;  
   (missing) // DV (edge legend)

2227) 2-, 45mm, findspot unknown, BM;  
   p 104;  
   (missing) // (griffin rampant), $DV...(ES...BA)YE around

2228) 2-, 49mm, findspot unknown, BM;  
   p 104;  
   three crowns, 15 71 to sides, Y...100 C(R) around // (missing)

2231) 4-, 6//11//11mm, findspot unknown, BM;  
   pp 197, 198;  
   -// 6, RWIC(E)+ around // crown //-

2235) 2-, 18mm, findspot unknown, BM;  
   p 176;  
   SB/1579// (missing)
2243) 2-, 20mm, Thames, London;
p 191;
(C B or P)D/PSR(R)/SD/...//OR

2257) 2-, 38mm, Thames, London;
p 114;
(missing) // crown & vertical stave in ornately-shaped shield, 1 1 to
sides, N...S..C..LCH(ESTER (S)AYE around

2259) 4+, 11//13//12//12mm, Thames, London;
p 93;
-///*T, ESEX around base // lion statant on chapeau, C R to sides
//-

2261) 4+, 15//17//17//14mm, Thames, London;
p 208;
XX/XII//H, 1611 around top, E...ERSET around // 1611 over shield
with arms of Stuart Britain, (R right) // Q

2262) 2+, 21//22mm, Thames, London;
pp 52, 54, 68, 229;
(? )VII (crude) // crown over portcullis, L.I.CO.(COVA) around
(Lombardic letter)

2264) 2-, 18mm, Thames, London;
pp 183, 186;
castle // (O)/ ARP

2266) 2+, 18//19mm, Thames, London;
p 180;
bird standing (stamp from ? partly defaced die) // 30 / (?) fleur de
lis

2274) 4+, 17//42//43//17mm, Thames, London;
p 114;
three coronets & vertical stave raguly // three coronets & vertical
stave raguly in ornately-shaped shield, 16 18 to sides, fleur de lis
ENGLISH-COLCHESTER-SAYE around // three-towered castle,
hatted male figure standing in entrance at top of steps, holding
partisan-type weapon & (?key) // E P

2277) 2+, 17//16mm, Thames, London;
p 46;
- // (crown) over Lombardic (F), fleur de lis right, (Lombardic-letter
edge legend)

2279) 2+, 22//23mm, Thames, London, ML no. 80.82/43;
p 242;
four parallel strokes // UG(O)/NI(E) (angular, sub-Lombardic letter)

2281) 2+, 24//21mm, Thames, London, ML no. 80.82/45;
p 53;
crown over portcullis, S R to sides //-

330
2282) 2-, 21mm, Thames, London, ML no. 80.82/46; p 38; (missing) // crown over sun, fleur de lis, & illegible device, CI around (Lombardic letter)

2284) 2+, 21//20mm, Thames, London, ML no. 80.82/48; pp 52, 242; - // crown over portcullis, (OM:)WI...R around (Lombardic letter)

2286) 2+, 25//26mm, Thames, London, ML no. 80.82/60; p 137; (scratches) // crown over rose, (M) T to sides, S*PAO+VE(A)L...E ... M around (Lombardic letter)

2294) 2-, 19mm, Thames, London, ML; p 53; mark, struck secondarily over stamp with portcullis //-

2296) 2+, 21//20mm, Thames, London, ML; p 53; mark // crown over portcullis, fleur de lis SVL(N)...ARIS around (Lombardic letter)

2301) 2+, 20//21mm, Thames, London, ML no. 80.82/53; p 137; - // crown over rose, B (V) to sides, GI...P...EAL'TCO(T)ENT around (Lombardic letter)

2302) 2+, 20//22mm, Thames, London, ML No. 80.82/54; p 244; // shield with three pears, SEA around

2306) 1+, rectangular, 22X17mm, Thames, London, ML no. 80.82/57; pp 112, 145, 280; lion passant & hulk dimidiated & conjoined; secondary stamps with LIIII // XXXIIII=

2308) 2-, 34mm, Westminster, ILU no. WBS 79 36 ; pp 161, 162, 400; bearded, balding head facing in six-arched treasure, SVLNAG ...(IC)LOND' around (Lombardic letter) // (illegible)

2315) 2+, 15//16mm, findspot unknown, HCM; p 178; - // crown over rose

2320) 2-, 15mm, findspot unknown, HCM; p 177; castle, P left, I below (no room for lion) // (?) rose

2325) 2-, 22mm, findspot unknown, HCM; pp 51, 54; - // crown over portcullis (crude)

2343) 4-, lozenge-shaped inner parts, 15//14mm, findspot unknown, HCM; p 141; COM/KENT/161(8)/ * //(COM)/KEN/T

331
2344) 2+, 16//16mm, findspot unknown, HCM; p 186;
castle, lion passant below // T(O) / NAR(O)/W(E)

2346) 2-, 28mm, findspot unknown, HCM; p 245;
XXVIII/XXXIII // three pears and fess in shield, ERG•P.. around

2353) 2-, 17mm, Thames, London, ML no. 81.398/6; p 99;
X mark // rose

2354) 2+, 17//16mm, Thames, London, ML no. 81.398/7; pp 172, 178;
castle // crown over rose (imprint of textile on surface of 1)

2356) 2+, 16//16mm, Thames, London, ML no. 81.398/9; p 177;
castle, P left // crown over rose (stamp from ? partially defaced die)

2360A) 4+, 11//14//13//12mm, Thames, London; ML no. 81.398/13; p 221;
- // , COMSVFOL around // thistle // -

2360B-D) Thames, London; ML nos. 81.398/14-16 p 221;
B as 2360A; C & D similar but incomplete, D has windmill on fourth disc.

2361) 4+, 12//12//12//12mm, Thames, London, ML no. 81.398/17; pp 76, 221, 273;
- // coronet over R & L ligature, OLKE around // crown over two fleurs de lis, (? lion passant below) // -

2362) 4+, 11//13//13//12mm, Thames, London, ML no. 81.398/18; pp 100, 221;
- // RH, SVFFO(L) around // crown over harp //-

2363) 2+, 14//16mm, Thames, London, ML no. 81.398/19; p 180;
bird standing // cinquefoil / 30 / (*)

2365) 2+, 15//15mm, Thames, London, ML no. 81.398/21; p 180;
A (C)/(l)620 // castle

2368) 4+, 14//18//18//14mm, Thames, London; pp 158, 199, 245;
- // (T) S priy mark // shield with chevron over illegible device, K...STER around // shield with on a chevron between three (leopards' heads), two mullets

2370) 2+, 14//13mm, findspot unknown, StA; p 184;
castle // (illegible device)
2383) 2+, 20/20mm, Bury St. Edmunds; p 51; // crown over portcullis, E left

2385) 2-, 17mm, Bury St. Edmunds; pp 184, 263, 397; r \(\text{C}^{\text{R}}\) // castle

2389) 2-, 19mm, Groton, Suffolk; p 54; XLIII (with scratches) // crown over portcullis

2395) 2-, 33mm, Thames, London, ML no. 80.242/8; p 106; three crowns & cross raguly in ornately-shaped shield, (1)5 71 to sides, OLCESTER around // (missing)

2397) 2-, 40mm, ? Thames, London, ML; p 108; (missing) // (secondary stamp) \(\text{T}^{\text{w}}\) privy mark

2400) 2+, 25/25mm, Thames, London, ML no. 81.398/30; p 115; two coronets and vertical stave raguly in ornately-shaped shield, 16 18 to sides // LISH /flower COL flower /CHESTER/SAYE/1618

2402) 2-, 21mm, ? Thames, London, ML; p 54; XXXI(l) // portcullis

2403) 1+, 35mm, Thames, London, ML; p 112; three crowns in ornately-shaped shield, 1(5) left //-

2413) 4-, inner disc, 14mm, Thames, London; pp 71, 126; \(\text{£}\) , 3 HAMPS around

2414) 4+, 10/11/11/10mm, Thames, London; pp 151, 152 (fig. 37), 211, 275, 278; - // I*- // RVGS,(*)...TER around // shield with harp, wreath to sides //-

2421) 2-, 27mm, Thames, London; pp 242, 244, 271; IIII // \(\text{£}\) over three pears

2423) 4+, 8/11/11/6mm, Thames, London; p 69; - // EVO/64// crown over fleur de lis, dot to each side // - ; discs 2 & 3 clipped parallel with the connecting strip

2430) 2+, 25/27mm, Thames, London; p 245; - // shield with fess and three pears, ILINGSLY\(\text{£}\) around

333
2433) 2+, 21/22mm, Thames, London; pp 52, 54, 139;
mark // crown over portcullis, St:V(L)...VEN...O:KENT* G around (Lombardic letter)

2446) 2-, 32mm, Thames, London, ML (DUA), MFS 76; p 245;
(missing) // shield, R..CA..NG.WI(C) around

2448) 2+, 18/19mm, Thames, London; p 191;
N/RWI/C//LS/WDBC/GB/C

2456) 2+, 31/32mm, Thames, London; p 110;
(DV)YT2 /OLCHE2 /TER 2AEY / 2300 DRA(E) / 1571 // griffin passant, $ below

2464) 2+, 15/15mm, Thames, London; pp 52, 67;
crown over portcullis, (D or V)ON around (?Lombardic letter) // -

2469) 4-, lozenge-shaped parts, 15/14mm, Thames, London; p 141;
34 // OM/EN/T// (missing) // C

2470) 2-, 42mm, Thames, London; p 102;
*/DVYTS/COLCESTER/*BAEY*/ 1(5)7(1) // (? beast)

2473) 4+, lozenge-shaped parts, 13/13/13/14mm, Thames, London; p 141;
- // COM/KEN/T// arms of Stuart Britain, C R to sides // -

2479) 2+, 45/45mm, Thames, London; pp 104, 106;
three crowns in ornately-shaped shield, 15 71 to sides, ESTER 100 C(R) around // griffin segreant (i.e. rampant), DVTS*CO...ES around

2480) 4+, 21/18/18/23mm, Thames, London; p 93;
128 // */T*, ES*EX around base // lion statant on chapeau, C R to sides //

2491) 1+, subrectangular, 28X16mm, Thames, London; pp 112, 145, 195, 280;
crown // griffin (? rampant)

2492) 4-, irregular 'star'-shaped inner parts, 11/11mm, Thames, London; p 217;
rose // 16/76, S(V)FOL around

2493) 2-, 23mm, Thames, London; p 245;
( missing) // *WO(RCE)...RNW (edge legend)
2495) 2-, 18mm, Thames, London;  
p 244;  
\[/? (\text{? shield})\] with three (pears)

2498) 2+, 16/19mm, Thames, London;  
p 179;  
bird standing; stamped on top of castle, (lion) below // XXVII / 16..9  
(possibly from two stamps)

2500) 4+, 11/15//14//11mm, Thames, London, ML no. 81.522/16;  
p 203;  
\[-// 82/\text{?}\] OXON/ bewigged man's head with collar, facing at  
left, illegible device (\text{? human figure}) right /6//-

2503) 2+, 47//47mm, Thames, London;  
p 106;  
three crowns in ornately-shaped shield, 15 71 to sides, VYTS·C(O)  
around // griffin (\text{? rampant}), DVY around

2511) 2+, 18//20mm, Thames, London, ML no. 81.522/19;  
pp 176, 178;  
crown over rose, M right // castle (no room for lion)

2513) 2+, 11//14mm, Thames, London, ML no. 81.522/18;  
pp 56, 128;  
(scratched) 24(\text{?}) // T T privy mark; stamp on strip, at point of fold,  
with crown over thistle, : H..RE around

2522) 4-, inner disc, 16mm, Thames, London;  
p 95;  
coronet over R & L ligature, ESSE around

2525) 4+, 11//15//15mm// (distorted), Thames, London;  
p 70;  
\[-// -//\] crown over rose, DENS1I around //-

2526) 1+, rectangular, 18X15mm, Thames, London, ML no. 81.522/8;  
p 112;  
crown over D (C) // (? griffin)

2529) 4+, 16//15//15//17mm, Thames, London, ML no. 81.522/15;  
p 143;  
lion rampant // CAN/TERB/\text{?} RI\text{?}F/\text{?} P\text{?} // lion statant on crown  
/C/A·D

2541) 2+, 17//17mm, Thames, London, ML no.81.522/46;  
p 179;  
bird rising, wings addorsed // 1619/XXVII

2554) 2+, 17//17mm, Thèmes, London, ML no. 81.522/14;  
p 196;  
WAL/ON, * NO...ENS* around // ship

2555) 4-, 13//16mm, Thames, London;  
p 256;  
\[-// erased beast's head left, griffin issuant from coronet right,  
\cdot CO...BOR\cdot \] around // (missing) //-

335
2567) 1+, 27mm, Thames, London;  
   p 112;  
   three crowns in shield ![secondary stamp - orientation uncertain]  
   (both surfaces apparently pared with a sharp instrument)

2571) 2+, 20/22mm, Thames, London;  
   p 77;  
   // fleur de lis, VE(I) around

2575) 2-, 15mm, Thames, London;  
   p 192;  
   ILW/WP// (missing)

2578) 2-, 44mm, Thames, London, ML no.81.522/9;  
   p 106;  
   (missing) ![griffin], ★ 1571 DV...E around

2593) 2+, 15/15mm, Thames, London;  
   p 177;  
   castle/ (16) // crown over rose (stamp from ? partially defaced die)

2601) 4-, inner disc, 16mm, Thames, London, ML (DUA) no. MFS 76,487;  
   p 122;  
   RN/VI, (T)ER'S around

2604) 4-, 11/14/14/12mm, Thames, London, ML (DUA) no. MFS 76, 486;  
   p 221;  
   // R·S, FOL around // cock standing // A]

2608) 4-, 10/12mm, Thames, London, ML (DUA), MFS 76;  
   p 218;  
   // T B, (S)VFFOLKE around // (missing) //-

2610) 4+, 14/14/14/14mm, Thames, London, ML (DUA), MFS 76;  
   p 141;  
   // COM/KEN/T// crown over fleur de lis //-

2611) 2+, 46/52mm, Thames, London;  
   p 108;  
   three crowns & cross in shield, DWIH...ESTER SAY 1571 around //griffin passant

2615) 2+, 25/25mm, findspot unknown, KL no.4;  
   pp 163, 269;  
   crown over arms of England, E R to sides, •S-VLI'PAO.VIAL(LE)  
   LON around // arms of London in ornately-shaped shield, • to each side, + LONDI...(L)ANICIS:1573: around

2620) 2+, 19/20mm, findspot unknown, KL no. 10;  
   p 190;  
   M(S)..<BCI/DB(F)//(W)

2622) 4+, 13/15/15/13mm, findspot unknown, KL no. 12;  
   p 256;  
   // demi griffin left, erased beast's head right, COM:E around  
   //crown over fleur de lis, I R to sides //-

336
2626) 4-, 15/13mm, findspot unknown, KL no. 18; p 167;
(1 & 2 missing) // arms of London in ornately-shaped shield, • to each side, scroll above with (? SVBSIDIES) on //(? )-

2634) 2+, 23/24mm, findspot unknown, KL no. 26; p 165;
- // crown over arms of London in ornately-shaped shield, LONDON...(HE:) around

2636) 4-, inner discs, 15/14mm, findspot unknown, KL no. 28; p 221;
cock // COM/SVFF/OLK

2637) 4-, 14/12mm, findspot unknown, KL no. 29; p 255;
(1 & 2 missing) // YOR/K / 1642// (?)-

2644) 4+, 10/10/10/10mm, findspot unknown, KL no. 41; pp 29, 69, 276;
- // O/EVON/ • 4 // crown over harp //-

2645) 2+, 16/15mm, findspot unknown, KL no. 44; pp 54, 55;
(portcullis) // (? VI)€ / ☐

2650) 4+, inner disc, 15mm, findspot unknown, KL no. 50; p 257;
K, • COMIT:YORKE around

2651) 2-, 15mm, findspot unknown, KL no. 53; p 177;
.../160/C N // (lion) rampant

2666) 4-, lozenge-shaped inner part, 15mm, Thames, London; p 95;
coronet over (R & L ligature), TH...SSEX around [see 2667]

(2667) 4-, lozenge-shaped inner part, 16mm, Thames, London; p 95;
crown over arms of England, (illegible device to right)
[Thought to be part of same seal as no. 2666; not counted separately for provenance totals.]

2668) 4+, lozenge-shaped first part, remainder are discs, 11/15//14//11mm, Thames, London, ML; pp 69, 73, 218, 276;
(offstruck) // 80,* S-V-F-F-O-L-K around // crown over 6 //-

2676) 2+, 17/17mm, Gorhambury House (St. Albans) excavation 1980 (context 98), StA(V) no. 28; pp 184, 397, 400;
(illegible device) // castle, lion (passant) below

2680) 2-, 41mm, Thames, London; p 109;
three crowns & cross in shield with scrolls at edges, rose DWYTSH (C)O around // (missing)
2683) 4-, 12/12/12mm, Thames, London; p 76; // rose // coronet over R & L ligature, EXON around //-

2689) 2-, 45mm, Thames, London; p 114; (missing) // castle, figure standing in entrance

2694) 2-, 16mm, Thames, London; p 192; (missing) // W/TBTA/B

2696) 2-, 21mm, Thames, London; pp 56, 150; 29 // crown over thistle, I left, CE(ST) around

2709) 2-, 15+mm, Thames, London; p 46; // (Lombardic F), fleur de lis left

2712) 4-, inner discs, 11/11mm, Thames, London; p 218; 80, *S... FOLK around // fleur de lis over 1

2713) 4+, lozenge-shaped parts, 13/15/14/15mm, Thames, London; p 95; // coronet over R & L ligature, COVNTY OF ESSEX around // crown over arms of England // (?)-

2714) 4+, 12/15/15/13mm, Thames, London; p 74; // */-*· E·X·O·N around top // three plumes through coronet /80 //-

2715) 4-, 'star'-shaped inner parts, square fourth part, 18/16/9mm, Thames, London; p 92; (missing) // three crowns, 6 left // 16/7(4), ...E·S·S·E·X around // (?)-

2721) 4+, 13/12/11/12mm, Thames, London; pp 100, 220, 274; 50 // lion passant (cast) // crown (cast) // crown over harp, COLCH(EST) .. R around

2722) 4+, 10/13/13/10mm, Thames, London; pp 219, 274, 405; // T B, SVFFOLKE around // shield with cross //-

2723) 4+, 9/13/12/10mm, Thames, London; p 221; // R· S, (VF) around // cock standing //-

338
2725) 2-, 45mm, Thames, London; p 106; three crowns in ornately-shaped shield, 5 left, R 100 around // (griffin, edge legend)

2727) 2+, 14//16mm, Thames, London; p 183; castle, (lion passant) below // I•B/(G)SC

2731) 2+, 19//20mm, Upper Walls Common, Baldock, Herts., LM no. 382.80; pp 172, 192, 397, 400; castle, (? lion) below // L/R (imprint of textile on surface)

2735) 2-, 19mm, Upper Walls Common, Baldock, Herts., LM no. 413.1980; pp 192, 397, 400; NO/RWI/CH//(missing)

2740) 2+, 18//19mm, findspot unknown LM no. 511.1980; p 191; NO/RWI/CH// (K or R) / M / BB(R)D/SV

2758) 2+, 19//20mm, findspot unknown, LM no. 2828.1977/9; p 190; AB/ECRD/S(P)G(P)/BC//(abraded) (? E misread according to warden list - see Appendix 6A)

2760) 2+, 18//18mm, findspot unknown, LM no. 2828.1977/11; p 192; FID(E)/LIT/ART//(missing)

2763) 4+, 12//13//12mm, Pixmore School Field, Letchworth, Herts.; pp 152, 211, 257, 275, 278, 397, 399; -// eagle displayed, IFA(X) around // two shields, respectively with cross and harp, OMM around //-

2766) 2-, 20mm, ? Thames, London; p 58; G privy mark, secondary stamp with (?) different privy mark // portcullis

2772) 2+, 20//20mm, Thames London, ML; p 165; -// arms of London in shield

2793) 2+, 15//16mm, Thames, London, ML no. 81.4/27; p 177; IC/(1)606/CN// lion rampant

2795) 2+, 15//16mm, Thames, London, ML no. 81.4/21; p 178; castle, illegible device below // crown over rose

2797) 2+, 19//20mm, Thames, London, ML no. 81.4/19; p 183; +** / RGRG/RM RG/IS• FA // castle, (lion passant) below
2798) 2+, 19//19mm, Thames, London, ML no. 81.4/20; p 183; castle, illegible device below // (R)GRC / M•RG/(F)A

2805) 2+, 16//18mm, Thames, London, ML no. 81.4/18; p 183; castle // N (stamp from ? defaced die)

2811) 2+, 16//16mm, Thames, London; pp 171, 174, 176, 179, 269; RW/1578/C N// lion rampant

2813) 2+, 17//18mm, Thames, London; pp 54, 55, 279; XXVI// portcullis (crude)

2818) 2-, 25mm, Thames, London; p 53; mark // crown over (portcullis), (fleur de lis) S'(V)...(O)MSR around (Lombardic letter)

2820) 2+, 14//15mm, Thames, London; p 178; castle, (lion) below // crown over rose

2822) 2-, 21mm, Thames, London; p 51; crown over portcullis, E (R) to sides, (R)O:COMIT(A) around (Roman letter) // (?)-

2823) 2-, 21mm, Thames, London; pp 57, 60, 90; A, (6)11 around top //ER/HED,(L)NE(C) around

2835) 2+, 15//17mm, Thames, London; p 186; bird rising, wings addorsed // (T)O/(H)OR/(E)

2837) 2+, 26//26mm, Thames, London; p 244; LXXVII(I)/XXXIII, (? plant motif above & below) // shield with three pears & fess, ₢ WORCE(STER) ...CH(E)D around

2839) 2+, 45//48mm, Thames, London; p 104; three crowns in ornately-shaped shield, 1(5) left, 100 CRONE DV(Y) around // (griffin) rampant, DVYTS around

2840) 4-, inner disc, 13mm, Thames, London; pp 69, 70, 211, 236; ₢, D (l)l (2) to left, (?D)...ON around

2841) 2+, 15//16mm, Thames, London; p 187; TO/NAR(O)/W(E) // TO• /SHOR/TE•
2842) 2+, 16/13+mm, Thames, London; pp 54, 55, 279; XXVI // portcullis (crude, no edge legend)

2844) 4+, 12/15/15/11mm, Thames, London; p 256; - // demi (griffin) left, erased (dragon's) head right, COM·EBOR around // crown over fleur de lis //-

2849) 4-, outer disc, inner square part, 12/13mm, Thames, London; p 73; - // * / 7.6·, EXON around top // (remainder missing)

2851) 2+, 16/17mm, Thames, London; p 176; RW / 1599 / CN // lion rampant

2853) 2-, 16(+)mm, Thames, London; p 176; I·T· / 1601 // (missing)

2854) 2-, fragment, Thames, London; pp 53, 54; (? crown over illegible device) // crown over portcullis, E left, 1567 (? or 1569) around

2866) 2-, 23mm, Thames, London; p 244; LXXVIII/XXXIII// shield with pear

2870) 2-, 23mm, Thames, London; p 188; (missing) // W/ escallop I..H escallop/I..(5)4

2871) 2-, 17mm, Thames, London; p 180; bird rising, wings addorsed // (missing)

2872) 2+, 26/27mm, Thames, London; p 115; ornately-shaped shield with two coronets, 16 left //EN(G)/ISH/L/CH(E)STE(R) /··:SAYE··; secondary stamp with incuse DO

2876) 2+, 15/17mm, Thames, London; p 176; CN/AT// (lion rampant)

2878) 2-, 17mm, Thames, London; pp 54, 55, 279; XXVI // crown over portcullis (crude)

2910) 2+, 15/16mm, Thames, London; p 184; castle // (stamp from ? defaced die)
2912) 2+, 14/16m, Thames, London; p 187; castle // IA(R)

2916) 2+, 16/16mm, Thames, London; p 192; (IID/IT/R(T)//(? castle)

2919) 2-, (estd.) c. 42mm, Thames, London; p 108; (fragment) (edge legend); secondary stamp with RD mark // (missing) [see 2920]

(2920) 2-, 42mm, Thames, London; p 108; (fragment) crown in ornately-shaped shield, 15...TSHE around // (beast) [Thought to be part of same seal as no. 2919; not counted separately for provenance totals.]

2923) 4-, 16/13/13mm, Thames, London; pp 152, 211, 257, 275, 278; XX/VIII// portcullis, (ES) ET 165 around // two shields, respectively with cross & harp, THE COM..O(N) around // two shields, respectively with cross and harp

2926) 2+, 18/19mm, Horsecroft, Bury St. Edmunds; p 51; - // crown over portcullis, E R to sides

2935) 4-, inner disc, 40mm, Mark Brown's Wharf site, Southwark, STW no. MBW 73 B layer 56, 156; pp 165, 167, 400; angel facing, holding palm branch & (? cup), two roses below each hand, rose (C)LORIA rose ..N rose EXCELSIS two roses around

2936) 2-, 45mm, Mark Brown's Wharf site, Southwark, STW no. MB A layer 73, 193; pp 104, 105, 400; three crowns in ornately-shaped shield, 12 left, ESTER 100 CRON(E) around // (missing)

2943) 4-, 13mm, Thames, London; p 95; (I & 2) missing) // coronet over R & L ligature, ESEXE around // (?-

2949) 2-, 24mm, Thames, London; p 53; + mark // crown over portcullis

2961) 2-, 44mm, Thames, London; p 104; three crowns in ornately-shaped shield, 15 71 to sides, (DVYTS COLCHESTER 100 CRONE) around // (? beast)
2983) 4+, outer discs, inner square parts, 13/14/14/13mm, ? Thames, London, ML no. 81.151;
p 212;
- //[*]/-77, TAVITON around top // two unicorns supporting (coronet) with three plumes through // -

2987) 4-, inner disc, 15mm, 'Oxfordshire';
pp 73, 236, 397, 399;
\star/\star1\star, EXON around top

2989) 4-, inner disc, 17mm, mill stream of River Avon, Salisbury;
pp 76, 211, 273, 397, 399;
coronet over R & L ligature, SO..E(R)S(ET) around

2992) 4+, 22/22mm, Stanham Farm, Crayford, Kent;
pp 163, 397, 400;
crown over arms of England, E R to sides, -'S'IVLII'PAO' VIALLE'LON around // arms of London in ornately-shaped shield;
* to sides, NDI(N)...L..NICIS around

2993) 4+, inner lozenge-shaped parts, 10/10mm, Thames, London;
p 221;
(lion passant), (P)/I(H) right // coronet over (R & L ligature), SVF...K around

2994) 4+, 12/15/15/12mm, Thames, London;
pp 70, 75;
- // - // crown over rose, D(ENSH)IRE around // (O)N

2995) 2+, 30/29mm, Thames, London;
p 110;
griffin rampant (edge legend) // YTS / LCHESTER/AEY 2300 /DR(A)ET/(1)571

2996) 2-, 45mm, Thames, London;
p 104;
three crowns in ornately-shield, 12 71 to sides, flower DV...1oo CRONE around // (missing)

2998) 4-, 14/12mm, Thames, London;
pp 70, 75;
(1 & 2 missing) // crown over thistle, I R to sides // DE/N

2999) 2+, 19/17mm, Thames, London, ML no. 81.266/29;
p 179;
XXVI/1628//(? bird)

3000) 2+, 30/28mm, Thames, London, ML no. 81.266/22;
pp 32, 39, 45;
crown over rose, PANNOR'IN C around // bulbous Lombardic F, rose left, sun right, 'S'SVBCI...(A)M! around (Lombardic letter)

3002) 4+, 12/13/13/13mm, Thames, London;
p 142;
lion rampant //+.//K, KENT around base // lion (statant) on (chapeau), (C) R to sides // C / A•D
3003) 4-, 9/12mm, Thames, London, ML no. 81.266/28; 
p 140; 
- // cinquefoil/COt/KENT/1616/ cinquefoil // (missing) //-

3004) 4-, lozenge-shaped parts, 14/15mm, Thames, London; 
p 141; 
(30) // COM/KENT// (3 & 4 missing)

3005) 2+, 22/23mm, Thames, London, ML no. 81.266/24; 
pp 51, 68; 
- // crown over portcullis, S·VL·PA·VEN...(ICO)...(V)O around (Lombardic letter)

3006) 2+, 16/16mm, Thames, London; 
p 51; 
-// crown over portcullis (illegible legend around)

3013) 2-, 24mm, Thames, London; 
pp 164, 165; 
crown over arms of England, E R to sides, S·VL...(LLE) around (fine lines, Lombardic letter) //-

3020) 2+, 15/15mm, Thames, London; 
p 186; 
castle // (T)00/HO(R)/T:

3022) 2+, 15/14mm, Thames, London; 
p 183; 
castle // TCB(N)/MPT

3041) 4+, 12/11/11/12mm, Thames, London, ML no. 81.316/2; 
p 100; 
9, 49 scratched above // lion passant (cast) // crown (cast) // crown over harp, CO...T(ER) around

3042) 2+, 22/22mm, Thames, London, ML no. 81.316/3; 
p 111; 
DVYT/COLCHE/R; secondary stamp with H I // three coronets & cross raguly in ornately-shaped shield, secondary stamp with p

3043) 2+, 23/20mm, Thames, London, ML no. 81.316/4; 
p 111; 
COLC(H) ...(S)/· TE(R)· // three coronets & cross raguly in ornately-shaped shield; secondary stamp with p

3049) 2+, 28/28mm, Thames, London. ML no. 81.534/7; 
pp 32, 39, 226; 
- // crown over rose, S'SV...IN COM SSEX around (Lombardic letter)

3051) 2-, 25mm, Thames, London; 
p 42; 
crown over ornately-shaped shield with arms of England, rose left, sun right, S VLNA...(A)NTC around (Lombardic letter) // crown over illegible device left, sun right
3052) 2+, 22//23mm, Thames, London, ML no. 81.534/8;
p 137 (fig. 31A);
- // crown over rose, G H to sides, HGH'SPAO'VEAL'C...KENT(C)
around (Lombardic letter)

3059) 2+, 17//17mm, Thames, London, ML no. 81.534/11;
p 44;
crown over ornately-shaped shield with arms of England, sword to
each side // crown over illegible device left & sun right

3064) 2+, 19//18mm, Thames, London, ML no. 81.534/15;
pp 183, 186;
OR/WICH/(1)656//TO /(H)ARR/..(W)

3065) 2-, 23mm, Thames, London, ML no. 81.534/16;
p 165;
arms of Stuart Britain // arms of London

3070) 2-, 23mm, Thames, London;
p 165;
(missing) // ornately-shaped shield, *PRO*PANNIS*LANIC around
(stars may be pierced)

3071) 2-, 13mm, Thames, London;
p 184;
castle // (missing)

3077) 2-, 19mm, Thames, London;
p 192;
N (floral motif left) / O/R / (WI) L / IC

3078) 4-, 10//10mm, Thames, London;
p 69;
-// VON / 4.. // (missing) //-

3086) 2+, 14//15mm, Thames, London;
p 182;
castle // (M) / (B). S/ 6 (2 or 3 7)

3100) 2+, 17//16mm, Thames, London, ML no. 81.534/19;
p 178;
(stamp from ? defaced die) // crown over rose

3110) 2+, 25//26mm, Thames, London;
p 51;
- // crown over portcullis, AO.VEN around (Lombardic letter)

3113) 2+, 20//22mm, Thames, London;
p 38;
crown over illegible device, fleur de lis & rose, ( ? Lombardic letter
legend around) //-

3121) 2+, 19//19mm, Thames, London;
p 189;
NO/RW(1)/(CH)//F/BW/W

345
3129) 2-, 21mm, Thames, London, ML no. 81.534/20; p 51; // E R over portcullis

3138) 2+, 20/23mm, Thames, London, ML no. 81.534/22; pp 44, 162; crown over ornately-shaped shield with arms of England, sword left, S...DON around (Lombardic letter) // crown over illegible device and sun

3139) 2+, 25/24mm, Thames, London; pp 51; .. G privy mark // crown over portcullis, VLI: PAOI around (Lombardic letter)

3142) 2- (fragment), ?c. 23mm, Marlowe II site, Canterbury, unstratified, no. 419; pp 137, 397, 399, 400; // crown over rose, (H) right, EN around (Lombardic letter)

3144) 2-, 20mm, Cakebread/Robey 4 site, Canterbury, layer 98 no. 55; pp 52, 139, 397, 399, 400; crown over portcullis, P. VENA(L)...KE(N) around (Lombardic letter)//-

3146) 2-, 23mm, Thames, London, ML no. 81.398/24; p 51; // (? crown) over portcullis

3148) 2+, 17/16mm, Thames, London, ML no. 81.398/26; p 183; castle, lion passant below //../M(MN)/...

3149) 4+, 14/16/15/12mm, Thames, London, ML no. 81.398/27 & 28; p 143; (?Y) // CAN/TERBV/+ RI/+/T/+ // crown over fleur de lis, C R to sides // C/ A*(D)

3151) 2+, 16/16mm, Thames, London, ML no. 81.522/66; p 184; castle, (lion) passant below // (illegible)

3152) 2+, 15/17mm, Thames, London, ML no. 81.522/50; p 178; castle // (? crown)

3155) 2-, 20mm, River Kennet, Newbury, Berkshire; p 44; crown over arms of England // (Lombardic-letter edge legend)

3158) 2+, 16/15mm, Thames, London; p 186; (illegible) // O. / HOR/(TE)

3159) 2+, 16/17mm, Thames, London; p 182; castle // 16(1) // WP(T)/(BK)
3160) 2+, 16//18mm, Thames, London;
p 181;
163(0)/ WH // castle

3162) 4-, inner disc, 27mm, Thames, London;
pp 72, 262;
DITON+ / AC(K)

3175) 2-, 20mm, Thames, London;
pp 27, 165, 229, 280;
crown over arms of England, E R to sides, PRO+CO(V)ENT(R) around // (missing)

3176) 2+, 24//25mm, Thames, London;
p 115;
two coronets in ornately-shaped shield, 18 right // LIS(H) /C(O)L/CHESTE/SAYE/1618

3177) 2+, 15//16mm, Thames, London;
p 177;
castle, G right // (?) rose

3179) 2+, 15//19mm, Thames, London;
p 245;
CN / AT/ 1600 // (lion ? rampant)

3185) 2-, 28mm, Thames, London;
p 245;
(missing) // shield, *WORCESTER... (HED) around

3187) 2+, 16//16mm, Thames, London;
p 178;
castle (stamp from ? partly-defaced die) // crown over rose

3190) (?) 1-, (fragment) 33mm+, Thames, London;
p 111;
ornately-shaped shield with coronet, illegible edge legend // (griffin) rampant

3194) 2+, 21//20mm, Thames, London;
p 54;
portcullis, V(Li)P around (Lombardic letter) // T*A

3204) 2+, 18//17mm, Thames, London;
p 185;
(castle), lion passant below // XXVII, plant motif with flowers above and below

3205) 4-, 11//12//11mm, Thames, London;
p 142;
(missing) // *=above, KENT around base // lion statant on chapeau // (incomplete stamp)

3206) 2+, 15//16mm, Thames, London;
p 178;
crown over rose // (stamp from ? defaced die)
3215) 2+, 15//16mm, Thames, London;
p 182;
castle //•escallop /-BC• (R) /•HER•I/ • 163

3219A) 4+, 18//16//16//17mm, Thames, London;
p 143;
-//- CAN/TERTVBV/•PRH•/••P•+// crown over fleur de lis, C R to sides // C / A•D

3219B) as 3219A, but lion rampant on 1
p 143

3221) 2+, 16//15mm, Thames, London;
p 178;
(castle, lion passant) below // crown over rose

3222) 2+, 15//17mm, Thames, London;
p 178;
castle, lion passant below // crown

3223) 2+, 16//16mm, Thames, London;
p 187;
castle // TO acorn // AR(R)

3226) 2+, 17//20mm, Thames, London;
p 186;
castle, (lion) passant below // R/WE

3227) 2+, 17//16mm, Thames, London;
p 184;
castle, lion passant below // (illegible)

3233) 2-, 47mm, Thames, London, ML no. 81.422/2;
pp 104, 105, 106;
ornately-shaped shield with three crowns, •DVYT...(C)H(E..T)ER •100• CRON around; secondary stamp with RF privy mark // (missing)

3236) 2+, 19//19mm, findspot unknown, NO no. 6.944(1), [no. 151 on label];
p 183;
ORW/ICH/(1)654// HC/(N)ROW/ (16)/...

3238) 2+, 19//20mm, findspot unknown, NO no. 6.944(2);
p 188;
WOR/WICH// RO/(W)CB/ 6•56 / WP(P)

3240) 2+, ?//18mm, Costessey, Norfolk, (recorded from a rubbing);
p 51;
[unrecorded] // crown over portcullis

3247) (?) 2-, (fragment) 42+mm, , Thames, London;
p 117;
crown over rose in ornately-shaped shield, OWNE B around // (? scales of beast)

3256) 4-, scallop-shaped inner parts, 17//16mm, Thames, London;
p 122;
crown over arms of England, C left // •3•, GLS...1...2 around

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3257) 4-, scallop-shaped inner part, 16mm, Thames, London; p 123; 6·/TN, GKLOSTERS·16(8)2 around

3263) 2-, 38mm, Thames, London; p 106; (missing) // griffin (? statant), E(D) around

3265) 2-, 18mm, Thames, London; p 46; // (?) Lombardic 'F'

3267) 4-, inner discs, 12//12mm, Thames, London; p 221; RH, LK around // harp

3268) 4-, 'star'-shaped inner part, 16mm, Thames, London; p 144; E, CA(N).... S around

3269) 2+, 15//16mm, Thames, London; p 178; (castle) // crown over rose

3271) 2+, 20//22mm, Thames, London; p 99; // crown over rose, (COLC)HESTER around

3281) 2+, 27//27mm, Thames, London; p 110; griffin segreant (i.e. rampant) // D(V)/ COLCH(E)S /SAEY/*DRA/I(57)

3282) 2+, 22//24mm, Thames, London; p 115; ornately-shaped shield with two coronets // LIS(H)/COL/H(I)STER /(Y)E/(1)618

3283) 4+, 20/44//43//21mm, Thames, London, ML no. 81.647; pp 113 (fig. 28), 114; lion (passant) // three coronets & vertical stave raguly in ornately-shaped shield, 16 18 to sides +ENGLISH·COLCHESTER·SAYE around // castle with pennons on towers, hatted male figure with partisan-type weapon standing, facing in offcentred entrance, at top of steps // $ mark

3287) 4+, 11//14//14//10mm, Thames, London; p 95; // crown over RL // coronet over R & L ligature, •• left, ES(E)XE around

3288) 4+, 16//15//15//18mm, Thames, London; p 143; lion rampant // CAN/TERBV/ IR/RI /J/ T/J // lion statant on crown // C/AD
3306) 2+, 17//16mm, Thames, London; pp 176, 187; castle (no room for lion) // TO/AR

3308) 2-, 24mm, Thames, London; pp 52, 53, 54, 208; crown over portcullis, O(M)ERS(E) around; secondary stamp with teasel cob, H right // (missing)

3312) 2+, 14//14mm, Thames, London; pp 56, 175; - // crown over thistle, I left, OM NORFIA around

3314) 2-, 38mm, Thames, London; pp 173, 193, 194; castle, lion passant below, C N to sides // portcullis

3321) 4-, 14//16//16mm, Thames, London; p 143; lion rampant // CAN/TERBV//RI/ // crown over fleur de lis, C R to sides // (missing)

3328) 4+, 8//13//13//10mm, ? Thames, London, ML; pp 94, 219, 405; -// TB, SVFFOLKE around // shield with cross //

3329A) 4-, inner disc, 11mm, ? Thames, London, ML; p 218; 80,*S*V*F*O*L*K around

3329B) (as 3329A) p 218

3329C) (as 3329A) p 218

3330) 4-, 10//13mm, ? Thames, London, ML; p 218; - // SVF/FOL* K // (missing) // (incomplete)

3332) 4+, outer discs, inner irregularly-shaped part, 14//16mm, ? Thames, London, ML; pp 68, 121, 236, 274; (illegible) // WILTSAV... around // (missing) // E

3333) 4+, 15//16//16//15mm, ? Thames, London, ML; pp 255, 275; (obscured) // Charles II-type head, OF ENG LAND around, incuse border of alternate // crown, 4 ½ to sides // (8)8// YOR/KE

3334A) 4+, 16//15//15//16mm, ? Thames, London, ML; p 143; lion rampant // CAN/TERBV+/RI+/ // crown over fleur de lis, C R to sides // C/AD

3334B) as 3334A, disc 2 only p 143
3334C) as 3334B
p 143

3335) (?) 2-, 20mm, ? Thames, London, ML;
p 143;
heart, CANTERB..RY ♦ around // (illegible device)

3337) 4-, inner discs, 14//14mm, Thames, London;
p 210;
NB, +SOM:* around // crown over rose

3339) 4-, inner discs, 17mm, ? Thames, London, ML;
p 123;
GLOS/TER/4 ¼

3340) 4-, inner discs, 12//12mm, ? Thames, London, ML:
p 142;
* /P, KENT around base // lion statant on chapeau, C R to sides

3341A) 4+, 13//14//14//13mm, ? Thames, London, ML;
p 143;
lion rampant // CAN/TERBV/¶RI / ¶P // crown over fleur de lis,
C R to sides // (illegible)

3341B) as 3341A, disc 1 missing
p 143

3341C) as 3341A, disc 4 missing
p 143

3342) 4+, outer discs, inner scallop-shaped parts, 11//16//17//12mm,
? Thames, London, ML;
p 122;
(obliterated) // TN, GLOSTERS around // crown over shield with arms
of England, C R to sides // (?)-

3344) 2-, 21mm, ? Thames, London, ML;
pp 189, 192;
K'O(R)IC(H) // (missing)

3346) 4+, 13//18//17//14mm, ? Thames, London, ML no. '1942.18'16.51';
p 142;
- // OMI /TATE/EN(T) // shield with arms of Stuart Britain, illegible
device above, (? R) right // (folded)

3347A) 4-, lozenge-shaped inner part, 13mm, ? Thames, London ML;
p 141;
COM/KEN/T

3347B) as 3347A
p 141

3347C) as 3347A
p 141
3348) 4-, inner disc, 12mm, ? Thames, London, ML; p 142; 
\[3349\) 4-, lozenge-shaped inner part, 15mm, ? Thames, London, ML; p 141; 
\[3350\) 4-, 15//18mm, ? Thames, London, ML; pp 134, 142; 
31// 32, rose left /KEN; secondary stamp with XXII // (3 & 4 missing)
\[3351\) 4-, inner lozenge-shaped part, 16mm, ? Thames, London, ML; p 141; 
\[3352\) 4-, inner disc, 18mm, ? Thames, London, ML; p 142; 
rose / COMI/TATE/KEN/I
\[3353\) 2-, 20mm, ? Thames, London, ML; p 192; 
(missing) // (B)IWI/B/E
\[3354\) (? ) 2-, sub-lozenge shaped part, 19mm, ? Thames, London, ML; p 192; 
(R)WI/CH//B/H
\[3355\) 2-, 20mm, ? Thames, London, ML; p 192; 
O(R)/W//M/...
\[3356\) 2+, 18//20mm, ? Thames, London, ML; p 190; 
\[3357\) 2+, 19//22mm, ? Thames, London, ML; p 192; 
(R)WI/(C)H// S/G/...
\[3358\) 2-, 17mm, ? Thames, London, ML; p 192; 
NO/RW// (missing)
\[3359\) 2+, 18//18mm, ? Thames, London, ML; p 191; 
B(S)/LBB(T)//(C)GB//(H)//N(O)/(R)WI/CH
\[3360\) 2-, 18mm, ? Thames, London, ML; p 192; 
(N)O/RWI/...// (missing)
\[3361\) 2+, 19//19mm, ? Thames, London, ML; p 191; 
B(S)/BBT//(G)BB//NO/RW//(CH)

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3366) 2-, 18//17+mm, ? Thames, London, ML; p 192; (R)/WI/(C) //S/R

3367) 4-, inner disc, 18mm, ? Thames, London, ML; p 126; (rose)/ HAMP/SHIRE

[3368] copper alloy disc, 37mm, (? cast), (?) never lost, BM (CM) no. 32874 21.67; p 167; arms of London, wreath below, DE•LONDI• • NO around top //angel facing, holding palm branch right & (?) lantern left, •:GLORIA•IN•EXCELSIS•:• around

3370) 4-, inner disc, 22mm, findspot unknown, BM (CM) no. 36 6 10 64; p 165; angel facing, holding palm branch right & (?) lantern left, GLORIA rose IN rose EXCELSIS (?) rose around

3371) 4-, inner disc, 38mm, findspot unknown, (?)bought Manchester, BM (CM) no. 1906 Parkes 11, Weber gift 5027; p 166; angel facing, holding (? orb) left, right arm (?)raised, D E below arms, ••••GL... IN EXCELSIS around

3374) 2-, 18mm, Thames, London, ML; p 46; -// Lombardic 'F' (thin), fleur de lis to each side

3377) 2+, 14//15mm, Thames, London, ML; p 183; B/(W)GSC/R•C// castle

3378) 4-, outer disc, 13mm, ? Thames, London, ML; p 151; 34 // L(A)/CAS/(ER)

3379) 4-, lozenge-shaped inner part, 16mm, ? Thames, London, ML; p 93; COM/ESSEX/ acorn D acorn

3380) (?) 4-, outer disc, 11mm, ? Thames, London, ML; p 93; - // pierced mullet / SSEX/ (F)

3381) 4-, inner disc, 12mm, ? Thames, London, ML; p 93; * over T, ESEX around base

3382A) 4-, inner disc, 15mm, ? Thames, London, ML; p 74; */*81*, •EXON• around

3382B) as 3382A p 74

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3384) 4-, inner disc, c. 45mm, Stratford St. Mary, Suffolk; pp 97, 397;
   (? ) cock, (A)LL..O O B around

3385) 2-, 32mm, Thames, Fulham, CO no. 293.1980; p 106;
   three coronets & cross raguly in ornately-shaped shield, 15 left,
   (O)O•CROS•157(1) around // (? beast)

3386) 4-, inner disc, 16mm, ? Thames, London, ML; p 74;
   *//, (D or E)... •O•N around top

3387) 4-, 11//13mm, ? Thames, London, ML; p 75;
   // - // (missing) // (E)X/ON

3388) 4-, inner disc, 14mm, ? Thames, London, ML; p 74;
   7.. /*, •E•X•O•N around top

3389) 4-, 12//14mm, ? Thames, London, ML; p 74;
   // */*, •E•X•O•N around top // (3 & 4 missing)

3390) 4-, 10//10mm, ? Thames, London, ML; p 69;
   // DEVO/ 6'(4) // (missing) // -

3403) 2-, 21mm, ? Thames, London, ML; p 111;
   three coronets & cross raguly in ornately-shaped shield // (illegible)

3422) 1+, rectangular, 25X12mm, ? Thames, London, ML; p 112;
   crown, C right // -

3432) 2+, 17//17mm, ? Thames, London, ML; p 46 (fig. 10B);
   // crown over thin Lombardic 'F', ..O(N):FAVTI. (Lombardic letter)
   around

3445) 2-, 29mm, ? Thames, London, ML; p 110;
   (missing) // (O)L..ESTE/A(E)Y•230/PRA

3464) 2-, 26mm, ? Thames, London; p 115;
   (missing) // EN/\L/\CH/SAYE/(1)6(18)

3472) 4-, inner disc, 15mm, ? Thames, London, ML; p 218;
   80, •S•V•F•O•L•K around

3473) 2+, 20//21mm, ? Thames, London, ML; p 190;
   PR/CPV/GP//(W1)
3476) 2+, 15/15mm, ? Thames, London, ML; p 196; OL/N, (I). WICH around // ship (incomplete)
3479) 2+, 16/16mm, ? Thames, London, ML; p 187; (I)O/(I)ARO/(W) // (legend)
3480) 4-, outer lozenge-shaped part, inner 'star'-shaped part, 9/15mm, ? Thames, London, ML; p 92; // 80, E S S E X around // (3 & 4 missing)
3487) 2-, 20mm, ? Thames, London, ML; p 192; (missing) // NO/(P)
3493) 2-, 17mm, ? Thames, London, ML; p 177; TS/ (6)0 // (missing)
3500) copper-alloy matrix, 30mm, (device recorded from modern impression), Pulham, Norfolk, NO, no. 76.94 (148); pp 40 (fig. 7), 90, 401; crown over fleur de lis, in six-arched tressure, S'SVBSIDII PANNOR IN COM ESSEX; (Lombardic letter) around
3504) 2+, 18/16mm, ? Thames, London, ML; p 183; castle // T(L)/C/..
3507) 2-, c. 24mm, ? Thames, London, ML; pp 97, 99, 273; (missing) // crown over (?) rose, (BR)ANT around
3534) 4-, inner disc, 13mm, ? Thames, London, ML; pp 141, 224, 274; ¶ / SV(RR)
3555) 2+, 18/20mm, ? Thames, London, ML; p 191; N(O)/(R)WI/H // B C & S stamped together /W..BC/...B
3578) 4-, inner disc, 13mm, ? Thames, London, ML; p 73; W, EXON around top
3584) 4+, 18/18/19/19mm, ? Thames, London, ML; p 93; mark // (? P), ESEX around base // lion (statant or passant), C left // (? portcullis)
3603) 4-, 15/15mm, ? Thames, London, ML; p 256; XIXP/XAIY // demi griffin left, (illegible device right), COM·EBOR around; (? cinquefoil) secondary stamp // (3 & 4 missing)
3605A) 2-, 26mm, ? Thames, London, ML;
p 244;
two pears & fess in shield, (P).. around // (X)XVIII/(X)XXII..

3605B) as 3605A, XXVIII/XXXIII on 2
p 244

3605C-E) as 3605A, disc 1 only
p 244

3605F) as 3605A, XVIII/..XXII- on 2
p 244

3609) 2+, 19//19mm, ? Thames, London, ML;
pp 176, 184;
castle (no lion below) // XXVI(I) over plant motif with three flowers

3614) 2-, 18mm, ? Thames, London, ML;
pp 32, 41 (fig. 8B), 42, 279;
VIII//crown) over sun & rose dimidiated & conjoined (crude)

3646) 4-, 13//15mm, ? Thames, London, ML;
p 256;
(E)A/CH/(D) // erased beast's head left, demi griffin right,
:C(OM):EBOR: around // (3 & 4 missing)

3652) 2-, 17mm, ? Thames, London, ML;
p 177;
castle, P left // (missing)

3656) 2+, 19//20mm, ? Thames, London, ML;
p 184;
castle, lion passant below // (illegible)

3657) 2-, 15mm, ? Thames, London, ML;
p 177;
castle, G right // missing

3658A) 2+, 16//17mm, ? Thames, London, ML;
p 186;
TO/(S)HOR/(TE) // castle, (lion passant) below

3658B) as 3658A
p 186

3658C) as 3658A
p 186

3659) 2+, 18//18mm, ? Thames, London, ML;
p 186;
castle // SHO/T

3661) 2+, 19//18mm, ? Thames, London, ML;
p 192;
(E/I)TA/RT(E/A)L(I)T// castle, lion passant below
3662) 2+, 19/18mm, ? Thames, London, ML; 
p 187; 
castle, lion passant below // T(O)/WAR/(O)

3663) 2+, 14/15mm, ? Thames, London, ML; 
p 182; 
castle // H/R(C)/20

3664) 2-, 15mm, ? Thames, London, ML; 
p 184; 
castle // (illegible)

3669) 4+, 10/14//13//10mm, ? Thames, London, ML; 
p 221; 
- // R, ..F around // cock standing // (?)-

3675) 4-, inner disc, 16mm, ? Thames, London, ML; 
p 255; 
demi dragon's or griffin's head left, erased (? lion's) head right, CO(M EB) around

3680) 4-, 9//8mm, ? Thames, London, ML; 
p 197; 
(1 & 2 missing) // unicorn passant, ½ above // (?)-

3682) 4-, inner disc, 39mm, ? Thames, London, ML no. 10,258; 
p 165; 
angel facing, holding (palm branch) right & illegible object left, GLORIA escallip IN EXCELSIS- escallip around [see no. 4711]

3686) 4-, 16//12mm, ? Thames, London, ML; 
p 74; 
(1 & 2 missing) // lion couchant on inverted portcullis, 81 to sides // (incomplete stamp)

3693) 2+, 17//17mm, ? Thames, London, ML; 
p 196; 
WAL/ON, (legend around) // ship

3694) 2-, 19mm, ? Thames, London, ML; 
p 243; 
three pears & fess in shield, STE(R) S around // (crown) over rose

3702) 2-, 22mm, ? Thames, London, ML; 
p 245; 
- // two pears & fess in shield, (I C) around

3709) 2-, 19mm, ? Thames, London, ML; 
p 244; 
† I // pear & fess in shield

3710) 2-, 23mm, ? Thames, London, ML; 
p 245; 
three pears & fess in shield, (E)D around // (obscured)
3740) 2-, 19mm, ? Thames, London, ML; p 192; ID/ITAS/(A)RTES/ALIT // (illegible)

3743) 4-, 10mm, ? Thames, London, ML; p 75; - // (2 & 3 missing) // (E)X/ON

3748) 2+, 19//21mm, ? Thames, London, ML; p 192; IDE/ITAS/(A)RTES/(A)LIT // (castle), (lion) passant below

3778) 2+, 19//19mm, ? Thames, London, ML; p 185; castle, lion passant below / (? XX) (stamp from ? defaced die)

3788) 2+, 13//17mm, ? Thames, London, ML; p 186; castle // O/O

3805) 4-, inner discs, 18//18mm, ? Thames, London, ML; p 142; (? crown over rose), C left // 'P', (K)ENT around

3814) 4-, inner disc, 17mm, ? Thames, London, ML; p 93; 'P', EX around

3823) 2+, 18//18mm, ? Thames, London, ML; p 191; B(S)/LBBT/(I)GBB/HP // (illegible)

3829) 2+, 21//20mm, ? Thames, London, ML; p 190; ..//BB/BPP//H

3830) 4-, inner discs, 14//13mm, ? Thames, London, ML; p 76; rose // coronet over R & L ligature, EXON around

3840) 2-, 17mm, ? Thames, London, ML; p 192; BD/...//(W)I

3843) 2+, 15//15mm, ? Thames, London, ML; p 183; castle, lion passant below // N•/WAR (poorly registered)

3847) 2+, 18mm, ? Thames, London, ML; p 192; (B or D B)/BIWI/(WR) // (obscured)

3871) 2-, 15mm, Thames, London; p 178; crown over rose // (missing)
3872) 4-, inner discs, 15/19mm, Thames, London;  
   p 78;  
   - / tower with portcullis, inverted key to each side

3874) 2-, 17mm, Thames, London;  
   p 47;  
   king seated on throne, facing, holding sword left & sceptre right,  
   wearing tunic with arms of England, (Lombardic-letter legend around) // crown over shield with arms of England

3876) 4-, 10/12mm, Thames, London;  
   p 95;  
   - // coronet over RL // (3 & 4 missing)

3881) 4+, 10/12/11mm, Thames, London;  
   p 142;  
   lion rampant // * over P, KENT around base // lion statant on chapeau, C R to sides // C A(D)

3888) 2+, 20/19mm, Thames, London;  
   p 255;  
   - // thistle, C(or l) R to sides, COM:EBO around

3910) 2+, 19/21mm, ? Thames, London, ML;  
   p 191;  
   BL/(W)BB(F)/PHG(B, P or R)/GS//(NO/R)W(I)

3911) 2+, 21/20mm, ? Thames, London, ML;  
   p 190;  
   (R)WI(/H // (R)/GLN/(B)BM/(SR)

3921) 4+, 10/10/10/10mm, Thames, London;  
   p 69;  
   - // CO/(D)EV// crown over fleur de lis //-

3924) 2-, 23mm, Thames, London;  
   p 150;  
   34 // crown over thistle, C left, ERY around

3928) 2-, 17mm, Thames, London;  
   p 180;  
   (missing) // bird's wing (addorsed)

3934) 2+, 21/20mm, 195-6 Moulsham Street site, Chelmsford, CLM no. S42, XII/I;  
   pp 51, 52, 400;  
   - // (crown) over portcullis, (N)ORV(O) around (Lombardic letter)

3938) 2-, 21mm, ? Thames, London, ML;  
   pp 56, 57, 61, 150, 217;  
   A, (l)II around top // thistle, (l) R to sides, (CO)M:(?BV or SV) around

3955) 4-, 9/13mm, ? Thames, London, ML;  
   p 71;  
   - // - // (missing) // DE /VON

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3960) 2+, 24//25mm, Thames, London; 
   p 115; 
   two coronets & vertical stave raguly in ornately-shaped shield, 18 
   right // LISH/#C(O)L/CHEST(E)/SAYE /1618

3966) 4+, 10//13//13//10mm, Thames, London; 
   p 218; 
   - // (S)VF/OL* /K// crown over thistle, C left // - 

3969) 2+, 20//23mm, Thames, London; 
   p 190; 
   GG/WCB/RCEB/WL// (illegible) 

3995) 4-, inner disc, 18mm, ? Thames, London, ML; 
   p, 210; 
   NB, O(?L)...(ERSET) around 

4008) 4-, inner disc, 38mm, Thames, London; 
   p 166; 
   angel standing facing, holding palm branch left, unclear object right, 
   16 33 (rose) GLORIA ..N· EXCELSIS rose around

4011) 2+, 'spade'-shaped first part, round second part, 20X28//16mm, 
   Thames, London; 
   pp 49, 50; 
   (cast) X..II(I)/(X)XII; secondary stamp with crown over arms of 
   England, (E) R to sides // - 

4016) 2-, 17mm, Thames, London; 
   p 177; 
   TS/160// lion (? rampant) 

4017) 4+, lozenge-shaped parts, 9//12//12//11mm, Thames, London; 
   p 95; 
   - // illegible device, VNT OF ESS around // crown, I R(or B) to 
   sides // - 

4020) 4-, lozenge-shaped inner parts, 15//14mm, Thames, London; 
   p 141; 
   COM/KENT/1620// arms of Stuart Britain, I'R to sides

4026) 2+, 24//24mm, Thames, London, ML; 
   pp 158, 199; 
   shield with: on a chevron between three leopards' heads, each 
   holding a shuttle in the mouth, three roses, 
   K(ET)TERIN(G N)OR(TH)AMP - around // - 

4027) 2+, 20//19mm, Thames, London; 
   p 190; 
   AB/FCRD/SR(C)P/(RC)//NO/RW1/(CI) 

4029) 4+, 11//14//16//11mm, Thames, London; 
   p 69; 
   - //*, ·DEVON· around top, 81 below// lion couchant on inverted 
   portcullis, 8 1 to sides // W
4030) 4+, 10/11/11/11mm, Thames, London;
p 218;
- // 16/79, ♠SVF♠ FOLK around // harp, (?)*1*+*+ around // -

4033) 2+, 19//20mm, Thames, London;
pp 52, 242;
- // crown over portcullis, R/* right, (OM WOR) around (Lombardic letter)

4044) 2+, 20//21mm, Thames, London;
p 99;
$ mark // crown over rose, C...S(T)ER+ around

4045) 2+, 12//12mm, Thames, London;
p 175;
- // crown over thistle, I left, (R)F* A* around

4051) 4+, 13//14//14//15mm, Thames, London;
p 220;
- // F, CO (S) around // portcullis // rose, R right;
incuse R on strip connecting 1 & 2

4057) 2+, 20//21mm, Thames, London;
p 190
NO/RWI/H//BT/BR/V

4058) 2+, 18//17mm, Thames, London;
pp 56, 242;
- // crown over thistle, I R to sides, WIGOR around

4059) 2+, 20//20mm, Thames, London;
p 192;
ID(E)/ITAS/(R)TES/LIT// castle, lion passant below

4064) 2+, 21//18mm, Thames, London;
p 52;
crown over portcullis, EAL'I CO (Lombardic letter) around // crown
over portcullis, C...(? NT) (Lombardic letter) around

4067) 4-, inner discs, 14//14mm, Thames, London;
p 143;
CAN/EBV/R1+/P+// crown over fleur de lis, (C) R to sides

4075) 2+, 36//42mm, Thames, London;
p 109;
three crowns & cross raguly in shield with scrolls, (SH...(L)CESTER
S...E) around; secondary stamp with P // griffin segreant (i.e.
rampant)

4086) 4-, inner disc, 16mm, findspot unknown;
p 245;
shield with on a chevron between three leopards' heads, each holding
in the mouth a shuttle, three mullets, ♠KIDERMI(NS)TER* around

4090) 4-, inner disc, 27mm, Exeter;
pp 76, 397, 398, 399;
eagle displayed, ♠JAMES GRANT EXON around
4096) 4-, inner disc, 17mm, findspot unknown; pp 100-01; portcullis, 3 below, COLCHESTER around, incuse border

4097) 4-, inner disc, 14mm, findspot unknown; pp 71, 80; •£, •2• DORSET★ ★ around

4101) 4-, inner lozenge-shaped part, 12mm, findspot unknown; p 141; (C)O(M)/(K)EN(T)/(I)620

4102) 4-, inner disc, 17mm, findspot unknown; pp 59, 275; TD, • BERKS: around

4103) 4-, inner disc, 14mm, findspot unknown; p 74; •78, • EXON • around

4104) 4-, inner disc, 14mm, findspot unknown; p 72; W /68, (E)X ON around

4108) 2+, 22/22mm, findspot unknown; pp 195, 196; crown over portcullis; secondary stamp // castle, lion passant below, (C) left, IS•NOR(W) around; secondary stamp

4111) 4+, inner square parts & outer discs, 12/13/13/12mm, findspot unknown; pp 212, 275; - //•76•, TAVTON • around top // crown in triple border // -

4114) 4+, 12/16/15/12mm, Trig Lane site, London, layer 1076, ML (DUA) no. TL 74 2880; pp 256, 400; SE/RC(I)//erased object left, demi (griffin) right, •C... (E)BOR• around // fleur de lis // VI/VII

4115) 4+, 13/13/13/14mm, Thames, London; p 221; - // RH, FO(L) around // crown over harp // windmill, A D to sides

4116) 4-, 'star'-shaped inner part, 14mm, Thames, London; pp 212, 236; ⋅77•, WILTS around top

4117) 4+, round outer & square inner parts, 12/13/13/13mm, Thames, London; p 73; - //•77•, EXON around top // two unicorns supporting coronet with three plumes through //-

4118) 2+, 19/20mm, Thames, London; p 189, 191; (N)/OR/WIC/H//(LL)/IBHC/WLH/M

362
4126) 4-, inner discs, 18//18mm, Thames, London; p 94;
     ESEX/TB // unicorn rampant, crown over R right

4135) 2-, 17mm, ? Thames, London, ML; p 188;
     BD/(S)PR/(6)/B// (missing)

4154) 2+, 19//20mm, ? Thames, London, ML; p 191;
     B../ CCMD/MDPH/AC///OR/WI/H

4166) 2-, 40+mm, Thames, London;
     p 222;
     - // lion passant over hound sejant

4167) 2+, 20//20mm, Isle of Grain (? spoil dumped from London); p 111;
     three coronets & cross raguly in ornately-shaped shield; secondary
     stamp with fleur // (DV)/OLCES/R/AY/5; secondary stamp with
     acorn over P

4168) 2+, 20//20mm, Isle of Grain (? spoil dumped from London); p 191;
     NO/RWI/CH///P(I)B(C)/G(C)/W

4169) 2-, 40mm, Isle of Grain (? spoil dumped from London); p 104;
     griffin passant, *BAYE*15(7) around // (missing)

4173) 4+, 13//14//13//13mm, Thames, London; pp 75, 275;
     - // Charles II-type head, OF ENG LAND around// crown, 1 ½ above
     // EX/(O)

4184) 2-, 44mm, ? Thames, London, ML; p 104;
     three crowns in rudimentary shield, 15 left, "DVY... (ER)... (I)... (ONE)
     around // (missing)

4203) 2+, 22//23mm, ? Thames, London, ML no. 1941(or 2) 7, (16,150 on
     envelope); p 242;
     GO(R)N

4245) 2+, 21//22mm, Copenhagen, Denmark, NMD no. D43-1951; p 55;
     (scratches) // (?) portcullis (no legend)

4253A) 4+, 12//40//40//12mm, Alborg-egvesen, Denmark, NMD no. D10054;
     pp 165, 166, 397, 400;
     - // arms of London, wreath, rose DE rose LONDI rose NO rose
     around // angel facing, holding palm frond right & (? bunch of
     flowers or frame with teasels) left, rose at navel, rose GLORIA rose
     IN rose EXCELSIS • rose around // -
4253B) 4-, NMD (? Denmark - no number or findspot);
pp 165, 166, 397, 400;
in inner disc as 2 of no. 4253A, with gold-coloured coating & holed

4254) 2-, c. 27mm, Næstved, Denmark, NMD no. D2634;
pp 106, 397, 399;
three coronets in ornately-shaped shield, 15 71 to sides, ...S...
around // scales (of beast)

4255) 2-, 42mm, Slotsholmsgarde 8, Copenhagen, Denmark, NMD
no. D11068;
pp 111, 397, 399;
two crowns (only) in ornately-shaped shield, 15 71 to sides, (edge
legend) // (? beast)

4266) 2+, 15//15mm, ? Thames, London, ML;
p 181;
Al // castle

4272) 4-, lozenge-shaped outer part, 'star'-shaped inner part, 9//15mm,
? Thames, London, ML;
p 122;
- // 3/IN,*(G)LO(ST)ER*S16 around

4306) 2-, 18mm, Thames, London;
pp 52, 67;
portcullis, EV (Lombardic letter) around // (missing)

4308) 2+, 19//18mm, Thames, London;
p 78;
( scratched) 3 1 // W,V,VERTON around

4310) 2+, 19//18mm, Thames, London;
p 190;
(N)/(R)WI/(C)H//(CC)/HPBG/GBL(I)/C

4315) 4-, inner disc, 15mm, Thames, London;
pp 94, 218, 269, 274;
ESEX/TB

4319) 1+, rectangular, 24X14mm, Thames, London;
p 112;
crown, (C) right (multiple-struck) // -

4321) 4+, 12//14//15//12mm, Thames, London;
pp 143, 167;
lion rampant // CAN/TERBV/+RI+/+F+// cross in shield,
•THE•STA:SVBSIDIE•SEA:rose around // C/AD

4330) 2-, 23mm, Thames, London;
p 150;
32 // (crown) over thistle, I R to sides ES(T) around

4333) 2+, 16//17mm, Thames, London;
p 178;
(stamp from ? defaced die) // crown over rose
4335) 2+, 15/15mm, Thames, London; p 182;
castle, lion passant below // DM • WP/* /D • (L)/ 16(2 or 3)
4336) 2+, 15/15mm, Thames, London; p 186;
castle // (AR/E)
4340) 4+, 10/10/10/9mm, Thames, London; p 69;
- //0/(E)VO(N)/4/ crown over fleur de lis, dot to each side // -
4343) 4+, 15/17/18/16mm, Thames, London; p 142;
3 • 2/• rose • /COMI/ATE/K..NT //• rose • / shield with arms of Stuart Britain, R right // W(O)
4344) 4-, 16/16mm, Thames, London; p 143;
lion rampant // TERBV/*RI/* /T // (missing) // C/D
4354) 4-, lozenge-shaped outer part, inner disc, 12/13mm, Thames, London; p 92;
(?) - // 16/79, E • S • E • X • around // (3 & 4 missing)
4355) 4-, 14/16mm, Thames, London, ML (215 on label); p 74;
- //• /79, EXON around top // (3 & 4 missing)
4356) 2+, 20/20mm, ? Thames, London, ML; p 188;
(N)OR/(W)ICH/656//W/16/MWP/R
4357) 4-, lozenge-shaped outer part, irregular 'star'-shaped inner part, 10/13mm, ? Thames, London, ML (209 on label); p 217;
(incuse) IW//16/77, SVF • FOLK rose around // (3 & 4 missing)
4358) 4-, 14/17mm, ? Thames, London, ML; p 142;
- // rose / COMI/TATE/KENT/1628• // (missing) // 3
4359) 4-, inner disc, 12mm, ? Thames, London, ML; p 140;
COM/KENT/1616
4360) 4-, lozenge-shaped inner parts, 15/15mm, ? Thames, London, ML; p 140;
CO(M)/KENT/1618/* /SEA/RCH* /ED/*
4365) 4-, inner disc, 18mm, ? Thames, London, ML; p 209;
H/ • 1611 around top, SO ...(SE) around
4367) 4+, lozenge-shaped parts, 14//15mm, ? Thames, London, ML; p 141;
- // K(E)N(T)/ 1620 // (crown) over shield with arms of Stuart Britain, I R to sides // -

4368) 4+, 13//16//15//13mm, ? Thames, London, ML; pp 209, 210;
(? stamp from defaced die) // S, SOMERSET around // crown over thistle, 16 12 to sides // D, E around

4369) 4+, lozenge-shaped parts, 15//14//13//17mm, ? Thames, London, ML; pp 92, 271;
64/OM/SS(E)/X/ (date ?); secondary ☄ mark // 162 over shield with arms of Stuart Britain, (? I) right; secondary ☄ mark // -

4373) 2+, 16//16mm, ? Thames, London, ML; p 51;
crown over portcullis, E R to sides of crown, (edge legend) // -

4374) 2+, 18//20mm, ? Thames, London, ML; pp 174, 177, 179;
crown over rose, E left // castle, lion passant below

4375) 2-, 26mm, ? Thames, London, ML; p 53;
(crudish) crown over large E // portcullis

4376) 4-, inner discs, 12//13mm, ? Thames, London, ML; p 210;
NB, + SOMER around // crown over thistle, C R to sides

4379) 4-, inner disc, 39mm, Thames, London; p 165;
arms of London, wreath, LONDI+NO+ around

4393) 2+, 45//42mm, Thames, London; p 114;
castle, hatted male figure standing, facing, in offcentred doorway at top of steps, holding partisan-type weapon; secondary E+P stamp // three coronets & vertical stave raguly in ornately-shaped shield, 1(6) 18 to sides, ☄ENGLISH·COLCHE(S)..E(R)..AYE around

4410) 2-, 45mm, Thames, London; p 95;
(missing) // (edge legend) 100 ESEX

4413) 4+, 13//15//16//13mm, Thames, London; pp 255, 256, 270, 272;
XIIIY/XXIXP// demi griffin, (C)OM E(BOR) around // shield with arms of Stuart Britain, R right // (scratches)

4416) 4+, 10//13//12//11mm, Thames, London; p 221;
- //R, H, *SVF(FOL) around // crown over harp // -

366
4417) 2+, 16mm, Thames, London; p 176; TL/160/ (CN)// (foot of beast)

4423) 4+, 10//10//10mm, ? Thames, London, ML; p 69; - // VO/64/(N)// crown over harp // (missing)

4455A) 2+, 16//17mm, ? Thames, London, ML; p 178; crown over rose // castle, (lion) passant below

4455B) as 4455A p 178

4455C) as 4455A, but no stamp on 2 p 178

4455D) as 4455A, but 2 missing p 178

4456) 2+, 18//19mm, ? Thames, London, ML; p 178; (crown) over rose // castle, lion passant below

4457A) 2+, 17//18mm, ? Thames, London, ML; p 178; - // crown over rose, R right, (CO)Mx(N) ...(R)WIS around

4457B) as 4457A, but edge legend ... NOR... on 2 p 178

4458) 2+, 42//42mm, Thames, London; p 104; griffin segreant (i.e. rampant), COLC(ES)TER•BA around // three coronets in ornately-shaped shield, 15 7(1) to sides, DV...R•100•CRONE around

4475) 4+, 11//14//14//10mm, Thames, London; p 94; - //* over T*, ESEX around base // crown over harp, R right // -

4478) 4+, 11//15//15//12mm, Thames, London; p 210; (?) - // S,SO..(ER)SET around // crown over thistle, I R to sides // -

4479) 2+, 10//13//13//9mm, Thames, London; p 218; - // SVF/OL*//K// crown over thistle, C left // -

4480A) 4+, 13//14//15//13mm, Thames, London; p 70; - // - // (crown) over rose, DENSIR around //

4480B) as 4480A, but - on 4 p 70
4481) 4+, 11//12//13//11mm, Thames, London; p 142;
   lion rampant // # over T, K(E)NT around base // lion statant on
   chapeau, C R to sides // C/A

4482) 4+, 10//12//12//8mm, Thames, London; p 93;
   - // # over T, ESEX around base // lion statant on chapeau, C R to
   sides // -

4519) 4+, 15//27//27//15mm, in drain, site at E. Bankside, London;
   p 72;
   - // 8 // arc over CREDITON, FULFORDS around top,
   MANUFACTURERS around base // -

4533) 4-, inner disc, 53mm, Thames, London; p 96;
   bird of prey rising, wings displayed & inverted, bells on legs,
   *BOCKING* 1637 around

4534) 2-, 42mm, Thames, London; p 106;
   (missing) // griffin (statant)

4535) 2-, 41mm, Thames, London; p 109;
   three crowns & cross raguly in shield with scrolls, (S)H COL..ESTER
   SA(YE) around // (missing)

4536) 2+, 32//31mm, Thames, London; p 104;
   three crowns in ornately-shaped shield, (1)5 71 to sides,
   OLCHESTER\* (100) around // (O)ER\* BAYE (edge legend)

4561A) 2+, 15//14mm, ? Thames, London, ML; p 178;
   (stamp from ? defaced die) // crown over rose

4561B) as 4561A, but - on 1 p 178

4561C) as 4561A, but castle, lion passant below on 1 p 178

4562) 2-, 19mm, ? Thames, London, ML; p 137;
   - // crown over rose, B left, *KEN around (Lombardic letter)

4563) 2+, 22//23mm, ? Thames, London, ML; p 137;
   - // crown over rose, A...(O)M around (Lombardic letter)

4564) 2+, 19//19mm, ? Thames, London, ML; p 98;
   - // crown over rose, TER around

368
4565) 4+, 12//14//14//12mm, ? Thames, London, ML; pp 143, 210, 267, 273;
- // S(OM)ERS(E)T around // crown over rose, SAND(W)ICH around // -

4572) 2-, 17mm, ? Thames, London, ML; p 178;
crown over rose // (obscured)

4573) 4-, 12//13mm, ? Thames, London, ML; p 221;
- // (R) S, S(VFF) around // (3 missing) // incomplete (A C) privy mark

4584) 2+, 18//18mm, ? Thames, London, ML; p 243;
11' around top of illegible device, (O)M'W(O) around // arms of Stuart Britain

4597) 4+, 17//18//18//18mm, ? Thames, London, ML; pp 121, 210;
74 // NB, OSTE(R)SO...SE(T) around // shield with arms of Stuart Britain, R right // crown over illegible device

4601) 4+, outer discs, inner scallop-shaped parts, 11//15//15//12mm, ? Thames, London, ML; p 122;
- // 3 // TN, ER'S around // crown over shield with arms of England, C left // -

4605) 2+, 16//17mm, ? Thames, London, ML; p 175;
- // thistle, R right, C...N(OR) around

4608) 2-, 44mm, ? Thames, London; p 104;
griffin (passant), O...(R)ONE around // OI..E · DV (edge legend)

4609) 2-, 35mm, Thames, London; p 103;
 DUYTS/70 CRUIS/BAYE..A// (missing)

4610) 2+, 35//37mm, Thames, London; p 106, 107;
(three coronets) & cross raguly in ornately-shaped shield, (E)STE around // (ES)...(R)1(57) around

4617) 2+, 21//21mm, Thames, London; p 191;
 NO/(R)WI///(F)B/SRB/..

4625) 4+, 9//12//12//9mm, ? Thames, London, ML; p 218;
- // SVF/FOL*/K// crown over thistle, C left // -
4640) 4+, 12/14/13/12mm, ? Thames, London, ML; pp 29, 77, 78; - - crown over three fleurs de lis, I (R) to sides // O, TOTNES around

4641) 4+, 10/10/11/10mm, ? Thames, London, ML; p 69; - VON/ 4(? 6) // crown over fleur de lis, dot to each side // -

4651) 4-, inner disc, outer lozenge-shaped part, 11/8mm, ? Thames, London, ML; p 197; (1 & 2 missing) // unicorn passant, I above // (?) -

4657) 2+, 20/20mm, ? Thames, London, ML; p 184; castle, lion passant below // opposed lions rampant

4664) 4-, inner disc, 14mm, ? Thames, London, ML; pp 121, 210; (L)OS(TE) -(SO) around

4671) 2-, 33mm, site at East Bankside, London; pp 44, 136; crown over arms of England in ornately-shaped shield, rose left, sun right, SVBCIDII P..NNO..IN COM (KENT) around (Lombardic letter) // (missing)

4672) 2+, 19/18mm, site at East Bankside, London; p 41; crown over ornately-shaped shield with arms of England // (sun & ? rose dimidiated & conjoined)

4680) 2+, 21/20mm, well at Swan Lane site, London (layer 2172), ML (DUA) no. SWA 81 1295; pp 150, 400; 34 // thistle, C R to sides, O(M L)A(N)CES around

4681) 2+, 21/20mm, well at Swan Lane site, London (layer 2172), ML (DUA) no. SWA 81 1293; pp 150, 400; 34 // crown over thistle, C R to sides, C..(M LA)...(E)STERY around

4686) 2-, 49mm, well at Swan Lane site, London (layer 2172), ML (DUA) no. SWA 81 1296; pp 104, 400; three crowns in ornately-shaped shield, 5 71 to sides, L.O.(CRO)NE•DVYT(S) around // wing of beast

4688A) 2+, 27/27mm, riverside land-reclamation dump at Swan Lane site, London (layer 2112), ML (DUA) no. SWA 81 975; pp 160, 161, 400; crown, •SIGILLV...ORVM around // bearded, balding head facing, inverted sword left, IS: LONDONIAL around

4688B) as 4688A, no. SWA 81 3323, (stamp with head on 1, with crown on 2) pp 160, 161, 400
4689) 2+, 26/27mm, riverside land-reclamation dump at Swan Lane site, London, (layer 2106), ML (DUA) no. SWA 81 8444; pp 160, 161, 400; crown, 'SIGILLVM PAN(HORVM) around // bearded, balding head facing, inverted sword left, (C)IVITATIS:LODONII(A)L around

4690) 2-, 26mm, riverside land-reclamation dump at Swan Lane site, London, (layer 2106), ML (DUA) no. SWA 81 1843; pp 161, 162, 400; bearded, balding head facing in six-arched tressure, trefoils to sides, (S:VL...AG)...RVM; CIVITAT(E LON) around (Lombardic letter) // (missing)

4698) +, 16/15/14mm, ? Thames, London, ML (J20 on label); p 93; - // Charles II-type head, OF ENG LAND around // 1 ½ * lion passant // 88 // ESS

4699) 4-, 16/13mm, ? Thames, London, ML; p 74; (1 & 2 missing) // coronet with three plumes through, 80 below // (?)

4708) 4-, inner disc, 14mm, ? Thames, London, ML; p 95; coronet over R & L ligature, ••ESE around

4711) 4-, inner disc, 38mm, ? Thames, London, ML; pp 165, 166, 280; arms of London, wreath, DE escallop LOND? (? escallop) NO around; coating of gold leaf (analysed) [Thought to be part of the same seal as no. 3682; not counted separately for provenance totals.]

4712) 4-, inner disc, 40mm, ? Thames, London, ML no. 1922 - 169; p 163; arms of London, wreath, DE?? LOND?++ NO around; (gold-coloured coating)

4716) 2-, 28mm, ? Thames, London, ML no. 79.428/1; pp 161, 162; bearded, balding head facing in six-arched tressure, trefoil to each side, S:VLANAGII:PA...RVM.CIV...ATE:LONDON: // crown in multiple-arched tressure, trefoil right

4717) 4-, 13/13/13mm, ? Thames, London, ML; p 73; - // Charles II-type head, OF ENG LAND around // crown, 1 above left // X/N

4718) 2+, 13/13/14/15mm, ? Thames, London, ML; p 75; - // Charles II-type head, OF ENG LAND around // crown, (1 ½) above // (E)X/(N)
4719A) 4+, outer discs, inner square parts, 12//12//12//12mm, ? Thames, London, ML; p 73; - // \* /76 \*, EXON around top // crown in triple border // -

4719B) (inner parts only) as 4719A p 73

4719C) (part 3 only) as 4719A p 73

4719D) (part 3 only) as 4719A) p 73

4725) 2-, 26mm, ? Thames, London, ML; p 51; - // crown over portcullis, NI(C) around (Roman letter)


4728) 2-, 26mm, ? Thames, London, ML; p 44; crown over arms of England in ornately-shaped shield, ...II around //(/?) -

4732) 4+, 17//15//15//19mm, ? Thames, London, ML; p 95; 54 // ES/EX// thistle // - ; incuse H on strip connecting 1 & 2; inner-disc devices possibly cast

4735) 2+, 35//35mm, ? Thames, London, ML; pp 106, 107; griffin (rampant), (E)R\* BAY(E) 1(5)..1 (DV) around // three crowns & cross raguly in ornately-shaped shield, 15 71 to sides, (edge legend)

4736) 2+, 34//35mm, ? Thames, London, ML; p 106; three crowns & cross raguly in ornately-shaped shield, 15 71 to sides, (edge legend) // beast (? passant), (ESTE) around

4737) 2-, 37mm, ? Thames, London, ML; p 104; (missing) // (griffin), (O)LC(H)...(TER BA) around

4738) 2-, (estd.) c. 50mm, ? Thames, London; ML; p 104; (? beast), TER BA around (fragment of disc 1 or 2)

4739) 2-, 33mm, ? Thames, London, ML; pp 106, 107; (missing) // beast rampant, cinquefoil above & below, S\*COLCES around

372
4740) 2+, 45/49mm, ? Thames, London, ML; p 114;
castle // three crowns in ornately-shaped shield, 1(8) right, SH-COLCH around

4741) 2-, 45mm, ? Thames, London, ML; pp 102, 103;
(missing) // (griffin), (E) 1(57) around; secondary stamp with incomplete I (? B) privy mark [see 4742]

4742) 2-, 45mm, ? Thames, London, ML; p 102;
DVYTS/CO...(T)ER/C...(NE) /...B(A)YE/(157) // (missing)
[Thought to be part of same seal as no. 4741; not counted separately for provenance totals.]

4743) 2-, 45mm, ? Thames, London, ML; p 106;
(missing) // griffin segreant (i.e. rampant), E·1(57) around

4744) 2-, 41mm, ? Thames, London, ML; p 106;
(missing) // (griffin), (ES) around

4745) 2-, 44mm, ? Thames, London, ML; p 106;
three crowns in ornately-shaped shield // (missing)

4746) 2+, 18/17mm, Isle of Grain (? spoil redeposited from London), ML no. 82.728; p 46;
- // (thin Lombardic 'F'), inverted lion passant left, A(O) around (Lombardic letter)

4749) 2-, 45mm, ? Thames, London, ML; p 104;
(missing) // griffin (passant), EST(E)BA around

4751) 2-, 51mm, ? Thames, London, ML; p 104;
two coronets in ornately-shaped shield, C(R)O around // (? wing)

4752) 2+, 42/38mm, ? Thames, London, ML; p 102;
griffin segreant (i.e. rampant) // DV/OLC.. 2T..R/BAEA ·/1571/...

4753) 2+, 46/47mm, ? Thames, London, ML; pp 102, 103;
DVYT/COLCESTE/BAYE// (griffin ?passant), CHEST..R:(D) around

4757) 2-, 20mm, Thames, London, p 185;
castle // 2

4759) 2+, 15/15mm, Thames, London; p 182;
castle, lion passant below // 163/.../R8·/+ (stamp from ? partially defaced die)
4764A) 2+, 16/16mm, Thames, London; p 178; castle // crown over rose

4764B) as 4764A p 178

4772) 2-, subrectangular first part (i.e. 'spade'-shaped seal) 23X17mm, Thames, London; pp 49, 52, 254, 270; (cast) IIII/XXI(I); secondary stamp with portcullis, EBOR around (Lombardic letter) // (?) -

4773) 2-, 36mm, Thames, London; p 109; three crowns & cross in ornately-shaped shield, S...(5)71^V DW around // (? claw)

4784) 2+, 16/16mm, Thames, London; p 187; castle, lion passant below // *TO*/ N(A)R/W

4785) 2+, 15/15mm, Thames, London; p 183; castle, lion below // (P)R/WCS

4787) 4+, 13/12/12//15mm, Thames, London; pp 99, 100, 220; shield with two crowned & cross raguly // (cast) lion statant // (cast) crown // crown over rose, E(S)TER around

4788) 4-, inner disc, 15mm, Thames, London; p 70; crown over rose, D(E)...(SH)IRE around; secondary stamp with (?) R & L ligature

4789) 2+, 16//16mm, Thames, London; p 183; B*/WP*X(T)/ (illegible device) // castle

4794) 2+, 15//16mm, spoil from Bull Wharf site, London; p 46; - // thin Lombardic 'F', illegible letters to sides, (edge legend)

4795) 2+, 15//17mm, spoil from Bull Wharf site, London; p 180; bird standing // 2(7), fleur de lis above & below

4801) 2+, 19//19mm, Thames, London; pp 49, 121; DC, LOCESTE around // crown over shield with arms of England, 3 or 5 right

4802) 1-, (fragment of two discs soldered together) 29mm, Thames, London; pp 111, 112; two coronets in ornately-shaped shield, 5 right // (? beast)
4814) 4-, 16/13mm, Thames, London; p 70;
   (1 & 2 missing) // crown over rose, SHIRE* around // (?) -

4825) 4+, 13/11/11/13mm, Thames, London;
   pp 99, 100;
   shield with crown // (crowned) lion passant (cast) // rose, OLC around

4827) 4+, 13/13/13/15mm, Thames, London;
   p 221;
   -/-\]A, CO...VFOL around // (?) thistle; incuse G // (H)

4831) 4+, 11/16/16/13mm, Thames, London;
   p 75;
   (offstruck) // - // crown over rose, DENSHI(RE) around // EX/O(N)

4832) 1+, rectangular, 29X16mm, Thames, London;
   p 112;
   (D) crown C (multiple struck) // -

4834) 1+, rectangular, 21X11mm, Thames, London;
   p 112;
   crown // (?) head of griffin, (edge legend)
   (part of stamp for large-diameter seal)

4840) 2+, 20/21mm, Thames, London;
   p 111;
   HE5/ER/Y //three coronets & cross raguly (? in ornately-shaped shield)

4844) 2+, 18/20mm, Thames, London;
   p 51;
   - // crown over portcullis

4846) 2+, 17/16mm, Thames, London;
   p 175;
   - // crown over thistle, I (R) to sides, RF'S:S: - around

4849) 4+, 10/14/14/11mm, Thames, London;
   p 73;
   -//*/*71*/, EXON around top // two beasts (? lions) supporting (? coronet) // -

4850) 2+, 19/19mm, Thames, London;
   p 189;
   NOR/WIC/H// SB/L/B

4851) 2+, 16/16mm, Thames, London;
   p 183;
   (E)LW(L)/L (stamp from ? partially defaced die) // castle, lion passant below

4855) 2+, 17/16mm, Thames, London;
   p 51;
   - // crown over portcullis, VEA around (Lombardic letter)
4857) 2+, 20//18mm, Thames, London; pp 99, 111; CHE/*/S(TER* /S(A)EY// crown over rose, CH(E)STER* around

4868) 2+, 18//14mm, Thames, London; p 177; castle, G right // crown over rose

4871) 4+, 11//13//12mm, Thames, London; p 221; - //Æ , SV(F)OL around / thistle // -

4876) 2+, 21//20mm, Thames, London; p 229; (? ) EN(II) // elephant with castle on its back

4881) 2+, 13//16mm, Thames, London; p 178; castle // crown over rose

4913) 2-, 18mm, Pakenham, Suffolk; p 51; - // portcullis

4916) 4+, 15//18//17//15mm, Brandon, Suffolk; pp 151, 397, 400; - // crown over portcullis, R right // garter, (H)ONI SOIT QVI M around; (possible secondary stamp with */ I R / 3 ½ // LAN/CAS/ER

4918) 2+, 20//19mm, Gorleston, Norfolk; pp 190, 397; (N)O/RW/(CH)//PR/BBLW/(P)WH

4924) 2+, 15//17mm, Thames, London; p 176; (R)W/599/CH// (lion) rampant

4926) 4+, 10//12//13//12mm, Thames, London; p 221; - // RS, S(VF) around // cock standing // -

4927) 4+, 14//13//12//14mm, Thames, London; p 93; (scratched) 25 //H// S(E)X //lion passant / C R //

4928) 4+, 12//12//13//11mm, Thames, London; p 221; - // RH, S around // crown over harp // -

4932) 2+, 21//20mm, Thames, London; p 189; N(O)/RW(I)/CH//AD/(? N)

4939) 2+, 28//31mm, Thames, London; p 245; LXXVII/XXXIII// shield with three pears & fess, T(HV):PAC around

376
4941) 2+, 19/20mm, Thames, London; p 46;  
   - // crown over thin Lombardic 'F', fluer de lis to each side, (AO) around (Lombardic letter)

4942) 2+, 22/21mm, Thames, London; p 164, 165;  
   - // crown over arms of England, E R to sides, V(LI)FPA around (Lombardic letter)

4943) 2+, 16/14mm, Thames, London; p 51;  
   - // crown over portcullis, (edge legend)

4954A) 2+, 16/16mm, Thames, London; pp 176, 178;  
   castle, 1615 below (no room for lion) // crown over rose

4954B) as 4954A, but no date on 1 pp 176, 178

4955) 2+, 16/15mm, Thames, London; p 186;  
   bird rising, wings addorsed // HO(R)/TE*

4956) 2+, 15/17mm, Thames, London; p 187;  
   castle // NAR/OW

4959) 2+, 16/17mm, Thames, London; p 180;  
   bird standing // 27

4968A) 2+, 17/18mm, Thames, London; p 178;  
   (stamp from ? defaced die) // crown over rose

4968B) as 4968A p 178

4968C) as 4968A p 178

4969) 2+, 15/18mm, Thames, London; p 182;  
   castle, (?) lion below // I/(B or R)TC

4979) 2+, 25/24mm, ? Thames, London; pp 241, 244, 271;  
   (III)/W(LI)/GORN

4981) 2+, 22/19mm, ? Thames, London; p 54;  
   IVXXX// portcullis (? no edge legend)

377
4982A) 2-, 24mm, ? Thames, London;
   pp 164, 229, 278;
   N (fleur de lis) around // arms of London in ornately-shaped shield, + PAN around (fine-line engraving)

4982B) as 4982A
   pp 164, 278

4982C) as 4982A
   pp 164, 278

4982D) as 4982A
   pp 164, 278

4985) 2+, 19//18mm, Thames, London;
   p 51;
   - // crown over portcullis, R right, AL* around (Roman letter)

4993) 4-, inner disc, 45mm, Thames, London;
   p 96;
   stylised star, FINE+BOCKING rose 100:-*BAYES 1648 around

4997) 2+, 48//47mm, Thames, London;
   p 104;
   three crowns in ornately-shaped shield, 15 7 to sides, (C)RONE*D(V)
   around // beast rampant

5000) 2-, 24mm, Thames, London;
   pp 161, 163 (fig. 41);
   haloed bust of St. Paul holding shield with a cross, in the first quarter a sword, rose to each side, S'SV(B)...NDON around (Lombardic letter) // crown over shield with arms of England, S'V(L)
   around (Lombardic letter)

Selected seals recorded after January 1983:

5284) 2+, 19//20mm, ? Thames, London;
   p 150;
   XXXVI// rose, LAIK...SHIRE around

5545) 4+, 19//23//23//18mm, Thames, London;
   pp 57, 60, 63, 70, 75, 77, 90, 97, 99, 111, 145, 210, 273;
   - // A, 1611 around top, *COME around // crown over rose, COLCHESTER* around // (ER/C)H(E)D/ 1611, (LN)EG around

5613A*) 2+, 25//25mm, Amsterdam, ADAM no. ML9-127);
   pp 195, 264, 398, 400;
   crown over portcullis, C(IV)...(A) around // castle, lion passant below, C N to sides, +CI(V)...(ATIS)...WICI around

5613B*) (disc 2 only) as 5613A, ADAM no. M25-139
   pp 195, 264, 398, 400

* These seals were recorded during study travel financed by a University of London Central Research Fund Grant.
5615*) 2+, 50//53mm, Waterlooplein site, Amsterdam, ADAM no. Wlol-69; pp 194, 264, 398, 400; castle, lion passant below, C N to sides, (W) ALITA around; two incuse • marks // crown over portcullis, (A)LIT ARTE(S) around

5616*) 2-, 38mm, Waterlooplein site, Amsterdam, ADAM no. Wlol-47; pp 101-02, 264, 398, 399, 400; cinquefoil DWS cinquefoil / COL(C)ES(E)/AY// (? beast)

5617*) 2+, 39//39mm, Amsterdam, ADAM no. ML 11-42; pp 101-02, 264, 398, 399, 400; WS/(O)L(C)ESE(R)/Y 157(1) // (illegible main stamp); secondary stamp with R privy mark

5619*) 2+, 44//42mm, Amsterdam, ADAM no. W1 1-13; pp 144, 264, 398, 400; crown over rose, S W to sides, rose SA(N)DWYC(H) BAYE rose around // (lion) rampant, x15...1oox(D)...BAEY around

5621*) 2+, 40//31mm, Waterlooplein site, Amsterdam, ADAM no. Wlol-6; pp 117, 264, 398, 400; ornately-shaped shield with crown over rose, ✷ to each side, •1592 ... (N)E around // griffin

5651*) 4+, 14//14//14//13mm, ? Stockholm, SSM no. 8014; pp 237, 398, 400; – // arms of Stuart Britain // ilite(s) (black letter) /..(D) // –

5655/1-68*) 68 seals or fragments from Bamble wreck, off south coast of Norway. pp 165, 166, 167, 403, 404. All are 4- disc type with:
- // arms of London, wreath, DE LONDI NO around // angel standing, facing, holding (?) palm frond right, unidentified object left, GLORIA IN ECELSIS around // –

(complete etc. refers to inner discs, which are c. 26 mm in diameter; surviving outer discs are c. 8mm in diameter)

5655/1 NSM no. S3 (or S3?) complete
5655/2 NSM no. S5 complete
5655/3 NSM no. S8 complete
5655/4 NSM no. S11 complete
5655/5 NSM no. S34 disc 2 only
5655/6 NSM no. S44 complete
5655/7 NSM no. S54 complete (with cloth)
5655/8 NSM no. S62 complete
5655/9 NSM no. S66 complete
5655/10 NSM no. S70 complete
5655/11 NSM no. S71 discs 2 & 3 only
5655/12 NSM no. S78 complete
5655/13 NSM no. S106 disc 2 only
5655/14 NSM no. S132 complete
5655/15 NSM no. S171 complete

* These seals were recorded during study travel financed by a University of London Central Research Fund Grant.
5655/16* NSM no. S173 complete
5655/17 NSM no. S190 complete
5655/18 NSM no. S220 complete
5655/19 NSM no. S228 complete
5655/20 NSM no. S229 complete
5655/21 NSM no. S230 discs 2 & 3 only
5655/22 NSM no. S317 disc 2 only
5655/23 NSM no. S350 disc 3 only
5655/24 NSM no. S413 complete
5655/25 NSM no. S475 complete
5655/26 NSM no. S520 complete
5655/27 NSM no. S578 cut fragment of discs 2 & 3
5655/28 NSM no. S621 discs 2 & 3 only
5655/29 NSM no. S622 disc 3 only
5655/30 NSM no. S630 disc 3 only
5655/31 NSM no. S645a/b discs 2 & 3 (in 2 pieces)
5655/32 NSM no. S678 complete
5655/33 NSM no. S744 cut fragment of discs 2 & 3
5655/34 NSM no. S809 complete
5655/35 NSM no. S810 disc 3 only
5655/36 NSM no. S811 complete
5655/37 NSM no. S813 complete
5655/38 NSM no. S814 disc 2 only
5655/39 NSM no. S840 complete
5655/40 NSM no. S871 disc 2 only
5655/41 NSM no. S913 complete
5655/42 NSM no. S930 complete (with cloth)
5655/43 NSM no. S960 complete
5655/44 NSM no. S961 complete
5655/45 NSM no. S964 cut fragment of discs 2 & 3
5655/46 NSM no. S1002 complete
5655/47 NSM no. S1003 complete
5655/48 NSM no. S1004 complete
5655/49 NSM no. S1005 complete
5655/50 NSM no. S1006 complete
5655/51 NSM no. S1007 complete
5655/52 NSM no. S1008 complete
5655/53 NSM no. S1009 complete
5655/54 NSM no. S1010 complete, with gold-coloured coating
5655/55 NSM no. S1080 complete
5655/56 NSM no. S1153 complete
5655/57 NSM no. S1191 complete
5655/58 NSM no. S1213 complete
5655/59 NSM no. S1214 complete
5655/60 NSM no. S1254 complete
5655/61 NSM no. S1520 complete
5655/62-6 NSM 'S1641-51' on bag five complete seals
5655/67 NSM no. S1739 complete
5655/68 NSM no. S1941 complete

* These seals were recorded during study travel financed by a University of London Central Research Fund Grant.

380
5666A-H* 8 seals or fragments from Bramble wreck off south coast of Norway.
pp 165, 167, 279;
All are 4-disc type, with:
- // arms of London, wreath, DE LONDI NO around /angel standing,
facing holding palm branch right, unidentified object left, GLORIA
IN EXCELSIS around //</-
(complete etc. refers to inner discs, which are c. 23 mm in
diameter; surviving outer discs are c. 14 mm in diameter)

5666A) NSM no. S140 complete
5666B) NSM no. S164 complete
5666C) NSM no. S165 complete
5666D) NSM no. S166 discs 2 & 3 only
5666E) NSM no. S316 complete
5666F) NSM no. S592 complete
5666G) NSM no. S666 disc 3 only
5666H) NSM no. S812 complete

5675*) 4+, 15/17/17/15mm, Bamble wreck, off south coast of Norway,
NSM no S761;
p 219;
(6)1 // TB, SVF...(LK)E* around; illegible secondary stamp //arms
of Stuart Britain, C R to sides; (? secondary stamp) // (illegible
device)

5680*) 4+, 13/17/17/13mm, Bamble wreck, off south coast of Norway,
NSM no. S914;
p 219;
(scratched) X // TB, SVFF around // arms of Stuart Britain, R right;
secondary stamp with castle // SI

5681*) 4+, 15/317/17/15mm, Bamble wreck off south coast of Norway,
NSM no. S915;
p 219;
(?6)0 // TB, FOL..E around // arms of Stuart Britain, R right;
secondary stamp with castle // SI

5684*) 4+, 15/316/16/15mm, Bamble wreck off south coast of Norway,
NSM no. S993;
p 219;
(? illegible stamp), scratched X / TB, * SVFFO..KE around; illegible
secondary stamp // arms of Stuart Britain, (R) right; illegible
secondary stamp // SI

5685*) 4+, 13/17/17/13mm, Bamble wreck, off south coast of Norway,
NSM no. S994;
p 219;
60 // TB, VFFOLK(E) around; illegible secondary stamp // arms of
Stuart Britain, (C) R to sides; secondary stamp with castle // I

5686A*) 4+, 14/18/18/14mm, Bamble wreck, off south coast of Norway,
NSM no. S996;
pp 94, 219;
58 // ESEX / TB; illegible secondary stamp // shield, R right;
illegible secondary stamp // *[S acc. catalogue] E, (RC)HE around

* These seals were recorded during a study travel financed by a
University of London Central Research Fund Grant.
5686B*) NSM no. S1219; as 5686A, C R with small crowns above letters to sides of shield on 2, (EAR)C around (L or D)E on 4
pp 94, 405

5686C*) NSM no. S1621; as 5686A; (no visible secondary stamps)
pp 94, 405

5686D*) NSM no. S1763; as 5686A; (no visible secondary stamps)
pp 94, 405

5686E*) NSM no. S1789; as 5686A, uncertain device on 1; (no visible secondary stamps)
pp 94, 405

5695*) 4+, 15//17//17//15mm, Bamble wreck, off south coast of Norway, NSM no. S1079;
p 219;
60 // (TB), SVF...LKE around; secondary stamp with (shield with cross) // shield; secondary stamp with castle // (SI)

5696*) 4+, 14//17//17//14mm, Bamble wreck, off south coast of Norway, NSM no. S1081;
p 219;
60 // TB, SVFF around // arms of Stuart Britain // (SI)

5701*) 4+, 14//17//17//14mm, Bamble wreck, off south coast of Norway, NSM no. S1154;
p 219;
(60) // TB, VF(F) around; illegible secondary stamp // arms of Stuart Britain, C R to sides; illegible secondary stamp // SI

5702*) 4+, 15//17//17//15mm, Bamble wreck, off south coast of Norway, NSM no. S1155);
p 219;
60 // TB, SVF..OI..E around; illegible secondary stamp // arms of Stuart Britain; secondary stamp (?) with arms of London // (SI)

5703*) 4+, 14//17//17//14mm, Bamble wreck, off south coast of Norway, NSM no. S1156;
p 219;
(3)8 // (TB), F..OI around; secondary stamp (?) with arms of London // arms (of Stuart Britain); secondary stamp with castle // (SI)

5704*) 4+, 14//17//17//14mm, Bamble wreck, off south coast of Norway, NSM no. S1157;
p 219;
(3)1 // TB, SVF(F)..(L)KE around // (illegible) // (illegible) [SR/W according to catalogue]

* These seals were recorded during study travel financed by a University of London Central Research Fund Grant.
5709*) 4+, 13//16//16//13mm, Bamble wreck, off south coast of Norway, NSM no. S1216;
pp 219, 403;
31 // TB, SVFFOLKE around; secondary stamp with arms of London // (illegible) [arms of Stuart Britain according to catalogue] // SE /W

5714*) 4+, 13//16//16//15mm, Bamble wreck, off south coast of Norway, NSM no. S1283;
p 219;
56 // TB, * SVFFOLKE around; secondary stamp with castle //shield with arms of Stuart Britain; illegible secondary stamp //incomplete privy mark

5715*) 4+, 14//18//18//14mm, Bamble wreck, off south coast of Norway, NSM no. S1310;
p 219;
58 // TB, * SVFFOL(K) around; illegible secondary stamp //arms of Stuart Britain, .. R with small crown above to sides; secondary stamp with arms (of London) //?

5719*) 4+, 16//16//16//16mm, Bamble wreck, off south coast of Norway, NSM no. S1392;
p 219;
6(0) // (illegible) [TB, SVFFOLKE according to catalogue]; secondary stamp with castle //shield, [C R with small crowns above to sides, according to catalogue]; (illegible secondary stamp) // (illegible)

5723A*) 4+, 11//40//40//10mm, Bamble wreck, off south coast of Norway, NSM no. S1527;
pp 165, 167;
- // arms of London, wreath, DE•LONDI•NO around // angel standing, facing, holding palm branch right, unclear object left, •GLORIA• (rose) IN (rose) EXCELSIS• around // -

5723B*) NSM no. S1796; as 5723A
pp 165, 167

5723C*) NSM no. S1953; as 5723A, but disc 3 only
pp 165, 167

5723D*) NSM (unlabelled); as 5723A
pp 165, 167

5726*) 4+, 14//16//16//14mm, Bamble wreck, off south coast of Norway, NSM no. S1550;
p 219;
(5)6 // (illegible), [TB, SVFF around according to catalogue] // (?) shield //T* R privy mark [partly according to catalogue]

5728*) 4+, 14//17//17//14mm, Bamble wreck, off south coast of Norway, NSM no. S1729;
p 219;
(3)1 // TB, FFOLKE around; (illegible secondary stamp) // shield //SE/W

* These seals were recorded during study travel financed by a University of London Central Research Fund Grant.
5747* 2-, 16mm, Kongsgård, Oslo, OSS no. C32439d; pp 36, 155, 160, 163, 398, 400; (missing) // halo with radiating lines around bald pate

5758) 2+, 25//27mm, Thames, London, ML no. 84.132/1; pp 38 (fig. 5), 45, 217, 265; bulbous Lombardic 'F', rose left, sun right, (SVBC)...(PA)NN(OR) IN COM (SVFF) around (Lombardic letter) // crown over fleur de lis, rose left, sun right, (DII PA) around (Lombardic letter)

5882) 2+, 20//19mm, Thames, London; p 196; (WA)/ON, CH*ALLI(E) around // ship

6223) 2+, 19//23mm, Thames, London; pp 221, 222 (fig. 54); - // crown over rose, SIG•GIPWIC• WOO(L)... IGE around

6511) 2-, 14mm, Billingsgate watching brief, London, ML (DUA) BWB 83 no. 1939 (layer 351) pp 36, 155, 160 (fig, 38), 163, 400; haloed, bearded, balding head facing // (missing)

6537) 4-, inner disc, 14mm, ? Thames, London, ML (SM XXIV 45 on ? accompanying label); pp 69, 70, 72; 6, 4/D 1/1 2 to sides, EXON around base

6732) 2-, 32mm, Bunwell, Norfolk; pp 212, 398; RM ligature, TW/TON/SER/GES around // SER/GES, R...(T) around

6916) 2+, 20//21mm, Thames, London; p 221; - // crown over rose, SIG•GIPWIC• WOODERIG(E) around

7195) 2-, 28mm, near Exeter Bridge, EXON no. EBI75, L59, Δ 100; p 44; crown over arms of England in ornately-shaped shield, rose left, sun right, (SID)II PANN(OR) around (Lombardic letter) // crown over illegible device

7196) 4-, inner disc, 23mm, in ceiling at 38 North Steet (feature 177), Exeter, EXON; pp 76, 270, 398, 399, 400; shield with on a bend dexter, three mullets, •IAMES•WHI(T)...I XON around; 38 on reverse (- i.e. inside surface of disc)

* These seals were recorded during study travel financed by a University of London Central Research Fund Grant.
List of collection codes:

ADAM  Amsterdams Archeologische Dienst, Netherlands
AS    Ashmolean Museum, Heberden Coinroom, Oxford
BL    British Library, Dept. of Manuscripts, London
BM    British Museum, Dept. of Medieval and Later Antiquities
BM(CM) British Museum, Dept. of Coins and Medals
BSE   Moyses Hall Museum, Bury St. Edmunds, Suffolk
BSL   Bristol City Museum and Art Gallery
CAT   Canterbury Archaeological Trust, Kent
CLM   Chelmsford Archaeological Unit, Essex
CO    Colchester and Essex Museum, Colchester
COAT  Colchester Archaeological Trust
CU    Cuming Museum, Southwark
CV    Herbert Art Gallery and Museum, Coventry
DL    Deal Museum, Kent
ERO   Essex Records Office, Chelmsford
EXON  Royal Albert Memorial Museum, Exeter
GF    Guildford Museum, Surrey
HCM   Hampshire County Museum Services, Chilcomb House, Winchester
ILU   Inner London Archaeological Unit
      (now Greater London Archaeology Dept., Museum of London)
KL    The Lynn Museum, Kings Lynn, Norfolk
LI    City and County Museum, Lincoln
LM    Letchworth Museum, Hertford
ML    Museum of London
      (ML seals from the former Guildhall Museum collection which
      lack accession numbers may well be from the Thames in the City
      of London)
ML (DUA) Dept. of Urban Archaeology, Museum of London
NMD   National Museum of Denmark, Copenhagen
NMW   National Museum of Wales, Cardiff
NO    Castle Museum, Norwich
NSM   Norsk Sjøfartsmuseum, Oslo
OSS   Universitetets Oldsaksamlingen, Oslo
PEM   Passmore Edwards Museum, London
SSM   Stockholm Stadsmuseum
StA   St. Albans City Museum, Hertford
StA(V) Verulamium Museum, St. Albans, Hertford
STW   Southwark and Lambeth Archaeological Excavation Committee
      (now Greater London Archaeological Dept., Museum of London)
WHS   Wembley History Society collection, the Grange Museum, Neasden
WI    Winchester City Museum, Hampshire

(no code = private collection)
### Alnage Statistics of the Fourteenth Century

#### Cloths of Assize

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>1 December</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1353-Mich.</td>
</tr>
<tr>
<td></td>
<td>1354 (ten</td>
</tr>
<tr>
<td></td>
<td>months)</td>
</tr>
</tbody>
</table>

#### North-eastern area:

- Newcastle: 69, 80, 84, 36, 121
- Yorks. (county): 103, 551, 220, 456, 833
- Lincolnshire: 773, 830, 586, 1,242, 545

#### East Anglian area:

- Cambridges. & Huntingdons.: 8, 40, 38, 56, 186
- Norfolk (Norwich): 261, 162, 178, 211, -
- Suffolk: 312, 282, 564, 376, 2,797
- Essex and Hertfordshire: 73, 87, 85, 102, 2,796

#### South-eastern area:

- London: 638+, 859+, 1,257, 1,551, (1,548)
- Kent: 1,233, 1,216, 1,037, 1,034, 1,348
- Surrey: 104, 104, 241, 142, 283
- Sussex: 64, 36, 168, 143, -

#### South-western area:

- Hampshire & I. O. W.: 2,131, 1,867, 3,005, 4,412, 2,333
- Wiltshire: - 254, 181, 181, 7,292
- Dorset: - - 832, 1,305, 460
- Somerset: 1,211, 445, - 12,376
- Bristol: 2,118, 2,092, 1,665, 2,295, 4,063
- Devon and Cornwall: 59, 60, 84, 114, 1,461

#### Western area:

- Gloucestershire: 860, 534, 191, 510, 363
- Worcestershire: 13, 35, 60, 60, (182)
- Herefordshire: 157, 141, 131, 144, 160
- Shropshire: 123, 128, 84, 148, (510)

#### Midland area:

- Bedfords. and Bucks.: 7, 8, 8, 18, -
- Berks. and Oxon.: 207, 117, 252, 252, 2,128
- Northants and Rutland: 189, 148, 123, 137, 196
- Warwickshire: - 220, 120, 82, 113
- Leicestershire: - 8 8 140
- Staffordshire: 15, 9, 8, -
- Notts. & Derbys.: 12, 12, 12, 12, 370
- Westmorland: 8, 10, - 1 -

#### Total:

- 10,993, 10,665, 11,622, 15,610, 49,308

APPENDIX 2B

Average Annual Profits on Subsidy & Alnage on Woollen Manufactures, 1686-1688

<table>
<thead>
<tr>
<th>County</th>
<th>£</th>
<th>The Goods for which the Duty is payable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berks.</td>
<td>130</td>
<td>Broad Cloths, Kersies and Serges.</td>
</tr>
<tr>
<td>Bucks.</td>
<td>30</td>
<td>Kersies.</td>
</tr>
<tr>
<td>Devon</td>
<td>1,500</td>
<td>Broad Clothes, Bayes and Serges.</td>
</tr>
<tr>
<td>Dorset</td>
<td>120</td>
<td>Broad Cloths, Kersies and Dozens.</td>
</tr>
<tr>
<td>Derby</td>
<td>20</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>Essex</td>
<td>700</td>
<td>Broad Cloths, Bayes and Perpetuanoes.</td>
</tr>
<tr>
<td>Gloucester</td>
<td>600</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>Hants.</td>
<td>160</td>
<td>Kersies and Serges.</td>
</tr>
<tr>
<td>Kent</td>
<td>30</td>
<td>Broad Cloths and Kersies.</td>
</tr>
<tr>
<td>Leicester</td>
<td>20</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>London and Middlesex</td>
<td>250</td>
<td>Ingrained Cloths, Crapes, Camblets, &amp;c.</td>
</tr>
<tr>
<td>Norfolk</td>
<td>400</td>
<td>Stuffs.</td>
</tr>
<tr>
<td>Northampton</td>
<td>30</td>
<td>Broad Cloths and Serges.</td>
</tr>
<tr>
<td>Nottingham</td>
<td>20</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>Oxford</td>
<td>35</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>Somerset</td>
<td>800</td>
<td>Broad Cloths and Serges.</td>
</tr>
<tr>
<td>Suffolk</td>
<td>250</td>
<td>Broad Cloths and Says.</td>
</tr>
<tr>
<td>Salop and North Wales</td>
<td>120</td>
<td>Cottons, Flannels and Friezes.</td>
</tr>
<tr>
<td>South Wales</td>
<td>25</td>
<td>Cottons, Flannels and Friezes.</td>
</tr>
<tr>
<td>Stafford</td>
<td>20</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>Warwick</td>
<td>30</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>Worcester</td>
<td>150</td>
<td>Broad Cloths and Kidderminster Stuffs.</td>
</tr>
<tr>
<td>Wilts.</td>
<td>300</td>
<td>Broad Cloths and Serges.</td>
</tr>
<tr>
<td>Westmorland</td>
<td>10</td>
<td>Broad Cloths.</td>
</tr>
<tr>
<td>York and Lancaster</td>
<td>1,600</td>
<td>Broad Cloths, Kersies and Bayes.</td>
</tr>
</tbody>
</table>

Average Annual Profit £7,350

Source: H. M. C. 1894, 42
APPENDIX 3A

(fig. 62) Distribution of the Woollen Industry in 1470

based on the alnage returns

Distribution of the
WOOLLEN INDUSTRY
in 1470

Taken from Morris & Wood 1922, 106
APPENDIX 3B

Textile-manufacturing Regions, c. 1500 and c. 1700

APPENDIX 3B

Textile-manufacturing Regions, c. 1500 and c. 1700

Taken from Langton 1978, fig. 7.1 (after Bowden 1971, 49)
APPENDIX 4

Provenances & Findspots of Seals (from nos. 1 - 5,000 only)

A) Provenances

(the 9 seals which mention two counties are counted under both)

<table>
<thead>
<tr>
<th>County</th>
<th>Number of Seals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berkshire</td>
<td>1</td>
</tr>
<tr>
<td>Buckinghamshire</td>
<td>3</td>
</tr>
<tr>
<td>Cheshire</td>
<td>1</td>
</tr>
<tr>
<td>Devon</td>
<td></td>
</tr>
<tr>
<td>Crediton</td>
<td>2</td>
</tr>
<tr>
<td>Exeter</td>
<td>65</td>
</tr>
<tr>
<td>Tiverton</td>
<td>9</td>
</tr>
<tr>
<td>Totnes</td>
<td>2</td>
</tr>
<tr>
<td>Devon total</td>
<td>130</td>
</tr>
<tr>
<td>Dorset</td>
<td>4 (including 3 with Dorset/Somerset stamps)</td>
</tr>
<tr>
<td>Essex</td>
<td></td>
</tr>
<tr>
<td>Bocking</td>
<td>3 (+ 1 matrix)</td>
</tr>
<tr>
<td>Braintree</td>
<td>3</td>
</tr>
<tr>
<td>Coggeshall</td>
<td>9 (minimum number)</td>
</tr>
<tr>
<td>Colchester</td>
<td>171</td>
</tr>
<tr>
<td>Dunmow (?)</td>
<td>1</td>
</tr>
<tr>
<td>Halstead</td>
<td>3</td>
</tr>
<tr>
<td>Essex total</td>
<td>246</td>
</tr>
<tr>
<td>Gloucestershire</td>
<td></td>
</tr>
<tr>
<td>Bristol</td>
<td>2 (+ 1 matrix)</td>
</tr>
<tr>
<td>Gloucestershire total</td>
<td>26</td>
</tr>
<tr>
<td>Hampshire</td>
<td></td>
</tr>
<tr>
<td>Southampton</td>
<td>- (1 matrix)</td>
</tr>
<tr>
<td>Hampshire total</td>
<td>5</td>
</tr>
<tr>
<td>Herefordshire</td>
<td>1</td>
</tr>
<tr>
<td>Huntingdonshire</td>
<td></td>
</tr>
<tr>
<td>Peterborough</td>
<td>1</td>
</tr>
<tr>
<td>Huntingdonshire total</td>
<td>1</td>
</tr>
<tr>
<td>Kent</td>
<td></td>
</tr>
<tr>
<td>Canterbury</td>
<td>32</td>
</tr>
<tr>
<td>Sandwich</td>
<td>3</td>
</tr>
<tr>
<td>Kent total</td>
<td>94</td>
</tr>
<tr>
<td>Lancashire</td>
<td></td>
</tr>
<tr>
<td>'Lancaster'</td>
<td>14</td>
</tr>
<tr>
<td>Manchester</td>
<td>5</td>
</tr>
<tr>
<td>Rochdale (?)</td>
<td>1</td>
</tr>
<tr>
<td>Lancashire total</td>
<td>21</td>
</tr>
<tr>
<td>County</td>
<td>Seal Count</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Lincolnshire</td>
<td>-</td>
</tr>
<tr>
<td>London</td>
<td>52</td>
</tr>
<tr>
<td>Norfolk:</td>
<td>county</td>
</tr>
<tr>
<td>Norfolk/Norwich</td>
<td>301</td>
</tr>
<tr>
<td>Kings Lynn</td>
<td>2</td>
</tr>
<tr>
<td>Norfolk total</td>
<td>308</td>
</tr>
<tr>
<td>Northamptonshire:</td>
<td>county</td>
</tr>
<tr>
<td>Kettering</td>
<td>1</td>
</tr>
<tr>
<td>Northamptonshire total</td>
<td>1</td>
</tr>
<tr>
<td>Oxfordshire:</td>
<td>county</td>
</tr>
<tr>
<td>Witney</td>
<td>1</td>
</tr>
<tr>
<td>Oxfordshire total</td>
<td>4</td>
</tr>
<tr>
<td>Somerset:</td>
<td>county</td>
</tr>
<tr>
<td>Bridgewater</td>
<td>1</td>
</tr>
<tr>
<td>Taunton</td>
<td>5</td>
</tr>
<tr>
<td>Somerset total</td>
<td>36</td>
</tr>
<tr>
<td>Suffolk:</td>
<td>county</td>
</tr>
<tr>
<td>Ipswich</td>
<td>1</td>
</tr>
<tr>
<td>Sudbury</td>
<td>1</td>
</tr>
<tr>
<td>Suffolk total</td>
<td>66</td>
</tr>
<tr>
<td>Surrey:</td>
<td>county</td>
</tr>
<tr>
<td>Guildford</td>
<td>2</td>
</tr>
<tr>
<td>Surrey total</td>
<td>3</td>
</tr>
<tr>
<td>Sussex:</td>
<td>county</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Warwickshire:</td>
<td>county</td>
</tr>
<tr>
<td>Coventry</td>
<td>2</td>
</tr>
<tr>
<td>Warwickshire total</td>
<td>2</td>
</tr>
<tr>
<td>Wiltshire:</td>
<td>county</td>
</tr>
<tr>
<td>Salisbury</td>
<td>1</td>
</tr>
<tr>
<td>Wiltshire total</td>
<td>10</td>
</tr>
<tr>
<td>Worcestershire:</td>
<td>county</td>
</tr>
<tr>
<td>Kidderminster</td>
<td>3</td>
</tr>
<tr>
<td>Worcestershire total</td>
<td>55</td>
</tr>
<tr>
<td>Yorkshire:</td>
<td>county</td>
</tr>
<tr>
<td>Halifax</td>
<td>1</td>
</tr>
<tr>
<td>Leeds</td>
<td>1</td>
</tr>
<tr>
<td>Wakefield</td>
<td>1</td>
</tr>
<tr>
<td>Yorkshire total</td>
<td>34</td>
</tr>
</tbody>
</table>

(25 counties represented - see fig. 64 below)

Total number of seals (from nos. 1-5000 only) with English provenances: 1105
(i.e. 1096 individual seals, with 9 counted under two counties)
(This is c. 23% of full total of all seals from nos. 1-5,000)
From the above figures it can be seen that over one quarter of the provenanced seals are from Norfolk, and that Norfolk and Essex seals together constitute almost exactly one half of the total. Devon seals make up over 10% of those with provenances, and Kent, Suffolk, Worcestershire and London each have over 50 (approx. 5%). Thirteen counties - those for which there are ten or less seals - show up only as a trace (less than 1%) among the recorded seals with provenances, and Lincolnshire is represented only by a matrix. Over half of the counties in the above list, taken together, provide less than 5% of the total number of provenanced seals recorded. Of the towns (the special case of Norwich aside), Colchester leads, having over 15% of the provenanced seals recorded, and Exeter has over 5% - the other towns appear only as traces.

Relatively few provenanced seals from nos. 1-5,000 can be attributed to the 16th century or earlier (i.e. two-disc seals with Lombardic lettering, or with Latin legends in Roman script). Less than 90 such seals (under 8% of the provenanced examples) have been recorded. About one third of these are London seals (these early issues constitute just over half of the 52 seals from nos. 1-5,000 which can be attributed to the capital), and about one sixth are from Kent. None of the other counties has even ten early seals. Sussex, Bristol and Guildford are only represented by seals attributable to this period, and seven of the nine recorded Tiverton examples have stamps from 16th-century matrices. It would be premature to make inferences about trade based on so few seals, which cannot be regarded as truly representative. Indeed, if all these early seals were discounted for fig. 64, only the relative position of London (which would move down below Yorkshire and Somerset) would be altered.
Total: 1105 (i.e. 1096 seals, with nine counted under two counties each)

For further discussion of these points, see Conclusions (above).
B) Findspots (nos. 1 - 5,000)

(fig. 65)

All findspots (total 1202 seals)

London finds (total 1008)

- London, Thames
- London, other than Thames

findspots
unknown

- the great majority of these may also be from the Thames in London

London, other than Thames

London outside London

unknown

abroad
The greater proportion (approx. 83%) of the total of 1202 seals from nos. 1 - 5,000 included in this thesis was definitely found in London. 729 seals (almost 70% of those with a known findspot) were from the Thames foreshore in the City and Southwark, or from sites right next to the River. Further seals in London collections (British Museum, Cuming Museum, and several in private possession) may well also have been found there, to judge from their association with material almost certainly from the Thames - i.e. documentation would appear to be lacking for what is known or thought to be a group of Thames material. If these were added, the London finds would rise to over 95% of the total of 1202 seals considered here. The concentration in the river area at the historic centre of London's commercial and textile-finishing area is underlined by the very few cloth seals in the former London Museum Collection * (catchment area principally Greater London), contrasted with the extensive collection formerly held by the Guildhall Museum * (catchment area mainly the City of London). Each of the 24 counties for which actual seals have been recorded is represented among the certain or probable London finds (Lincolnshire, for which only a matrix known, is the sole exception among the counties represented by items 1 to 5,000). It is quite likely that some of the seals for which no findspot is known, and which are now in provincial museums, were also found in the Thames in London. Although the Guildford Museum, the Hampshire County Museum collection in Winchester, the Ashmolean Museum in Oxford, and the Lynn Museum all have seals in some numbers, no local

* Now in the Museum of London collection, (the major national holding of these objects). The Guildhall Museum seals are usually those which lack accession numbers - see Appendix 1.
multiple finds have been reported at any of these places during the era of popular metal detecting - a notable contrast with the situation in recent years in London.

Outside London, the picture is very patchy. Enquiries were made by the writer directly to the national and principal provincial museums in the United Kingdom, and an advert was placed in the 'Information Exchange' section of the Museums Bulletin, seeking information on holdings of cloth seals. These approaches brought a small response. Recognition of seals by museum staff and archaeologists can by no means be guaranteed, and reporting of them is likely to be even more haphazard. Local finds have regularly been reported from the Bury St. Edmunds area and Norfolk *, and this explains an apparent small concentration of finds in East Anglia. It is probable that many more seals are found throughout the country, but are not recorded in any public archive. The town (other than London) where the largest number of provenanced seals have been found so far appears to be Bristol, with only five.

* Thanks to the diligence respectively of Elizabeth Owles (formerly Moyses Hall Museum, Bury St. Edmunds), and Barbara Green and Sue Margeson (Castle Museum, Norwich). Subsequent to the collection of data for this thesis, a number of seals have been reported from Devon, Lincolnshire and Salisbury by interested amateur workers.
The provenanced seals among nos. 1 - 5,000 for which there are findspots outside London are as follows:

<table>
<thead>
<tr>
<th>provenance</th>
<th>findspot</th>
<th>no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Devon)</td>
<td>Exeter</td>
<td>(?) Oxfordshire</td>
</tr>
<tr>
<td></td>
<td>Exeter</td>
<td>Exeter</td>
</tr>
<tr>
<td>(Essex)</td>
<td>Coggeshall</td>
<td>Stratford St. Mary, Suffolk</td>
</tr>
<tr>
<td></td>
<td>Colchester</td>
<td>Brill, Buckinghamshire</td>
</tr>
<tr>
<td></td>
<td>Colchester</td>
<td>Bristol</td>
</tr>
<tr>
<td></td>
<td>Colchester</td>
<td>Copenhagen</td>
</tr>
<tr>
<td>(Gloucestershire)</td>
<td>Bristol</td>
<td>Bristol</td>
</tr>
<tr>
<td></td>
<td>Bristol</td>
<td>Coventry, Warwickshire</td>
</tr>
<tr>
<td></td>
<td>Kent</td>
<td>Canterbury, Kent</td>
</tr>
<tr>
<td>(Lancashire)</td>
<td>? Lancaster</td>
<td>Brandon, Suffolk</td>
</tr>
<tr>
<td></td>
<td>London</td>
<td>Crayford, Kent</td>
</tr>
<tr>
<td></td>
<td>London</td>
<td>Aalborg-egven (Denmark)</td>
</tr>
<tr>
<td></td>
<td>London</td>
<td>(? ? Denmark)</td>
</tr>
<tr>
<td>Norfolk</td>
<td>Deal, Kent</td>
<td>1821</td>
</tr>
<tr>
<td>Norfolk/Norwich</td>
<td>Bury St. Edmunds, Suffolk</td>
<td>1016</td>
</tr>
<tr>
<td>Norfolk/Norwich</td>
<td>Bury St. Edmunds, Suffolk</td>
<td>1673</td>
</tr>
<tr>
<td>Norfolk/Norwich</td>
<td>Bury St. Edmunds, Suffolk</td>
<td>2385</td>
</tr>
<tr>
<td>Norfolk/Norwich</td>
<td>St. Albans, Hertfordshire</td>
<td>2676</td>
</tr>
<tr>
<td>Norfolk/Norwich</td>
<td>Baldock, Hertfordshire</td>
<td>2731 &amp; 2735</td>
</tr>
<tr>
<td>Norfolk/Norwich</td>
<td>Gorleston, Norfolk</td>
<td>4918</td>
</tr>
<tr>
<td>Somerset</td>
<td>Salisbury, Wiltshire</td>
<td>2989</td>
</tr>
<tr>
<td>Taunton</td>
<td>Deal, Kent</td>
<td>1819</td>
</tr>
<tr>
<td>Suffolk</td>
<td>Colchester, Essex</td>
<td>523</td>
</tr>
<tr>
<td>Worcestershire</td>
<td>Coventry</td>
<td>1129</td>
</tr>
<tr>
<td>(Worcestershire)</td>
<td>Kidderminster</td>
<td>Bristol</td>
</tr>
<tr>
<td>(Yorkshire)</td>
<td>Halifax</td>
<td>Letchworth, Hertfordshire</td>
</tr>
<tr>
<td></td>
<td>Leeds</td>
<td>Bristol</td>
</tr>
</tbody>
</table>

The seals with findspots outside London from those numbered above 5,000 which are included in the thesis give a greater prominence to finds outside Britain; this is because travel study permitted the writer to record some collections on the continent. Several of these seals are from archaeological contexts, but here too the emphases are probably misleading. The multiple finds from the wreck off Norway would dominate and unduly distort almost any simple, unweighted statistical consideration of the whole corpus described in this present work; they are not included in the following list (see Appendix 5 for details of the Essex, London and Suffolk seals from that group).
It is at once evident that, while the recorded pattern of findspots of seals supports the broad view of London as the principal national market for cloths (and in the late 16th and 17th centuries a major finishing centre for textiles manufactured all over England), there is no foreseeable hope that seals could be used to confirm the known configuration of the national cloth trade, let alone reliably to establish any significant but hitherto hidden trends. Many of the obvious major centres of textile consumption are at present unrepresented among the findspots - no seal has definitely been found in Norwich, and apparently only one (not numbered - see on Colchester Dutch say seals with the town arms) has been found in York. In these terms, textile consumption at Colchester, Exeter and Winchester is as well-represented by seals found locally (one for each - nos. 523, 4090 & 982), as are places as small as Brill and Caerleon (nos. 419 & 1336), for example. While the number of seals from diverse provenances found in London reflects the capital's importance in trade and industry, the provenanced seals found elsewhere illuminate the movements of only a few individual textiles or consignments. The popular market for Norfolk worsteds in the 17th century seems to begin to be reflected in the discovery of Norfolk seals in three counties and in Amsterdam, in addition to London and Norfolk itself. Colchester's new drapery (?? bay)
seals have been found in Bristol (no. 693), Buckinghamshire (no. 419), York (see above), Amsterdam (nos. 5616-7), s'Hertogenbosch (see on Colchester Dutch 'baey' seals with tabular legends) and Copenhagen (nos. 4254 & 4255), as well as in London. The Yorkshire seals (nos. 695 & 2763) found at Bristol and Letchworth may be a foreshadowing of the county's late predominance in the cloth industry, but by themselves they do not constitute convincing evidence of a mainstream trend. The presence of the Leeds seal (no. 695) at Bristol, one of the main ports for trade to the United States, and the other three actually found over there (see on Leeds Seals) can perhaps be seen as archaeological evidence of an 18th and early 19th-century trade route, though the Bristol example may represent the use of a textile in that city, just as the Kidderminster seal (no. 692) with the same findspot probably does too. The two (unnumbered) mid 17th-century Gloucestershire seals found in New York State are further probable examples from the trans-Atlantic trade via Bristol. The Somerset seals found in Salisbury and Deal (nos. 2989 & 1819) may represent a growing market for Taunton serges in the 17th century, though only the latter example was definitely for a textile of that kind - the former may perhaps have come from a cloth being finished in Salisbury. Exeter's thriving late 17th-century serge trade is barely represented outside London; no. 2987 and an unnumbered seal found in S'Hertogenbosch (see under Exeter Seals) respectively standing for the rest of the national and the international trades. Exeter's products are, in numerical terms, equally represented in the city of origin, by seals nos. 4090 & 7196. It is so far quite unusual for seals (apart from London ones) to be found in the town of issue - only the two Kent examples (nos. 3142 & 3144) excavated in Canterbury and the Bristol seal (no. 704) found in the city of origin are
potentially comparable outside the capital. Perhaps the seals most representative of a particular part of the mainstream pattern of trade, (again excluding London), are those from the shipwreck off Norway (see Appendix 5) - these are, of course, atypical finds when compared with the rest of the corpus here. Unexpected links are revealed by the late 17th-century Lancashire seal found in Suffolk (no. 4916, perhaps for a 'cotton'), by the Wiltshire seal (no. 5651) probably discovered in Stockholm, and by the Worcestershire seals found in Amsterdam and Nya Lödöse in Sweden (unnumbered - see under Worcestershire Seals). London's textile export trade (at least the part of it revealed by London seals) is poorly represented in England by a single provincial find in Kent (no. 2992), but somewhat more widely represented in continental N.W. Europe by seals found in the Netherlands, Denmark (nos. 4253A & B), Norway (no. 5747), and (?) Finland - see under London Seals. Even so, this archaeological evidence is sadly deficient when the scale of London's trade, eventually reaching over the known world, is set against it. Outside Europe, only a wreck off Brazil has so far definitely produced London seals, and a probable London dyer's seal was found on the wreck of the Dutch ship Batavia (sunk in 1629) off Western Australia.

Only 25 of the seals numbered between 1 and 5,000 (just over 2% of those included in this thesis) were recovered in the course of archaeological excavations. These are nos. 519, 523, 851, 944, 947, 966, 1336, 1923, 2308, 2676, 2731, 2735, 2935, 2936, 3142, 3144, 3934, 4114, 4680, 4681, 4686, 4688A & B, 4689, 4690. In addition, nos. 5613A & B, 5615, 5616, 5617, 5619, 5621, 5747 & 6511, as well as the large group of seals from the shipwreck off Norway (see Appendix 5), are also from archaeological excavations, while no. 7196 was found
during the archaeological investigation of a standing building. The
dating information from associated objects for those found in London
and in Amsterdam has been particularly useful for the study of seals.
The few provenanced cloth-seal matrices (which might have been
expected usually to be found close to where they were used, or at least
in the same county) present a similarly wayward picture. Matrices for
Suffolk (unnumbered, see under Suffolk Seals) and Wiltshire (no. 59A)
were found in the respective counties of origin, but one for Bristol
(no. 1128B) was found just over the border in Somerset, an Essex
example (no. 3500) was dug up in Norfolk, and a Yorkshire one
(unnumbered - see under Yorkshire Seals) was apparently unearthed in
Suffolk. The findspots of the matrices for Kent (no. 66), Bocking
(no. 738 - the only post-medieval one recorded), Lincoln (no. 65), and
Southampton (no. 64) are unknown. An unprovenanced subsidy seal
matrix (no. 45A) was found in the Pyx Chapel at Westminster (where it
may perhaps have been deposited for safekeeping because it was felt to
be analogous to the items held there, which were associated with
checking the quality of coinage). The personal use of an old subsidy
seal matrix (see no. 15) in Monmouth - a minor cloth-trading centre in
the late 14th century - adds a further conundrum.

To sum up, this archaeological evidence for the cloth industry and trade
is at present so incomplete, that, apart from the case of late 16th- and
17th-century London, the picture it presents is not truly
representative, and, while it furnishes a number of points of
considerable specific interest, it seems unlikely that it will provide
information that will significantly alter existing ideas about major
trade links.
Seals from a Mid-Seventeenth-Century Wreck

A report on the excavation by the Norsk Sjøfartsmuseum (Oslo) of the wreck of a cargo ship of 17th-century date off the south coast of Norway near Bamble has been published (Molaug 173-95). Among the artefacts recovered were 393* cloth seals or fragments, including 190 provenanced examples (151 from London, 33 from Suffolk and 6 from Essex). Of these, 102 items were recorded by the writer in Oslo in 1982 during study travel financed by a University of London Central Research Fund grant. The provenanced items recorded then were 80 London seals or fragments (representing at least 76 complete seals), and 5 Essex and 17 Suffolk alnage seals or fragments issued by authority of the alnager TB - a total of at least 98 provenanced seals** (see under Essex, London and Suffolk Seals, and Appendix 1 nos. 5655 to 5728).

These seals are of considerable importance as the first contemporary group with diverse stamps from a tightly-defined context (in contrast to groups which may have been discarded over a period of time, found in pits, drains, wells, etc.).

It is possible that each of these seals represents a single cloth - i.e. the cargo comprised at least 76 textiles from London, 5 from Essex and 17 from Suffolk. If, however, the 22 provincial cloths were finished in, or just traded through, London (as opposed to being put on ship at one or more of the ports along the

* 465 according to a letter of 24/11/77 from Herr Molaug.

** The other provenanced items mentioned by Molaug in his summary and in letters to the writer could not be traced in 1982. Many of the seals examined by the writer had deteriorated considerably over the five years since recovery. Photographs and catalogue entries indicate that parts of some seals which are now illegible could be deciphered in 1977.
east coast - such as Ipswich, where the Eastland Company had one of its main offices - see Hinton 1959, 24) London seals could have added to them in the capital (at Blackwell Hall - see London, Historical Background), so that these 22 cloths could each have had seals from two provenances. The secondary stamps apparently with the arms of London (clearest on no. 5709) on most, if not all of the Suffolk seals (and perhaps on the Essex ones too, although none of the secondary stamps on those examined is actually legible), seem to point to export from the capital. If this was what happened, the minimum number of cloths in the cargo thus represented could have been 151. The maximum number represented by all the provenanced seals recovered (including those not seen by the writer in 1982) would have been 190. What cannot be assessed accurately is how many seals originally on the cargo of cloths were not recovered from the wreck, and whether, with all the shortcomings in the system of regulation, some of the cloths might not have been sealed at all.

The crudeness of the engraving for 68 of the London seals (nos. 5655/1 - 68, a minimum of 64 complete examples), which also omit the X from 'EXCELIS' in the legend, leads to speculation that these may have been counterfeits, used in avoiding examination of the textiles and duties payable in London, and intended to deceive customers abroad that quality checks had been carried out. If this is the case, then only about 16% of the London seals from the wreck and recorded in 1982 were genuine. It is difficult to believe that such a picture could be representative of the trade in the principal national commodity from the main port of the realm, though individual cargoes might sometimes have contained an even higher proportion of falsely-sealed cloths. The stakes were presumably high enough to lead occasionally to deception on this scale, but the authorities at home and abroad would surely have been able to prevent it from becoming a regular occurrence. The discovery that only about 20% of some cloths examined in 1631 at Blackwell Hall in a spot check
were properly sealed (Ramsay 1965, 86-7), shows that there was indeed scope for sharp practice, but also that it might be revealed if the cloths went through the legitimate market.

Falling outside the compass of the main discussion of this thesis, but worthy of mention here, are about half a dozen London dyers' seals, which were also recovered from the wreck (Molaug 179; cf. Egan 1985, 4 fig. 20). These were probably all for woaded textiles. Scraps of woollen cloth preserved between the discs of two of the recovered London-arms & angel seals are in one instance a very pale brown (seal no. 5655/42), and in the other a pale blue (seal no. 5655/7). The original colours may have faded. At this stage, it is only possible to speculate whether any of the dyers' seals would have gone on the same textiles as the other London or provincial seals. A great many Essex cloths, especially bays, were traded to south Europe and elsewhere from London in the 17th century, some of them were unfinished when they left the county of origin, but were intended to be coloured later (Pilgrim 1959, 39 & 43; V.C.H. Essex 1907, 395-6). There was a strong tradition of dyeing locally-woven cloths (especially in blue) in Suffolk by the early 17th century, and the export trade in these was substantial (V.C.H. Suffolk 1907, 258-60 & 262). Despite the local tradition, a number of the cloths woven there were dyed in London (Zins 1972, 162). The Eastland countries - Scandinavia and the Baltic - were important customers for broadcloths from both counties in the first half of the century (Hinton 1959, passim, especially 24, 34, 50, 53, 119; V.C.H. Suffolk 1907, 265-66; Pilgrim 1972, 253). The intended destination of the vessel wrecked off Bamble is unknown.

The Essex and Suffolk seals from the wreck, all issued in the name of the alnager T B, have different stamped numbers on the outer discs, presumably the results of examination of each cloth individually. At least three different privy marks appear on the Suffolk seals on the stamps opposite (i.e. stamped
on the outer discs at the same time as) those with the numbers. The privy marks indicate three different searchers (cf. 'searched' here on Essex nos. 5686A - E). It is not known whether these three would have been a team in one centre (? Ipswich), or whether each might have worked in a different part of the county. The stamped figures (31, 56, 58, 60 & 61) suggest two different, though possibly related, specifications - perhaps cloths and half cloths - with the weight in pounds, or (less likely) the length in yards, respectively around 60 and 30 (see above, The Sealing of Textiles in England: the system in operation; cf. Heaton 1965, 177-8 & Ramsay 1965, 101). Variation was clearly anticipated by the searchers, whose stamps catered for more than one figure around the higher specification.

An approximate date some time in the early 17th century for the wreck can be established from ceramics, clay pipes and other objects recovered (Molaug, letter to the writer, 3/4/1980), but the seals may provide a closer indication. The CR on the Essex & Suffolk seals points to the reign of Charles I (1625-49) - a date in the reign of Charles II does not fit with the rest of the finds assemblage. The identification of the TB on the these seals with Tobias Blosse (died 1631) of Ipswich, is not certain (see on Essex & Suffolk Seals). Suffolk TB seals found in London (nos. 2722 & 3328) and having arms probably relating to the Commonwealth, make this suggestion (originally proposed by Mr D.L. Jones, Keeper of Human History at Ipswich Museum, in a letter of 27/6/1978 to the writer) now appear unlikely. A date in the second quarter of the 17th century is the best than can be suggested at present from the seals.

Other seals from the wreck include unprovenanced ones with the royal arms (probably further alnage types), and several with privy marks, probably for different clothiers. Work in local record offices could perhaps produce some identifications of marks, though the chance of success seems slight. As things

405
stand, there is no way of determining whether a particular mark was used in Essex, in London, or in Suffolk.

Only the general background of the seals from the wreck has been established. The kinds of textiles the seals suggest were being transported, and their provenances, appear to correspond with the documented trade of the period. Further work, particularly if the date of the last voyage of the ship can be established more closely, may reveal connections with documented individuals.
Blank Text
1659 (fol. 116)
Thomas Saffery  John Betts
John Balderston  John Burridge
John Morduch  Thos Archer  SB
John Lord  John Browne  MLHL
William Hayward  Gilbert Pickeringe  BBAB
Thomas Lombe  Math Rix  PR

(Next entry 1665)

1665 (fol. 247)
Robt Freeman  John Wade
Robt Howard  Tho Copeman
Rich Brooke  James Shepheard  FH
John Wrench  John Porter  BWRW
John Rant  John Brown  WCSP
Danniell Westall  Robt Claxton  BC

1666 (fol. 281v/282)
John Wrench  John Porter
Jo Rant  Robt Claxton
Dan Westhall  Jo Browne  WR
Wm Cubit  Jo Shepheard  WCBC
Henry Brady  Jo Ellis  PCBS
Jo Chapman  Jos Lane  EL

Court Book  vol. 24:

1667 (fol. 30/30v)
Willm Cubit  Willm Hunt
Henry Brady  John Ellis
Jo Chapman  Joseph Lane  CB
John Newman  John Porter  CNPB
Tho Postle  John Browne  HELP
John Brooke  James Shepheard  BS
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1673 (fol. 242v/243)
Thos Nuthall
Aug Steward
Edw Clarke
Martin Money
Rich Smith
Timothy Wynn
John Browne
James Carrit
John Clements
Math Cogny
Wm Lombe
Robt Claxton

1674 (fol. 280v/281)
Martin Monie
Rich Smith
Timothy Wynn
Fra Westen
Edw Bayst
Bryan Lewys
Wm Barker
John Arger
Jo Brettingham
Sam Smyth
Tho Warner
Wm Harvy

1675 (fol. 315/315v)
Frances Wesen
Edw Bayst
Briant Lewis
Abrah Reten
Tho Harrison
John Copping
William Barker
John Arger
Joh Brettingham
Sam Smith
William Harvy
Rich Cogine

1676 (fol. 354v/355)
Abraham Rotie
Tho Harrison
Jo Coppin
Nich Parmenter
Wm Robbins
Wm Burnham
Wm Custance
Tho Page
Tho Woodrow
Hen Howard
Tho Greene
Tho Parkin

1194 410
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John Hall  John Newbeggin
Tho Pindar  Sam Copeman
Jo Lawes  Robt Curby
Tho Bell  Jacob Webster
Nich Beckett  John Lawrence
Gabriel Buttrie  John Bircham

1688 (fol. 235)
Thomas Bell  John Lawrence
Nich Berkett  Jacob Webster
Gabriel Buttrie  Tho Rye
George Gynn  James Bircham
Stephen Gynn  Colby Chamberlaine
John Wyth  Samuell Elis

1689 (fol. 251v)
George Gynne  Thomas Rye
Stephen Gynne  Colvey Chamberlaine
John Wythe  Samuel Elis
Wm Clarke  James Bircham
Tho Blythe  Jacob Webster
Wm Blythe  John Laurence

1690 (fol. 268)
Wm Blythe  Thomas Rye
John Locke St Giles  Colvie Chamberlaine
William Selth  James Garrett
Rich Witherington  Henry Lincoln
Thos Barrett  William Barker
George Bayfield  James Codlin

1691 (fol. 277)
William Copman  Nich Chamberlayne
George Bayfield  James Garrett
William Cockman  William Barker
Rich Witherington  Nathaniel Lubbocke
John Cowell  Henry Lincoln
John Howes  James Coolinge

413
1692 (fol. 292/292v)
Wm Cockman
John Cowell
John Howes
Gilbert Pickeringe
Nich Booty
Thos Goskar

James Garrett
William Barker
Nathaniel Lubbocke
Henry Lincolne
James Codlin
Nich Chamberlaine

CC
HPBG
GBLL
CC

1693 (fol. 306v)
Gilbert Pickeringe
Nicholas Booty
Thomas Goskirke
John Balderston
George Hase
James Bacon

James Garrett
Wm Barber
Nicholas Chamberlaine
Henry Lincolne
James Codlin
Nathaniel Lubbocke

PB
GBHB
GBCL
CL

1694 (fol. 321)
James Bacon
John Wrench Jnr
Ben Sabberton
John Longher
John Barrett
Thos Huson

Nich Chamberlaine
James Garrett
Wm Barker
John Bulwar
Jn Howard
Henry Redham

BW
SLBH
CGBB
HR

1695 (fol. 338v)
Benjamin Sabberton
Bernard Towell
Richard Athill
Tho Garwood
Peter Gibson
John Lancaster

James Garrett
Wm Blyth
John Bulwar
John Howard
Henry Rodham
Rich Athowe

ST
AGGL
GBBH
RA
Court Book vol. 26:

1696 (fol. 12v)
Richard Athil
Tho Garwood
Peter Gibson
John Lancaster
Henry Secker
Tho Smith

1697 (fol. 29)
Henry Secker
Thomas Smith
Richard Athill
John Lancaster
Peter Gibson
Tho Garwood

1698 (fol. 46v/47)
John Lombe
Bartho Meadhurst
Tho Mott
Dan Shinn
Mathew Coats
John Grinley

1699 (fol. 61v)
John Lombe
Barth Meadhurst
Tho Mott
Dan Shinn
Mathew Coats
John Grinley

AG
GLSS
GBAH
RB
SS
ALGG
GBAH
BR
LM
MSCG
GBBF
DR
LM
MSCG
DRBG
BF

415
1700 (fol. 83v)
Bartholomew Medhurst
Daniel Sheen
Thomas Mott
John Bacon
Joseph Carver
(five only)

Bartholomew Medhurst
Daniel Sheen
Thomas Mott
John Bacon
Joseph Carver
(five only)

1701 (fol. 107v)
William Fella
Joseph Carver
John Bacon
Timothy Copping
Ralph St. John
William Gedge

1702 (fol. 128)
Timothy Copping
Ralph St. John
William Gedge
Tho Tennant
Stephen Smith
Antho Parmenter

1703 (fol. 168v)
Anthony Parmenter
John Black
Tho Westgate
Stephen Smith
Robt Mott
Tho Smith

Thomas Riches
Eleazer Durrant
John Bulwer
John Fox
Danl Woods
Charles Bidden

MS
MBC
RDBF
WB

Daniel Woods
Tho Howard
Tho Jeckes
Charles Bidden
John Duckett

FC
BCS/JG
WRHJ
BD

John Ducket
Charles Beeting
Tho Howard
Tho Jecks
Wilm Robbins
Tho Couldham

CS/J
GTSP
DBHJ
RC

Tho Jeekes
John Ducket
Tho Coldham
Wm Robins
Danl Woods
Stephen Taylor

PB
WSMS
JDCR
WT
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APPENDIX 6B

Mayors of Norwich (1570-1660)

(source, Cozens-Hardy and Kent 1938, 60-90)

1570 John Aldrich
1571 Thomas Green
1572 Robert Suckling
1573 Thomas Peck
1574 Christopher Soam/Some
1575 William Ferrou/Ferrer
1576 Thomas Layer
1577 Thomas Culley
1578 Sir Robert Wood
1579 Simon Bowde
1580 Christopher Soam
1581 Christopher Layer
1582 Robert Suckling
1583 Thomas Gleane
1584 John Suckling
1585 Thomas Layer
1586 Thomas Peck
1587 Francis Rugg
1588 Simon Bowde
1589 Christopher Layer
1590 Thomas Pettus
1591 Robert Yarham/Yarome
1592 Thomas Gleane
1593 Clement Hyrne
1594 Christopher Soam
1595 Thomas Layer
1596 Richard Ferrou
1597 Thomas Pye
1598 Francis Rugg
1599 Roger Weld
1600 Alexander Thurston
<table>
<thead>
<tr>
<th>Year</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1601</td>
<td>John Tesmond</td>
</tr>
<tr>
<td>1602</td>
<td>Thomas Gleane (ob.), Francis Rugg</td>
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<tr>
<td>1603</td>
<td>Thomas Lane</td>
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<tr>
<td>1604</td>
<td>Sir Thomas Hyrne</td>
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<tr>
<td>1605</td>
<td>Thomas Sotherton</td>
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<td>1606</td>
<td>Joshua Culley</td>
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<tr>
<td>1607</td>
<td>George Downing</td>
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<tr>
<td>1608</td>
<td>Sir John Pettus</td>
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<tr>
<td>1609</td>
<td>Sir Thomas Hyrne</td>
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<tr>
<td>1610</td>
<td>Roger Ramsey</td>
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<td>1612</td>
<td>Thomas Blosse</td>
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<td>1613</td>
<td>George Cocke</td>
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<td>1614</td>
<td>Thomas Pettus</td>
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<tr>
<td>1615</td>
<td>Sir Peter Gleane</td>
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<tr>
<td>1616</td>
<td>Sir Thomas Hyrne</td>
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<td>1617</td>
<td>John Mingay</td>
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<td>1618</td>
<td>Richard Rosse</td>
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<tr>
<td>1619</td>
<td>Roger Gaywood</td>
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<td>1620</td>
<td>Richard Tolye/Tooley</td>
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<tr>
<td>1621</td>
<td>George Birch</td>
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<td>1622</td>
<td>Francis Smallpiece</td>
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<td>Robert Debney</td>
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<td>Bassingbourne Throckmorton</td>
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<td>William Bussey</td>
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<td>Christopher Baret</td>
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<td>1635</td>
<td>John Anguish</td>
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<td>1636</td>
<td>Thomas Baker</td>
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<tr>
<td>1637</td>
<td>Robert Sumpter</td>
</tr>
<tr>
<td>1638</td>
<td>John Tolye/Tooley</td>
</tr>
</tbody>
</table>
1639  Richard Harman
1640  Henry Lane
1641  Thomas Carver (ob.), Adrian Parmenter
1642  William Gostlin
1643  John Thacker
1644  John Tolye/Tooley
1645  Matthew Peckover
1646  Henry Watts
1647  John Utting
1648  Edmund Burman
1649  Robert Baron (ob.), John Rayley
1650  Matthew Lindsey (ob.), Thomas Baret
1651  Barnard Church
1652  William Barnham
1653  John Mann
1654  Thomas Toft
1655  John Salter
1656  Samuel Puckle
1657  Christopher Jay
1658  Roger Mingay
1659  William Davy
1660  Sir Joseph Paine
Glossary of Technical Terms

(For terms referring to the seals, see figs. 2A & B. For heraldic terms not included in the glossary, the reader is referred to A. C. Fox-Davis, Complete Guide to Heraldry (London, first published 1909). Some other terms, which are mentioned only once, are defined in the text.)

N.B. Several of the fabric names were used for different kinds of textile at different periods. In selecting definitions the attempt has been made to reflect contemporary usage appropriate to the subject matter of this thesis, but in a few cases some doubt as to the appropriateness remains.

Alnage: system of quality control in the textile industry, administered and run by officers of the Crown up to 1724

(aulnage, ulnage)

Arras: originally a rich hanging (the name derives from that of the town in France)

Assize, (cloth of): statutory dimensions, quality and other specifications

Bay: usually a mixed woollen warp/worsted weft textile, though sometimes described by contemporaries as a woollen, one of the principal lightweight new draperies, used for linings etc. Impressions from bay on seals indicate a plainwoven fabric, generally with 10-12 threads per 10 mm. in both systems. 'Crown' - and 'cross' bays seem to have been respectively the standard-quality and better-quality (marginally more loosely-woven according to impressions) kinds at Colchester. See also minikin.

(Modern baize is a different kind of fabric.)

Blanket: thick woollen textile, made from hollow-spun thread

Broadcloth: originally woollen cloth woven on a broad loom; later a fine, heavily-milled woollen

Broad Seal: a seal with large-diameter discs (i.e. c. 30mm +)

Burrel: a coarse woollen cloth of the middle ages

Cam(b)let: an imitation in worsted of expensive foreign fabrics, often with a decorative lustrous surface

Calender: (appropriate for worsteds and half worsteds) to smooth the surface of the textile, by hand or in a press, to give a glossy sheen

Caunegantry: lightweight, 'dry' (non-greasy) fabrics, woven by the Walloons in Norwich
Clothier: capital-owning employer or labour hirer of less-affluent textile workers

Cogware: a coarse woollen fabric, made of inferior wool

Cotton: (in 16th and 17th centuries) a pure woollen textile with a raised ('cottoned') nap; in mixed fabrics, often the vegetable fibre.

Crape: a plainwoven gauzy fabric, originally worsted

Crown Seal: an alternative name for alnage seal

Damask: a figured fabric, originally worsted; also used of mixed fabrics of silk with other fibres

Dornix: a worsted fabric for hangings and carpets, (also a mixed linen & woollen fabric)

Dozen: a woollen cloth originally twelve yards long

Drugget: a mixed fabric with worsted warp and woollen weft

Duffield: a thick woollen cloth with a raised nap on both sides (cf. modern duffel)

Escallop: (heraldic term) scallop shell

Erased: (heraldic term) torn off

Finishing: the processes of fulling, raising the nap, shearing, calendering and dyeing a newly-woven cloth

Flannel: a loosely-woven woollen fabric

Frisado: a type of bay with the nap on one or both sides raised and shorn

Frisado: (freesadoe, frieze, frize)

(Freesadoe, frieze, frize)

Fulling: the thickening (felting) and cleaning of a newly-woven cloth

Fustian: a coarse, mixed cotton and linen fabric

Grograin: a coarse, mixed worsted and mohair fabric, sometimes with silk

Grograin: (grogram)

Half Worsted: textiles (stuffs and new draperies) made with worsted warp & woollen weft

Half Worsted: (handy warp)

Handwarpe: cloth with the warp prepared in some special way (?)

Hundred(s): probably some reference (not a simple count) to the number of warp threads in some new draperies, notably bay
Kersey: a relatively coarse, narrow cloth, made with long wool (less coarse than most medieval broadcloths)

Linsey - woolsey: a mixed linen-warp and woollen-weft fabric

Long ell: a kind of perpetuana (q.v.)

Medley cloth: a fabric made with wool of mixed colours or shades (see Spanish cloth)

Minikin: a superior kind of bay

Mockadoe: a worsted fabric imitating velvet, used for upholstery etc.

Moreen: a thick woollen fabric used for curtains

Mullet: (heraldic term) star with five points

New Drapery: the generic term for a variety of lightweight, generally cheap and cheerful fabrics, often mixed; these developed from the late 16th to late 17th centuries (after which the name fell out of use, though many of the fabrics were still produced)

Old Drapery: the generic name for traditional woollen textiles (as opposed to new draperies)

Penistone: a coarse woollen white cloth, originally manufactured in the Yorkshire town of the same name

Perpetuana: a durable serge

Piece: the entire, undivided length of a newly-produced textile

Rash: a very smooth cloth, especially a half-worsted, used for cloaks etc.

Ray: a striped cloth

Ruggs: a long-napped woollen fabric

Russel: a ribbed or corded worsted fabric, used for outer garments etc.

Russet: a medieval coarse cloth of reddish-brown (russet) colour

Satin: a very glossy worsted fabric, imitating or resembling silk, with either the warp or the weft virtually concealed by the other
Say: a fine, worsted fabric (included among the new draperies in England). Impressions on seals indicate a twilled or sometimes apparently plainwoven fabric, generally with c. 22 threads per 10 mm.

Searcher: the man who examined the quality and specifications of cloths, or one of the finishing processes

Serge: a durable twilled worsted fabric

Set(t) cloth: a cheap, (?) woollen cloth, of the late medieval period

Shalloon: a closely-woven woollen or worsted twilled cloth, used for linings etc.

Spanish cloth: a cloth woven in England of fine imported Spanish or similar wool (the term was apparently interchangeable for the most part with 'medley')

Stammin: a coarse worsted fabric

(Black, etc.)

Strait: a narrow cloth

(Black cloth)

Stuffs: generic term for worsted fabrics

Subsidy: a tax payable to the Crown on each cloth before it could go on sale at the market

Tammy: a fine, thin, high-quality worsted fabric, used for curtains, etc.

Tiltcloth: a covering made of coarse cloth

Twill, twilled: fabric with diagonal lines produced by passing weft threads over one warp thread and then under two or more

Vess(e): a worsted fabric of the medieval period

Walker: a fuller who trampled the cloths (as opposed to using mechanical power)

White (cloth): undyed cloth

Worsted: a fabric made with long-staple, combed wool

(Main sources, - Kerridge 1972, Oxford English Dictionary, Ponting 1971)
The marking of newly-woven cloths with seals of lead was part of the textile industry's quality control system in medieval and later times throughout Europe. Thousands of different stamps have been recorded from excavated examples.

In England, late 13th- or early 14th-century seal matrices for the cloth subsidy (i.e. tax) are known (fig. 1), but no corresponding stamps have been identified on surviving seals. Early marks may have been of wax. From at least the late 13th century the alnager, an officer of the crown, saw that the subsidy was paid and that current regulations were observed in the manufacture of each textile. At its most complicated this involved checking that the cloth was of good quality and that it conformed with the statutory length, breadth and weight. A mark or seal was put on each satisfactory cloth. Without this alnage seal the textile could not legally be sold. The cumbersome alnage system ended in 1724, but seals continued to be used as labels on cloths into the 19th century.

The earliest datable lead seal is from the late 14th century (fig. 3). County stamps of later medieval date have a leopard's head (fig. 4) or a crown over sun, rose or lis (either in combinations or alone) on one side and on the other the arms of England (fig. 5a and b). A precise chronology for the 15th century has still to be established. The legend 'seal of subsidy / alnage of saleable cloths in the county of...' appears in abbreviated Latin, with many variations, along with these and later devices up to the end of the 16th century. From 1464 a stamp with an ornate 'F' in place of that with the crowned devices was put on faulty cloths (i.e. those with minor imperfections), which were sold as seconds (fig. 5c). Later versions have the 'F' crowned. Textiles with serious defects were probably destroyed. County stamps with a halved sun and rose crowned were probably current in the 1470s and 1480s.
London seals, which always differed from the various county series, have in the earlier 15th century a crude head of St. Paul with a sword on one side and on the other a crown (fig. 6a and b). More elaborate versions of these devices lasted until the mid 16th century.

Early Tudor county seals may have continued to make use of the stamps described above; others, with the arms of England on a simpler shield, include 'Henricus' in the legend. Crowned rose stamps (fig. 7) seem to have been used only in Kent, during the reign of Henry VIII.

Important legislation of 1552 brought under the alnage system types of cloth previously omitted and laid down requirements for dimensions. A county series dated 1553 (fig. 8), and two-part seals with standard length and weight figures (cf. 'P' for pounds weight and 'Y' for yards length in fig. 13) cast on a rectangular flan probably resulted from this legislation: the latter type includes a space for a stamp reading 'searched' (i.e. examined), which closed the seal. A profusion of laws added to or amended these regulations up to the 17th century.

The usual Elizabethan county seal had a crowned portcullis (fig. 9) and sometimes the cloth's weight in pounds on the other side. Seals with poorly rendered versions of the portcullis are thought to be counterfeits, placed on unexamined cloths in order to avoid paying tax. Several towns began to have their own seals in the 16th century. London seals from the reign of Elizabeth feature the arms of England and the city arms. A large number of seals with privy marks and dimensions are known from this time onwards, when the clothier was required to put his mark on each cloth and to specify the length.

The first four-disc seals (fig. 10) were probably used at the end of the 16th century. An inner disc from an incomplete example has 'ER' crowned; its surface is gilded, a practice which became common on some four-disc seals of large diameter (30—50mm) in the following century.

The development of new types of fabric was stimulated by immigrant weavers in the later 16th century. Communities of settlers in Kent and East Anglia produced a range of 'new draperies', and special seals appeared for these fabrics. Large two-disc and four-disc seals are known in some numbers for bay and say cloths woven by the Dutch at Colchester (fig. 11a—c), whose rigorous quality control meant that their products commanded high prices. Counterfeit seals put on similar but inferior cloths became a considerable problem in the 17th century. Colchester Dutch seals are all dated 1571, the year the industry was founded; these seals probably continued in use into the 18th century. The immigrants also used rectangular and ovoid one-piece seals with holes horizontally which allowed them to be tied into place.
Regulation was at its most complex in the 17th century, when a single cloth might have half a dozen different seals applied to it, including that for alnage. Four-disc seals (usually with diameters of c. 15mm) came to be widely used by the alnagers of this time. A series of county seals dated 1610-11 includes both two-disc and four-disc types and may mark the start of the transition to the four-disc type for the alnage (fig. 12). The latter form was in use up to the end of the system in 1724, although some places continued to use two-disc seals at least until the middle of the 17th century. Some stamps refer to the successive Dukes of Lennox and Richmond, who controlled the alnage from 1605 onwards (fig. 13a and b). Following the Restoration, the monarch's head and the amount of cloth tax in pence frequently appear on alnage seals (fig. 14a and b).

Seals for Norfolk worsteds had two discs. Those from the early 17th century have a crowned rose on one side and the arms of Norwich on the other for the city's textiles (fig. 16); the lion was omitted from the arms for worsteds woven elsewhere in the county. In the second half of the century seals were applied to both ends of the textile, one stamped with 'Norwich' and the initials of the annually-elected wardens of the worsted weavers' guild, the other with 'worsted reformed' and the length in yards (fig. 17a-d).

Exeter's important serge trade of the 1670s is represented by seals which were changed annually (fig. 15a and b). Here, as elsewhere, the inner parts could be round, square or star-shaped.

The large London four-disc seals of the 17th century have the city arms and an angel (fig. 18). These cast devices were often gilded.

Sometimes the type of cloth is specified: kersey ('carsay'), serge, cotton, or the generic 'new draprie', for example. The stamping of a seal often left an imprint of the textile on the inside surfaces of the discs, providing information about the weave and fineness. Textile imprints on outside surfaces may sometimes be the result of calendering a folded worsted.
Starting in the late 16th century and lasting throughout the 17th century, two-disc seals were used in the dyeing industry to indicate the colourant used on the cloth and the person responsible for applying it. Some London seals have the Dyers’ Company arms (a chevron and three madder bags); others have a madder bag as a symbol of the industry in general, with letters to specify the dyes used (fig. 19). ‘London stall’ stamps, with I, II, III, etc probably indicate the number of successive washes in woad for blue cloths (fig. 20). A few seals specify cochineal, ‘in grayne’ or (?) bleached.

One-part ‘seals in the form of blobs, each with an asymmetric hole by which to tie it in place, are usually stamped with privy marks of late 16th- or 17th-century types, probably to identify artisan dyers (fig. 21a–b). In the 18th and early 19th centuries two-disc seals give the dyer’s full name and trade. Similar stamps with a name and ‘packer’ were used to show who folded the cloths and sent them to the markets. Fulling mill owners and clothiers too continued to seal cloths after the alnage finished. Two-disc seals were also still in use in the early 19th century by the East India Company and by the army (probably for uniform cloths).

The earliest identified seals from imported textiles are Venetian, dating from the first half of the 15th century (fig. 22a and b). St Gallen linen or fustian seals are known from the third quarter of the century (fig. 23a and b) and a wider range of imports, mainly linens, is attested by seals from France, Germany and the Low Countries during the 16th and 17th centuries. Seals for Augsburg fustians (fig. 24) and Haarlem linens (‘Holland’) have a wide distribution here, and those from Leiden textiles (some of which were woollens), stamped with the crossed keys of the city arms, are also quite common. A few Danzig seals probably represent sailcloths imported from the Baltic in the 16th century.

The findspots of cloth seals and of the stone moulds in which the blanks were cast sometimes indicate the location of textile processing.

The only identified seals of the forms described here which were not put on cloths are of the two-disc type and are stamped ‘Kosher’ in Hebrew. These were probably used in the later 17th century by the Jewish community to label chickens destined for the table.

Select bibliography

Includes types found in England. Summary in English.
Includes seal with evidence of calendering.
Includes extensive references.
Erroneously refers to ‘bale’ marks. Of general use passim in understanding the style of ‘merchants’ marks on seals.
Tonnochy, A.B. Catalogue of British Seal Dies in the British Museum (London, 1952), pp. 11-12 and pl. IV.
To be used with caution.

As well as the seals in the collections, photographic records of many examples elsewhere are held in the Museum of London.
The Sealing of Cloth in Europe, with Special Reference to the English Evidence

WALTER ENDRÉI AND GEOFF EGAN*

THE PURPOSE AND SIGNIFICANCE OF CLOTH SEALING
The mere physical appearance of some commodities tells the consumer very little about their quality. He will not know the taste of a wine until he has opened the bottle, he will not know how well his sword is tempered until it has been tried in battle, and he will learn how durable a cloth is only after he has worn it for some time. Soon after the advent of long distance trade, there was a demand for the quality of goods to be guaranteed by the makers or the sellers in such a way that the provenance of the products could be ascertained at any later time. Marking the source of the product — whether by a hallmark, a watermark for paper, or a ceramic mark — developed from simply being an administrative device into a method of advertising the goods. The marks on reliable articles of good quality came to be much in demand and to command a higher price. Rival manufacturers of inferior goods were quick to counterfeit such marks. The same thing happened in the case of quality marks warranted by municipal and state supervisory bodies to safeguard the interests of the individual consumer or of the community as a whole.¹

Quality marks on textiles, especially leaden cloth seals, played an outstanding role in the early stages of this development. Although it is likely that leaden tags were used to indicate quality on wool bales in Roman times,² the sealing of cloths began in the middle ages.³ The first specifications of standards were laid down in the laws of Iceland as early as 1096, and in England in 1197.⁴ The *keures*, the municipal statutes for the guilds which regulated cloth manufacturing in Flanders, mostly date from the 13th century.⁵ There had certainly been *keures* before, such as those of Bruges from 1127 and 1200, and there was a shortlived *keures* at Ypres in 1217,⁶ though none of these gives details of the way the sealing was carried out.

There is hardly a regulation mark which has received less attention than the leaden textile seal. Hallmarks for gold and silver, and touchmarks for pewter — not to mention coins, which can be regarded as a particular development of the quality mark into an independent entity — were an integral part of a product made from these metals, while cloth seals were ephemeral appendages to the textile. As soon as woollen, silken or linen cloths were cut up by retailers, the seals lost their significance and were discarded. It is for this reason that almost all the known seals of this type are archaeological finds.

Cloth seals consist of two, or less commonly, four discs joined by a strip, often with different stamps of each side. They vary between 5 mm and 80 mm in diameter. In working out their precise function the evidence provided by documents is invaluable.

*Continental section by W.E., English section by G.E., the concluding paragraph was written jointly.
The Sealing of Cloth in Europe

Early references to the use of leaden seals are few, but by the beginning of the 14th century there is evidence for their being issued on a large scale in Ypres (see Fig. 1). According to the accounts books, 12,500 seals were purchased in the town in 1304–1305, 30,000 in the next year, and so on until 1314–1315 when 63,500 were used. It would, of course, be wrong to try to extrapolate the number of cloths involved here from these figures, since several seals might be attached to one piece, as is clear from the *keures*. The idea that only finished pieces were sealed is also wrong; undressed, dyed, or tentered cloths were also sealed when the quality of each process of manufacture was checked soon after it was carried out. In this way three to six seals might appear on a single piece; cloths were occasionally inspected and sealed by several overseers from the same guild, by searchers from the town council, and even by special King’s officers, as was the case in England. As well as seals with the arms of countries, towns or guilds, examples are frequently encountered which give the quality and dimensions of the piece or certify the payment of a fee, while others bear the name or trademark of the manufacturer or the owner. Occasionally seals of tin or alloys, sometimes coated in gold, were used to indicate quality differences, but these were a late development, and never very widespread.

Cloths from the Hague could hardly be distinguished from those from Leyden, but the former were made of Scottish and Dutch wools, and the latter were manufactured of fine English thread. Merchants in Hamburg in 1465 removed the Hague seals and sold the cloths as Leyden products. It was, however, mainly the manufacturers who took advantage of their position to remove seals marking defects and to replace them with others — sometimes they themselves actually stamped the seals. Surprisingly detailed regulations were therefore devised to cover every aspect of sealing. The rules governing the purchase of lead for the seals were just as precise as those concerning the election of a sealing master and the custody of dies or stamping pliers. New members of the guild in Cologne in the 14th century paid a special *Durpelgeld* (fee charged for admission to the stamping room). Sealing took place there three times a week, early in the morning. At the beginning of the 15th century the town council resolved that four ‘honourable reasonable men who stamp the cloths and weigh them after taking an oath’ should be elected, and that the pliers should be kept under lock and key, and that the keys should be looked after carefully.

Although in England in 1358 Edward III only expressed displeasure at malpractices in sealing, elsewhere severe penalties were inflicted, especially for counterfeiting. At Ypres in the 14th century exile of up to seven years’ duration was not uncommon, and a case is recorded of a draper being exiled for life for using counterfeit stamps (‘*faux sceaux et contrefaits*’) which were copies of those used for scaling cloths manufactured in the town (see Fig. 1). For minor offences like using offensive language to a searcher, the penalty imposed might be a pilgrimage to Santiago de Compostela. Physical punishments were again harshest among the Germans. In 1433 a weaver called...
Dietmar Koch was burned to death for counterfeiting the stamping pliers.\textsuperscript{18}

As the relative importance of cloth in the economy declined, the authorities became more lenient. To cite an example from Hungary, according to the 1651 statutes of Brasso, all cloths sold unsealed were to be confiscated, two thirds of their value being forfeited to the magistrate and one third to the guild.

It is interesting that quite early on there were regulations which required the clothier to weave his sign or name into the selvedge or stitch it into the piece. For example, the Ypres keure of 1362-1405 required that it should be stitched in tightly, in white thread.\textsuperscript{19} All the evidence indicates that leaden seals were originally a means of supervision; this is also shown by the frequent mentions of penalties when the weavers, mostly of peasant origin, and the clothiers who employed them did not readily comply with the system.

\textbf{THE ORIGIN OF THE LEADEN CLOTH SEAL}

Since there are various indications that sealing in lead did not develop from any kind of property tag or trade mark used in the textile industry in the early middle ages,\textsuperscript{20} where did it come from?

Although there is evidence that rolls of Chinese silk for export were sealed in bronze, no information has been published which shows whether they reached Europe regularly.\textsuperscript{21} An Arabian origin is out of the question because the Tiraz fabrics of the 10th to 14th centuries were marked with embroidered, woven, painted or printed legends giving the name of the workshop or the customer.\textsuperscript{22} A similar practice is known to have been used for Coptic cloths and the products of Jewish artisans in Talmudic times.\textsuperscript{23} At first sight, the same might appear to be true of the Byzantine Empire.

Here, in the most advanced industry of its age, the name of the Imperial workshop, or of its supervisor, was woven in damask on some of the silk cloths which constituted such an important Byzantine export.\textsuperscript{24} More careful investigation, however, shows that this system of supervision is rooted in the centralized and extremely sophisticated bureaucracy of the Eastern Roman Empire. The officials of this vastly increased administration, which exercised an all-embracing supervision and directed several state monopolies, sealed their records in lead, and furthermore, they countermarked the goods supervised in the same way, as will be seen below.\textsuperscript{25}

The most important monopolies in the production and trade of silks involved finished products, such as cloths and articles of clothing.\textsuperscript{26} For example, the 10th-century Book of Prefects reserved for the Imperial manufacturers the right of dyeing thread purple, while others were permitted to dye in the piece. This was because of the manner in which the distribution of the so-called kekolymena (prohibited textiles)
The Sealing of Cloth in Europe

was supervised. The section de vestibus holoveris et auratis in the laws of Justinian forbade male commoners to wear holovera and similar articles made by private workshops; women, on the other hand, were allowed to wear damask clothes produced by the Imperial manufacturers. Jacob Cloths from private workshops and Arabian imports could be used to make such magnificent clothes that Rabbi Benjamin of Tudela compares the appearance of the inhabitants of Constantinople with that of princes. Damask in three or more shades, and gold brocade served to satisfy the vanity of women's fashions and to reward court dignitaries, as well as to keep at bay both loyal barbarians and troublesome enemies. Very occasionally, important foreign dignitaries, like the King of the Franks, or his envoys, were presented with such fabrics. In such cases the cloth or clothing was furnished with a conspicuous leaden seal as an export permit; Schlumberger remarks on the connection between this function and one particular type of seal. Of course, any article to be exported by a foreign merchant was also sealed. If he were to be caught trying to smuggle out prohibited cloths, he would be liable to a flogging as well as to the confiscation of his wares.

When Liutprand, Bishop of Cremona, was sent by Otto I on a mission to Nikeforos Phokas in 968, he wrote an embittered report about a haughty customs officer, who said to him: 'We know you have purchased some robes, produce them at once. Whichever fit you will be given lead seals and you may keep them. As for the others, since everyone except Romans are forbidden to wear them, they will be confiscated and their value refunded to you'. 'What else could I do?' Liutprand continues, 'I had to obey, so five valuable purple robes were confiscated ...'. We do not know which official was authorized to judge whether silk cloths sealed in lead could be exported or not.

At the end of the 6th century, a new post was added to the bureaucratic hierarchy in Byzantium, that of the kommerkiarii. These officials were to buy up raw silk of foreign origin and to distribute it, without personal profit. Afterwards, as heads of state stores (apothekai) they were also authorised to levy a sale tax and customs duty. From the 9th century, they were the most important customs officers in the provinces into which the Empire had been divided for revenue purposes. This regional organization survived the Byzantine Empire, since the Turks took it over unchanged.

A large number of the seals of these chief customs officers have come down to us (see Fig. 2). Schlumberger lists 50, and Zacos and Vegley have recorded many times that number. Wares sealed in this way were extremely expensive in the west, but compared with cheap Arabian and, later, Italian goods, these 'hall-marked' wares were far more prestigious. Since they were rarely trafficked — diplomatic gifts and tributes to the Bulgarian, Russian, Persian, Arabian or Frankish rulers were infrequent and did not go through usual trade channels — how could the movement of these articles develop into a commercial system? The frequent prohibitions suggest smuggling was lucrative; as the Eastern Roman Empire contracted and its borders became less controllable so did the chance of smuggling increase. There was, however, a legal outlet. In Pavia, the capital of the Kingdom of

Fig. 2. A Kommerkiarios seal (after Millet)
Italy, two trade fairs were held annually, at which Eastern spices and Byzantine silks were sold by the merchants of Venice, Amalfi, and Salerno — the Italian vassals of the Byzantine empire. Venice was the main beneficiary, and, characteristically, had to pay one silk pallium each year to the Kingdom of Italy for this right. Good relations between Venice and Constantinople were temporarily broken in the 11th century, and by the time they were restored, Venice was on her way to independence: in 1082 she was commercially equal to Byzantium. Komnenos Alexis rewarded Venice for the exarchate's help in his war against the Normans by allowing Venetian merchants to export their goods unchecked and duty free. By that time, however, the strict regulations of the Byzantine silk monopoly had been undermined: silk weavers from Salerno had been settling in Lucca since the year 1000, and the Normans forced a number of skilled workers to leave Greece for Sicily in 1147. Leaden seals seem to have turned from customs tags into trade marks guaranteeing quality among the cloth merchants of Western Europe in the 9th–11th centuries. It was at this time that they became widespread, being attached to Byzantine luxury wares. They began to be imitated in the 12th and 13th centuries at the latest, probably on silks in the first instance. It is interesting that one of the first sealing regulations was for Venetian fustian (a cotton fabric) in 1275.

It is at this time that the origins of the guilds are to be found. The whole system of monopolies and privileges granted and regulated by municipal government, and the control of the dimensions and qualities in handling and use of cloths follow a Byzantine pattern. Lopez wonders whether it would be clear from reading the Book of Prefects (issued during the reign of Leo the Wise, in 911–912), that the regulations refer to 10th-century Byzantium, rather than to a Western European city in the 13th century. Doubtless this is not just coincidental. During the Latin Empire, the Counts of Flanders reigned in Constantinople between 1204 and 1237. Unfortunately the influence of the connection on the organization of guilds in Flanders has not been analysed, though the archives of the Counts still survive.

The Spread of Cloth Sealing in Europe

However it developed, sealing in lead quickly spread all over Europe from the two main centres from which textiles were exported, Flanders and Northern Italy. The outlines of this are sketched below.

The use of leaden seals first diffused into the neighbouring territories, to the towns competing with the Flanders cloth industry in the north of France, the Netherlands and the western regions of Germany, for example. In Chalons-sur-Marne the quality of cloths was regulated as early as 1243, and in Soest, Westphalia, the responsibility for

FIG. 3. 16th–17th-century seal found in Hungary, probably German
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overseeing this had been transferred from the council to the guild by 1260.\textsuperscript{40} It was apparently some time later that the practice of sealing was introduced in England where searchers in towns, known as alnagers were first appointed primarily to examine imported cloths.\textsuperscript{41}

Sealing in lead spread yet further in the 14th century. The guild statutes of the clothiers of Béziers and Carcassone in the south of France mention it in 1317. Here an examiner was paid to do this work for the guild.\textsuperscript{42} The towns of the Hanseatic League later passed a collective resolution requiring pieces to bear the arms of the town in which they were made.\textsuperscript{43} Cloth sealing began in the 15th century in Czech and south German towns (\textit{see} Fig. 3) where textile industries flourished and finally in Polish, Hungarian (\textit{see} Fig. 4), and Scandinavian\textsuperscript{44} towns on the periphery of Europe in the 16th century.

At the same time as this system of quality control was being introduced in the woollen cloth industry, other branches of the textile trade adopted it too. The earliest record of sealing in Cologne is in the 1397 regulations of the blanket manufacturers' guild, though the rules governing the clothiers in other branches of the textile industry there are certainly much older.\textsuperscript{45} It would, however, be wrong to attribute all such regulations to guilds concerned with woollen cloths.

Little is known of Italian seals for cloths. A 14th-century example from Florence is stamped with the guild arms (a lamb with a cross) on one side, and the city arms (a fleur-de-lis) on the other.\textsuperscript{46} Another seal of about the same date, possibly from Verona, depicts a church on one side, and on the other a town gate, though it has no inscription (Fig. 5). The Italians have apparently not studied their cloth seals, but an interesting contribution is made in Stromer's recent publications on those used in the cotton industry.\textsuperscript{47} In his opinion, the Lion of St Mark, which was used by the Venetian fustagneros (fustian weavers)\textsuperscript{48} was imitated by the manufacturers in the south German centres which developed during the last 30 years of the 14th century, for example in Basel (1368), Augsburg (1372), Ulm (1375), and others from Zurich to Innsbruck. Seals for the best fabrics were stamped with a lion
or an ox, while those for inferior ones had grapes with leaves. In Regensburg a knife, a wheel or a pair of scissors were depicted. The seals of Milan bore an eagle, an anchor, or a crown, while in Leyden pieces of the best quality were marked with one or two lions. No information is available about the marks used by the fustian guilds of Bohemia (Prague, 1384), Poland (Krakow, 1385) and Hungary (Kassa, 1411).

Leaden seals are likely to have spread to the linen industry as early as the 15th century — these fabrics had been marked with linseed oil from time immemorial. The biggest exporter of canvas in Europe, St Gallen, had its products marked, in order of decreasing quality, with a ‘G’, a crab, a red cross, a black cross, or an ‘O’ (which was pronounced ‘leer’ — i.e. not of a good enough quality to be sold). In some parts of Austria leopards’ heads were stamped on the seals, while in some bleacheries in Saxony swords were depicted.

Sealing in the silk industry also originated in Italy; leaden seals are known there in 1540. It is recorded that in France these were attached by a white string. The Italian practice was not universal, since several towns, including Venice, had already been forced by the great number of forgeries to mark the selvedge or the leading edge of the piece with coloured thread, sometimes of gold.

The 16th and 17th centuries were the dawn of the age of the manufactories. Among the privileges granted to proprietors by rulers was exemption from quality control by towns and guilds. The textile manufactories encouraged by Colbert were free to seal their own products. Van Robais’s fine cloth manufactory at Abbéville (1665) is an example; the one seal known from here has the Bourbon arms on one side and those of the owner’s family on the other. The silk manufactories of Lyon were granted the right to seal in 1688. The Prussian state repeatedly brought the regulations governing textile manufactories into line with the French system. In 1712 and 1723, for example, sealing was made the responsibility of state control offices (Schauanstalt). With characteristic efficiency, single letters were applied to indicate the quality — ‘F’ for the best, ‘K’ for good, ‘M’ for middling and ‘O’ for standard.

A number of artistic representations show that the manufactories adopted the practice of sealing unchanged. A series of engravings...
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of 1728 depict the Waldstein industry in Horny Litvinovy; the title-page of this volume shows a transaction, and the leaden seals are clearly visible on the ends of the pieces being traded (Fig. 6). There is also a wood carving in Monschau, Germany, depicting a putto hammering a die to mark the quality of a cloth (this panel is on the rococo staircase of the Rotes Haus, built in 1756, when it was the property of a cloth-manufacturer).

Simultaneous developments in guilds and manufactories are illustrated by a guild statute from Banska Bystrica (1727), concerning the products of Sterz's woollen manufactory. It was issued, rather surprisingly, jointly by the town council and the owner to the artisans. The best quality cloth was to be marked with a large seal stamped with a star, to show it was guaranteed by the magistrates and the principal. The seal on a defective piece was to have one side unstamped, that is, it would not bear the manufactory trademark, while on the other side there was to be a letter 'O'.

By this time the leaden seals were not regarded as reliable. The factors (buyers) of the commercial houses in Leipzig pointed out as early as 1595 that it was not possible to differentiate between the seals of innumerable small towns, and that only the well-known trademarks could be trusted. The prestige of the leaden seals was in many cases eroded by the corruptness of the administering officers. The most notorious example of this is the English alnage under the Duke of Lennox; from 1611 his officers' malpractices led to a series of scandals (see below).

Together with the involvement of the guilds, the sealing of textiles was pushed into the background as mercantilist ideas spread, particularly as a result of the industrial revolution. It survived well into the 19th century in England, famed for her traditionalism, as well as in central and eastern Europe, but by then it was little more than a nostalgic indulgence, a token of 'old-fashioned quality', in contrast with mass-produced factory goods.

CLOTH SEALING IN ENGLAND

The English evidence for the sealing of cloths is extensive, both on the documentary side and in the numbers of leaden seals surviving. All the extant cloth seals used prior to the end of the 18th century have apparently been recovered from the ground.

While it is uncertain when the first seals were fixed to cloths in this country, the tradition of regulations which led to their use seems to have begun with the Assize of Measures of circa 1197. Cloths were required by this assize to conform to a statutory width, and they had to be of

FIG. 6. Allegorical engraving of the cloth trade (detail), showing seals on the ends of the cloths, 1728
uniformly good quality throughout. In a few years there are records of fines imposed both on individuals and on communities for breaches of the regulations. In 1278 the earliest fixed length for cloths was laid down and from the following year two officers were appointed by the Crown to ascertain by measuring that all cloths to be sold actually conformed with the assize before they were put on the market. The office of alnager was in existence by the end of the 13th century, and for over 400 years the men who held this position were responsible for enforcing the current assize and for seeing that a subsidy of four pence for each whole broadcloth, or the equivalent, was paid to the Crown. This tax was higher in the case of dyed fabrics, and varied according to colour. For his service in checking for deficient wares and marking the satisfactory ones, the alnager received a fee of a halfpenny per cloth. In the early period of this evolving system the alnagers may have worked in cloth-manufacturing areas; certainly they were stationed in the ports to deal with incoming foreign fabrics, and they attended the trading fairs in order to measure the cloths which were to be sold, like those of canvas brought to St Botolph's Fair in 1291.

The marking of cloths by the alnager is mentioned as early as 1348; seals of lead were used to mark cloths in London in 1380, though it is likely that by then this method had been in use for some time. One seal was attached to each cloth to indicate that it had been examined and passed as satisfactory, and that the subsidy had been paid. The earliest datable English cloth seals known to the writer belong to the last years of the 15th, or to the early 16th century, leaving the first one and a half centuries of the alnage apparently unrepresented. The explanation for this probably lies in the rapidly increasing home manufacture of cloths (as exports of English wool correspondingly diminished) at this time, together with the small proportion of the seals used that have been found. The alnage system lasted, with modifications, until the last licence for the right to the fees expired in 1724. Responsibility for the maintaining of manufacturing standards in the cloth industry then passed to the searchers in the case of Yorkshire, which was the main area for cloth production in the country from this time onwards. Although widely and increasingly ignored, the 18th-century legislation which stipulated the use of seals for newly-manufactured textiles was formally revoked only in 1889.

Early in the development of the alnage, the number of cloths produced required more than one man to carry out a proper examination. The right to sub-contract the collection of the subsidy revenues in different districts, and to retain some of the income, was farmed out to a number of individuals from the reign of Henry IV onwards.

Almost every type of textile was required to be sealed, ranging from coarse sailcloths to cloths-of-gold, with the apparent exception of silks. From 1578 various types of 'new draperies' began to be included among the textiles examined by the alnagers. The successive Dukes of Lennox held the alnage licences for these from 1605, and again (after a break during the Interregnum) following the Restoration. Knitted stockings, which were included with some reservations among the new draperies covered by the alnage, seem to have been the only finished garments and the only knitted items to which seals were fixed. The proliferation, particularly in the 17th century, of new types of fabric not covered by existing legislation meant the statutes were in constant need of revision to bring these latest developments under the
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It is probable that the alnager’s search and sealing was always a hit or miss affair, especially in remote and rural areas. Thirsk’s observation that the ‘alnage collectors appeared and disappeared in a totally unpredictable way’ in the specific case of stockings, is likely to have been true of the system for all kinds of cloth.

A bewildering series of possible searches and sealings at different stages of manufacture and after finishing, carried out by local corporate organizations (either guilds or companies concerned with cloth production, or the municipal authorities) developed during the 16th century and later. The critical accounts of these various controls, written by Leake in 1577 and in greater detail by May in 1613, suggest that a cloth might be searched and sealed after weaving, after fulling and shearing, and (in the case of a coloured piece) after dyeing.

Each district or town seems to have operated a slightly different system, (see below, for example, the arrangements at Colchester). The clothier (who owned the piece) and the artisans were usually required to mark cloths with their names or personal devices to indicate the origin in case of complaint about sub-standard work. The clothier’s trademark was usually woven (like the reigning monarch’s crowned initial, which was required to be worked into each cloth), though some may have been on seals, as were most of the artisans’ marks. The right of searching and ‘marking’ of the true widths and lengths of all cloths exposed for sale at the three great annual fairs of London was held by the Drapers’ and the Merchant Tailors’ Companies in the 15th century; it is not clear whether this marking was on seals, or done in some other way. The clothier’s seal giving the length he claimed the piece measured, was however, certainly a leaden one. Including the obligatory alnage seal, by the time it came to be put on the market a cloth could in theory be festooned with upwards of half a dozen leaden seals, not to mention other types of mark. However, it is clear from both Leake and May that such rigorous attention was rarely, if ever, accorded any single cloth. Particular care seems to have been taken in searching the work of fullers in Coventry at the end of the 15th century, while in early 17th-century London, cloths dyed with woad were given special seals.

The corporations of cloth manufacturers considered by contemporary observers to be the most conscientious in the whole realm — the Dutch immigrants at Sandwich and Colchester in the later 16th and 17th centuries — used the system to which they had been accustomed in their homeland. This involved three searches (for weaving, fulling and finishing, with another for dyeing if applicable), all of which in Colchester cost the clothier 10d. per cloth. Every search entailed an extra fee as well as a delay in getting the wares to market, which put the small-scale clothier with his limited capital at a severe disadvantage. The actual measuring of a cloth which had been dried on the tenter frame after fulling was supposed to follow immersing the piece again for some hours to induce any shrinkage (hence the name ‘water seal’, which was sometimes used to refer to the searcher’s seal indicating length and width). This process and the subsequent drying must have taken up considerable space as well as time. A petition sent by some provincial clothiers to the Privy Council in 1591 demanded compensation from the searchers in London for the inconvenient and expensive delay caused by the immersion. This was just one incident in a struggle that lasted over half a century and which concerned a matter far more important in the sealing of cloths, namely the legality of a second search and
sealing, in the capital, of cloths which had already gone through these processes in local centres. In 1607 a statute withdrew the London alnager’s right to examine cloths already sealed according to the alnage system. That may have been the end of this dispute, though it would be surprising if the London authorities were prepared to lose their search fees from this source without making any subsequent attempt to regain them. The second search, in London, had been abolished during Mary’s reign, yet, as noted above, it had been reinstated by 1591, and before the end of the reign of James I it was felt necessary to make provision against the practice once again. It seems that whenever the London officials felt they could insist on a second search without provoking a major uproar, they tried to get away with it and ignored previous legislation.

Despite this elaborate and cumbersome series of provisions, defective cloths still reached the market stalls regularly enough to bring the seals into disrepute, as the jaundiced comments of Leake and May testify. While this can be seen as the result of negligence on the part of the alnagers and the searchers, it also demonstrates the decreasing applicability of methods of medieval craft control to production on a greater scale in a later age. Although the alnager as industrial watchdog was almost at the end of his usefulness in the Stuart era, his duties as revenue collector remained important until the end of the 17th century. While it is to be expected that records will tend to concentrate on the failures of the system rather than the innumerable routine instances when it ran smoothly, it does seem that the extreme unreliability of some medieval alnage accounts has a counterpart in the poor reputation the system earned in the post medieval period. At least as early as the third quarter of the 16th century some alnagers were in effect selling seals directly to clothiers for the price of the subsidy and a nominal search fee, leaving the clothiers to fix them on their own unexamined cloths. Complaints of similar evasions of their duties by the alnagers in Yorkshire are recorded in 1596 and 1676; at the start of the 18th century the purchase of seals was sometimes by the hundred. Weavers who were lobbying for the abolition of the alnage at this time claimed in a pamphlet that some clothworkers had actually been given authority to mark and seal their own cloths, and that in London the Deputy Aulnager’s wife and maid-servant are the persons intrusted with the viewing and searching of cloths, and they usually affix the office-seal to all goods that are brought to them.

May devotes a whole chapter to an impressive catalogue of types of textile defects, with which he must have been only too familiar in the course of his duties as deputy alnager. Among the repetitive records of transgressions of the statutes a few cases are noteworthy. The discovery in 1627 by a purchaser in the Low Countries that his pack of ten Wiltshire cloths were deficient in length, breadth and weight despite the seals, must have been a common enough occurrence in the years of depression following the ruinous Cockayne Project. In 1631 the Lord Mayor of London ordered a spot check on some of the cloths at Blackwell Hall, and of 29 mined, only six were found to be true. Matters came to a head in the west of England with the appointment in 1630 of the zealous Anthony Wither to a commission of investigation and reform of searchers and their regulation of the local cloth industry. In exposing the need for a tightening-up in procedure (some of the searchers were ignorant of their duties and others were quite prepared to connive at substandard
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work perpetrated by the artisan), Wither's new broom seems sometimes to have made the worst of a delicate situation. The strength of feelings that might be aroused can be gauged by one occasion when, in the course of inspecting a fulling mill, Wither was hurled into the River Avon after heated words were exchanged. His brief career as a trouble-shooter ended in dismissal from office in 1636, though through his efforts searching in the west had been temporarily restored to its former efficiency.

The usefulness of the alnage system was being widely questioned by the end of the 17th century, as regulation depending on minute individual scrutiny became unworkable with the increased scale of production, particularly in Yorkshire, where capital was becoming concentrated in fewer hands. In Norwich the alnagers abandoned all claim to the control of standards in 1699, accepting an annual composition instead of the subsidy on each cloth; sealing itself ended there in 1705. Attacks like the weavers' pamphlet mentioned above resulted in a decision to end the alnage when the current patent ended in 1724; subsequently the searchers were left to try to exercise some degree of quality control, though they never seem to have raised the same enthusiastic support in Parliament as the alnagers had once enjoyed. It is doubtful whether the demise of the alnage caused any great difficulties in the West Riding of Yorkshire, since an Act of 1708 had already handed over to the searchers there the regulation of the local manufacture of broadcloths. These officers were to check that the owner of the fulling mill had fixed to every cloth a seal giving the true length, and his name, and that he had woven into every piece his name and address; clothworkers too were required to affix seals giving their names. Samuel Hill, a clothier of Soyland in the West Riding seems in practice to have allowed his full name to be woven only into those of his cloths which were of a high standard, for others his initials sufficed, and in the case of remainders he gave instructions that even these letters should be picked out. Similar regulations to those of 1708 were extended 30 years later to narrow cloths, which were allowed to be of any length, the seals being marked accordingly. From 1765 the actual sealing once again became the prerogative of the searchers. The 18th-century legislation for the West Riding of Yorkshire failed in the same ways as the Tudor and Stuart legislation had done under the alnagers, though the breakdown did not attract the attention it had in the earlier periods. By 1806 the searching of cloths was moribund, though some 'stamping' was still carried out; in 1821 a committee investigating the working of the laws which were supposedly in force recommended that they should be abandoned since they were completely ineffective. The final repeal only came in 1889, though by this time the sealing of cloths must long have been abandoned in most places.

The Seals

Turning to the seals themselves, one is at once struck by their remarkable distribution. Although English seals have been found in Scandinavia, Jamaica, North America, and in some numbers in Amsterdam, only a small proportion of those found in this country for which the findspots are certain have been recovered outside London. There are small groups found in the Floating Harbour at Bristol, in Winchester, Hitchin, Deal, Suffolk — especially in the area of Bury St Edmunds, a collection of about 50 thought to have been recovered from the River Ouse at King's Lynn, and a few

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finds of single seals throughout the country. However, perhaps over 85 per cent of the provenanced examples found in Britain have been recovered from the soil of London. A number of the isolated finds are likely to be chance losses, though some may be from the sites of trading fairs. All the larger groups come from areas near wharves, and especially from along the Thames in London. Notable concentrations occur in the parts of the foreshore nearest to Blackwell Hall (the monopoly cloth market for the City), and next to the former premises of the London Dyers' Company. It is possible that the seals became detached in the course of manhandling cloths between ships or lighters and the wharves, though one might have expected the packs to be more firmly secured than this would imply. Riverside dyeing establishments may account for the finding of so many of these objects here. The seals found in the capital indicate cloths coming from at least 14 counties, as well as some foreign imports (see below).

The seals can be divided into three usual types, according to the number of their lobes (see Fig. 7). Almost all the recorded examples are single-, two-, or four-lobed, though there is a variety of shapes, and the size of the lobes ranges from smaller than a present day halfpenny to approximately 50 mm in diameter. Six-lobed seals, of which only a handful of examples are known, appear to date from the reign of James I; their awkward shape probably meant they were a short-lived phenomenon.

Single-lobed seals, having an irregular-shaped flan, with a horizontal hole through which a tape to bind them in place would have passed, are the least understood type. As yet they have only been recovered in London. The stamps on them rarely consist of more than a personal device typical of those in use in the late 16th and 17th
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centuries. A few examples, however, have a floral motif identifiable as the grain tree, a mythical plant once thought to be the source of a red dye. The grain tree figures in the crest of the arms of the London Dyers' Company, hence some, if not all, single-lobed seals appear to be connected with dyers. These seals may have been tied to coloured cloths to indicate responsibility for the dyeing in each case. If this was so, their limited distribution and the esoteric personal marks suggest that they had little significance outside the circle of London dyers.

Two-lobed seals are the most commonly found and widely distributed type. The cast blank of a two-lobed seal (Fig. 8) was folded over the edge of the textile, and struck between two dies to fix the seal in place by closing the rivet, and to register the designs for the stamps. The pressure applied in the striking often left an imprint from the cloth on the inside surfaces of the lobes (see Fig. 11). The two-lobed type of seal includes the earliest examples known, and it continued in use well into the 18th, and on a limited scale into the second half of the 19th century. Seals in the later period are less well-documented than the earlier ones, probably because after the first quarter of the 18th century they were of little importance except to traders, being possibly used as identification tags on the material wrapped around general merchandise to make bales, as well as on the actual cloths — the United East India Company was apparently still using them in 1794.

The earliest cloth seals that can be assigned a date with reasonable certainty are stamped on one side with late medieval style representations of a king enthroned, and the arms of the realm or an alnager's personal mark on the other (Fig. 7a). These examples were probably used during the reigns of the first Tudor kings, though the legends which would probably tie them down more precisely in both time and place, are too weakly struck to decipher.

Alnage seals of London of the reign of Henry VIII depict his head, while Elizabethan examples with various dates have the crowned arms of the realm on one side, and the arms of London on the other. A Somerset seal, apparently dated (15)53, may be connected with reorganization in accordance with the comprehensive Edwardian Act for the regulation of the clothing industry. Several other seals which depict a crown over a portcullis or the arms of the realm are probably of 16th-century date, but again in most cases illegible legends mean their original provenances are unknown. Exceptions are a Devonshire seal with the former design, and a Worcestershire one (found in Coventry) with the latter.

There are a great number of different seals, probably postdating the 1552 Act mentioned above, which read 'searched', and give dimensions of particular cloths, or

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Fig. 8. Unused blank of a two-lobed seal, showing upstanding rivet. (Photo: J. Bailey, x 2.) (Ryves collection.)
have various personal marks. The identification of individuals referred to on the stamps has proved extremely difficult, though it is possible that local archivists may be able to help when fuller lists are prepared on a county basis. A specific example will illustrate some difficulties representative of those encountered. One surviving lobe of an incomplete seal is stamped with a coat of arms depicting three covered cups, to the sides of which are the initials WV, and the legend 'Com. Kent 1614.' Attempts to trace someone connected with the alnage in Kent at this period whose initials and (?) family arms correspond with those on the seal have so far not produced even a possible candidate.\(^{164}\)

A different group of seals has one round and one rectangular (or in some cases 'spade'-shaped) lobe (Fig. 9). Dimensions in Roman numerals (presumably the length and weight of each cloth) are given on part of the rectangular lobe. In several cases, perhaps in all, these numerals have been cast with the blank. These seals were marked in the process of closure with a variety of circular stamps reading 'searched', not on the round lobe, but on the unused part of

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**Fig. 9.** Seals cast with figures for yards length and pounds weight, probably for kersey cloths; 16th or 17th century. (Actual size)

(a) Unused Blank: XVIII, XVII (in reverse.)

(Photo: A. Cash.) (Wheeler collection.)

(b) Used example unfolded: XVIII, XXII; counterstamped (SEA)ARCH(ED) above.

(Photo: J. Bailey.) (Van Dornengen collection.)

(c) Used example unfolded: XVIII, XVII (inverted 'V' counterstamped XXII, XVIII, and (SEA)ARCH(ED) on other side.

(Photo: A. Cash.) (Wheeler collection.)
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(a) and (b) Both sides of an unclosed 1½d. seal of William III with OF ENGLAND around king's head, and three fleurs de lis, ½ to sides. (Ryves collection.) (c) One side of a Queen Anne ½d. seal. Arms of Scotland, ½ to side, closed with AR ligature and rose (inverted as shown). (Essery collection.) (d) One side of a William and Mary seal, with the monarchs’ heads. (Department of Urban Archaeology collection MFS 299) (e) One side of a Charles II seal for a dyed cloth. Crown over rose, ½ to side, INGRAINED around, closed with a rose stamped on the outer lobe. (Essery collection.)
the rectangular one which gives the dimensions. In this way the seal would certify that a cloth accorded with the statutory dimensions. The figures on many examples may indicate kersey cloths. Seals from this group, including unused ones, have only been found in London. The absence of any royal device argues that they are not alnage seals; it is possible they were put on cloths under the auspices of Blackwell Hall by searchers in the later 16th and early 17th centuries. One example has 'searched' stamped on the back, while in the place where this usually appears there is a counterstamp giving a different pair of dimensions from those cast on the seal (Fig. 9c). It is perhaps an instance of the use of a blank from old stock after a change in the stipulated dimensions rather than an admissible deviation from those already marked on the seal.

A complicated series of county alnage seals, many of which are dated 1610 or 1611, seems to mark a transition from the alnagers' use of two-lobed to four-lobed seals, since similar stamps appear at this time on both types; these include the earliest dated four-lobed examples. The most usual stamp on this group consists of the date 16n, a county name, and a code letter (different for each county), all in a recurring design. The western counties of Devonshire, Gloucestershire, Worcestershire and probably Wiltshire are represented, as, rather surprisingly, is Buckinghamshire. The cloth industry in this last county was on a very small scale at this date, apparently being geared to the demands of local consumers. The discovery of a Buckinghamshire seal in the riverside area in London is therefore of particular interest. The 1611 stamps may be a manifestation of attempts to tighten up procedure following criticism in Parliament in that year concerning the lack of effectiveness of the alnage under the Duke of Lennox.

Apart from the two-lobed county seals in use in Worcestershire and Lancashire during the reign of Charles I, and those used in Norwich into the second half of the 17th century, the normal alnage seal from the reign of James I onwards was the four-lobed type. These are just like the two-lobed variety, but with two additional lobes between the outer closing ones, making a row of four (Figs 7c and 10). The lobes on this type of alnage seal rarely exceed the size of a modern halfpenny, apart from a few examples among the 1611 group. The latest datable four-lobed alnage seals are stamped with the head of George I. The period during which they were current thus appears to correspond very closely with the licences for the farm of alnage held from 1605 by the Dukes of Lennox, the last of these patents expiring in 1724. The double seals referred to in 1640 by the Royal Commission on the Clothing Industry are this four-lobed type. The brief details mentioned in the report confirm an observation made from the seals themselves—that there were two separate processes of stamping. First the two inner lobes were marked by 'some person of trust' with a royal device (hence the name 'crown seal'), the seals were then delivered to the local corporation, whose officers would fix them on measured cloths by closing the outer lobes with stamps bearing their personal marks and the word 'searched', or some other device. The person of trust was to keep an exact record of the number of seals he issued. In view of this careful control, and because they were in effect tax receipts for the subsidy payments, it is hardly surprising that no blanks for four-lobed seals have been found. Several four-lobed seals reading 'Lenox' have the devices on the inner lobes cast with the blank, eliminating the need for the initial striking (Fig. 7c). A few of these issues have dates in the later part of the reign of James I,
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so the 'Lenox' referred to is the second Duke, who was alnager-general for England and Wales from 1605 to 1624.

The variety of heraldic devices stamped on the inner lobes is remarkable, though the precise significance of most of them is far from clear — they are unrelated to the civic heraldry of the counties and towns named on some examples. The royal initials 'I R' or 'C R', or those of the 'person of trust' mentioned above often appear here too. After the Restoration, the monarch's head is frequently the main device on one of the inner lobes (Figs 10a and d), and by the end of the alnage, the resemblance to the representations on contemporary coinage becomes more marked. A seated Britannia similar to the one on the small change of the period appears on the other inner lobe in some cases. The subsidy payment, usually in multiples of 1½d., is often indicated alongside one of the enigmatic heraldic devices. Most of the post-Restoration alnage seals include this figure. A stamp with a crowned royal cypher was sometimes used from the reign of William III onwards to close the outer lobes, though more frequently these simply have the rivet hammered flat without any device; (symptoms, perhaps, of an increasingly impersonal and perfunctory operation of the alnage, as searchers found the volume of production irreconcilable with proper examination). A number of the dies used for stamping the royal cyphers remained in use subsequent to the reign they indicate; for example William III cyphers were employed to close seals stamped on the inner lobes with the head of George I.

Very few four-lobed seals have an imprint from the cloth between the outer closing lobes, nevertheless discoveries of this type of British seal abroad confirm the assumption that they accompanied the exported cloths. The rivets on several examples found in London and one excavated in Amsterdam are not closed, and so these particular seals may not have been securely attached to the textile in the manner presumably intended.

Textile Imprints

The nature of the textile to which a seal was fixed can in a few cases be established from the information given on the stamps, combined with that from the imprint between the lobes (Fig. 11). The cloth itself seldom survives, and when it does the fragments are almost all very scrappy indeed. A number of detailed fabric impressions occur on Colchester seals (see below) which the legends indicate were attached to bay cloths or the finer says manufactured in this town. An assessment of the impressions on seals from what were probably a range of worsteds from Norwich is in progress.

FIG. 11. A very detailed impression of a cloth on the inside of a seal which had two closing rivets. The imprint indicates a plainwoven unfulled or only very lightly fulled cloth of fairly even tension. Threadcount: vertical system c. 9 per cm., horizontal system (using a hardspun yarn) c. 10 per cm. This is one of a distinct group of similar seals, most of which bear the imprint of the same type of fabric.

(Photo: T. Hurst, × 4.) (Smith's collection.)
Several of these seals read ‘worsted reformed’. None of the ‘carsay’ (kersey) or Taunton serge seals recorded has a cloth imprint. Almost all the impressions so far recorded appear to be from plainwoven fabrics, though it is possible that some of the seals may have been attached — probably wrongly — to the selvedge, which would not be identical with the body of the cloth.

COLOURED CLOTHS

Unless a seal specifically indicates dyeing, for example by depicting the grain tree, it is not possible to tell whether it came from a coloured or an undyed cloth. Some seals stamped with the arms of the London Dyers’ Company and a ‘W’ are presumably from woaded cloths, and others give the profession and full names of individual dyers. A few four-lobed alnage seals read ‘ingrained’, indicating that they too would have been fixed on coloured cloths (Fig. 10e).

SUBSTANDARD CLOTHS

Not all the cloths sealed by the searchers had fully satisfied the requirements of the assize. Under Edward IV seals were to be put on faulty cloths and in the middle of the 16th century a seal stamped with the letter ‘F’ was specified for those with imperfections in the finishing. A statute passed a few years later required the use of a seal reading ‘faultie’ in full. May, writing in 1613, mentions the cutting of a notch in the edge of the cloth beside each defect, and the fixing of a seal in this cut to advertise the fault to the buyer. Cloths which were seriously defective were marketed as remnants with the lists torn off. A Suffolk seal with a letter ‘F’, one from Yorkshire reading ‘falty’, and two which are not inscribed with their provenance, but which were probably attached to Norwich worsteds, reading ‘defective’ and ‘to[O]shorte’ (Fig. 12) respectively have all been found in London, showing that pieces known to be imperfect were traded over considerable distances.

THE NEW DRAPERIES IN ESSEX

A complete paper could be devoted to the discussion of each of a number of regional and other groups of seals, but the large-sized ones from Essex occupy such an important place in this subject that they warrant a brief account even in a general survey.

The arrival in Colchester in 1570 of a group of Dutch refugees, including a number of textile workers, provided a decisive impetus for the manufacture of bays and says there. This important industry is represented by seals recovered in Bristol, from a wreck off the Cornish coast, especially in London, and there is a probable example found in York. It was claimed in 1633 that over £3,000 worth of these Colchester fabrics were sent to London each week, and even when the industry was in decline at the end of the 17th century, over a thousand bay

FIG. 12. Seal for a Norwich cloth which was deficient in length; TO(O) SHORTE.
17th century.
(Drawn by Katharine Hayes; x 2)
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cloths were still manufactured there weekly. The seals used by the Dutch at their Bay Hall in the town were two-lobed, with a diameter of between 30 and 50 mm. Several different designs are known, some of which (perhaps the ones used by first generation settlers) have a legend in Dutch. The most usual design, many varieties of which have been recorded, has a version of the Colchester coat of arms (a cross raguly and three coronets) on one lobe, with a griffin on the other. Seals for 'crown bay' are the most common of these, and for this brand of cloth the cross was omitted from the arms, leaving the coronets as a reference to the fabric's name (Fig. 13). 'Cross bay', the best quality of cloth manufactured in Colchester according to Morant, had seals on which the full arms are depicted; the cross is also included on seals for say cloths.

All the seals used by the Dutch in Colchester are dated 1571 (the year in which their industry seems to have been established on a proper footing), though they continued in use well into the next century. Friction between the Dutch and the native English weavers, who were quick to copy these lucrative new draperies which were being manufactured in their midst, was in part caused by the immigrants' privilege of searching all cloths made in Colchester. Agitation led to a separate grant of incorporation for the English weavers of the town in 1618, though the problem of having the 'strangers' as industrial overseers appears to have continued. A few seals are recorded which have the same design as the Dutch ones, but with 'English' in place of 'Dutch' in the legend, and the date '1618' instead of '1571' (cf. Fig. 13). There are also a number of smaller seals which read 'English Colchester say 1618'.

The exceptionally high regard shown for the Colchester immigrants' standards of searching and sealing has already been mentioned. It was perhaps inevitable that their seals, which alone of all those used in this country were regarded as reliable guarantees of the good quality of the cloths to which they were attached, should be counterfeited. In 1632 the trial was held at the Court of Star Chamber of one Tobias Jupp, a clothworker of London. Jupp admitted to having, on hundreds of occasions, fixed counterfeit Colchester Dutch seals to cloths of similar types manufactured elsewhere; these wares would, of course, not normally have commanded the premium of genuine Colchester products. It was the 'bunglerly' engraving of the dies he had used for his seals which exposed Jupp's fraud. In court, he produced seven dies by means of which he had raised the market value of cloths owned by a number of merchants. An 'exemplary punishment' was ordered, including a term in the Fleet Prison, spells in the pillory in six places in London and
Essex, and a savage fine of £1,000, reflecting the scale of Mr Jupp's operations as well as the serious damage this kind of malpractice was likely to inflict on English trade overseas. After the Restoration the statutory fine for a first offence of counterfeiting a Colchester seal was £20; by this time the problem of 'slight and naughty bays' furnished with seals from unofficial sources seems to have increased in scale. The variety of seals excavated which purport to indicate Colchester Dutch bays is considerable. It is reasonable to assume that not all the engravers of counterfeiting dies were as careless as the person whose poor workmanship brought the 1632 case to court. One of the seals found in London stands out because of the crudeness of the engraving (the coronets in the arms are represented by a few heavy lines and a couple of dots). In this case, the stamp is not only double-struck, it is positioned so far off the centre of the flan that almost half the design is missing. The textile impression between the lobes conforms with those on other Colchester bay seals, but in this example there is a marked distortion of the evenness of the weave, a phenomenon one is tempted to ascribe to hasty or inexpert fixing to the cloth. A number of Colchester seals have been counterstamped with different personal marks. These may be the devices of different clothiers, added in an attempt to keep a closer check on the genuine wares, and so make things more difficult for the potential counterfeiter.

There is also a counterstamped personal mark on the only recorded example of a seal (again a large one) for a bay cloth manufactured at Halstead in Essex. A small group of the Dutch immigrants at Colchester settled in Halstead for just over 10 years towards the end of the 16th century, but they were forced to rejoin the others by the hostility they encountered in the village, and in particular because their cloth seals were being counterfeited, just like the Colchester ones.

Four-lobed Essex seals, with flans of a comparable size to those described, presumably following the fashion set by the Dutch, are known for bay cloths from Braintree, Coggeshall and probably Great Dunmow. The seals from the last two villages are those of individual clothiers rather than of a local corporation. Although no seals for Bocking bay cloths have been noted, a matrix for stamping them has survived.

A number of other four-lobed large seals may belong to this 16th and 17th-century Essex tradition, though no provenance is given on the legends. Two of these are for a brand of cloth called 'star bay'; one has the legend in English, on the other it is in Spanish ('bayeta fina de estrelia'). The basic design is the same on both. The latter was presumably from a cloth destined for the important Iberian or Spanish-American market. Comparable on a number of points are the large four-lobed seals of John Hawking which read 'fin bajes de Anglater', and were therefore produced specifically for a French-speaking market.

**Seals from Imports**

A few seals from imported fabrics, almost all of which were linen-based, have been found in Britain. Some 30, probably dating from the first half of the 17th century, are known from Augsburg fustians; these are in fact the most widespread of all cloth seals which have been found in this country. The other foreign seals identified are one from Rouen (found in Southampton), and a handful of St Gallen, Leiden and Haarlem examples, all the provenanced ones having been found in London.
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FUTURE WORK

It can be seen from this brief survey of the European evidence that leaden cloth seals are a neglected field in the history of the textile industry and in numismatics. Most major museum collections include a few of these seals, though sometimes they have not been identified for what they are. In some countries considerable progress has been made towards a corpus, while in others not even the first steps have been taken. We believe that a systematic survey would be a most useful contribution to the history of commerce. As a specific example, a wreck of 17th-century date recently excavated off the coast of Norway, which according to the surviving seals included a number of cloths manufactured in Essex and Suffolk, provides a valuable opportunity to examine some of the details of the English textile trade and alnage practices which cannot be extrapolated from documents or finds of isolated seals.

The most urgent task is to catalogue the seals already in collections in each country. This should lead on to the evolution of a European typology and a corpus for each area. At the same time, the documentary evidence needs to be processed by scholars experienced in textile history, who are able to differentiate between the various kinds of fabrics involved and to identify any inconsistencies. Once this dual task has been carried out, we should be far better equipped to understand the working of this essentially medieval phenomenon of industrial regulation.

ACKNOWLEDGEMENTS

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(G.E.)

REFERENCES AND NOTES

Figs 7-11 and 13 © Museum of London.

1 A few other kinds of early marking of goods can be mentioned. Besides the ancient runes of masons and carpenters, it is less well known that salters marked their salt blocks. The use of hallmarks on metals spread in the 12th-13th centuries; the coopers of London were required to mark their products in 1420, and it was stipulated in Winchester in the 14th century that 'everych bakere habe hys seal y-know upon his loff'.

2 A series of rectangular leaden seals were recovered in Siskia. One has the word 'lana' stamped on it, from which this conclusion has been drawn; A. Hazy, 'Olomárócimkék Siskiából', in Folia Arheologica viii (Budapest, 1956) 97-104.

3 It has been my contention for some time that the true broadcloth was unknown in the ancient world; it is a type of fabric characteristic of the middle ages. See my review of J. P. Wild's, Textile Manufacture in the Northern

4 M. Hoffman, The Warp-Weighted Loom (Oslo, 1964) 263.

5 Ibid., 262. Hoffman cites Cornaert, who claims that the demand for scrupulous regulation had not arisen in the Flemish towns before that time. This is contradicted by the agreement between the Bishop of Arras and the Count of Flanders in 1177 concerning the revenues from the examination of cloths. G. Espinas and H. Pirenne, Recueil de Documents Relatifs à l'Histoire de l'Industrie Draperie en Flandre 1, 1 (Brussels, 1906) 113.

6 I am grateful to Professor J. Buntinx (St Amandsberg) for this personal communication.

7 Op. cit. in note 5, 1, 3 (1920) 113.


9 Ibid., 511.

10 Ibid., 524.

11 H.V. Loesch, Die Kölner Zunfturkunden, 1 (Bonn, 1907) 495 and 505.

12 I have discussed this topic in some detail at the International Symposium on Handicraft (Veszprém, Hungary, 21 November 1978) in a lecture on 'Die Entstehung und Bedeutung der Tuschschutzmarken'.


15 Ibid., 504 f.

16 Op. cit. in note 11, 11, 504-508. ('ierben verstandingen laden, die bi iren eiden alle doiche blijen ind och wijgen sollen').


18 Op. cit. in note 11, 512-513; ('zu den doide verordet in as ein welscher verbrannt').


20 In the silk industry, for instance, better quality pieces were marked by a special selvedge in Florence, and by a woof of gold in Venice. In the linen industry, quality was often shown by marks in paint. See F. Lerner, 'Quality Control in Pre-Industrial Times', in CIBA Review (1968) 13.


23 The so-called 'Zacharias' or 'Joseph' silks can be mentioned here. O. V. Falke, Kunstgeschichte der Seidenweberei (Berlin, 1913). For the Jewish weavers and dyers of Talmudic times, see R. J. Forbes, Studies in Ancient Technology, iv (Leiden, 1956) 139 and 229.

24 The elephant-damask of the 10th century in Aachen is marked with the names of the principal officers of the eidikon (textile treasury) and the purple manufacture.

25 A catalogue of the amazingly numerous and varied leaden seals has recently been published; G. Zacos and A. Vegley, Byzantine Lead Seals 1-11 (Basel, 1972).

26 This underwent some changes during the centuries, but the trading of purple was declared illicita negotiato, i.e. an activity of the black market only.


28 Ibid., 22.

29 G. Schlumberger, Sigillographie de l'Empire Byzantin (Paris, 1884) 11. Schlumberger says that these are conical leaden seals which depict an animal or a human figure, and which have no identifying inscription on the round bases.

30 Lopez, op. cit. in note 27, 28.

31 Középkori Krónikások vi-vii, Liutprand történeti munkái (Budapest, 1908) 53-54.

32 Lopez, op. cit. in note 27, 12-13.

33 Zacos and Vegley, op. cit. in note 25, 11, 1. G. Milllet, 'Sur des Commercaires Byzantin', in Melanges Schlumberger 11 (Paris, 1924) was not available; it describes the parallel development of the stores and the role of these officials.

34 Lopez, op. cit. in note 27, 27.


36 Lopez, op. cit. in note 27, 37-40. Even up to thirty years before the fall of the Empire, no permission to buy silk had been granted to the
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Genoese, whose fleet was indispensable for Byzantium.


Stromer quotes the byelaws of the Artis de Fustagnis, which requires the piece of fustian to receive the town seal ('recipiat bullam communis').

Lopez, op. cit. in note 27, 17-18.

Lerner, op. cit. in note 20, 6.

E. Lipson, The Economic History of England I (London, 1929) 406. The alnager was to account for 'all defaults, which he hath found in cloths throughout the realm'.

Lerner, op. cit. in note 20, 8.

Held, op. cit. in note 14, 5041 ('erre rechte Zegel der Stadt, darzé marthet weren, hebben').

N. K. Liebgott, 'Da, Kla: de var en "Markte-vare"', in Nationalmuseets Arbejdsmark (Copenhagen, 1975) 41-42.

Loesch, op. cit. in note 11, 1, 32 f.

A. Doren, Die Florentiner Wolltuchindustrie I (Stuttgart, 1901) 98.

Stromer, loc. cit. in note 38.

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Ibid., 22.

Ibid.

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J. A. P. G. Boot, 'Bombazijn en Bombazijnzegels in Nederland' in Textilhistorische bijdragen 11 (1970) 44. For a number of Dutch and other seals, see op. cit. in note 140, 110-125.

A. Kunze, Der Frühkapitalismus in Chemnitz (Karl-Marx Stadt, 1958) 27.

C. Schirman and H. Strehler, Vom alten Leinwandgewerbe in St Gallen (St Gallen, 1967) 49.

A. Marks, Das Leinengewerbe ... ob der Enns (Linz, 1950) 239 f.

Kunze, op. cit. in note 53, 91.

A. Sabatier, Etude révisionelle des sceaux de Plombs, etc. 23 (Villefranche, 1908) 40.

Lerner, op. cit. in note 20, 13.

A. Latour, 'Französische Wollmanufakturen zur Zeit Colberts', in CIBA Rundschau 74 (1947) 2741.

Lerner, op. cit. in note 20, 13.


Designatio Iconographica Oberbleutensdorfenses Pannarios Officinas.
of the City of London at the Guildhall, Letterbook H (London, 1907) 145-146, ('seal du plumb'). I am grateful to Dr D. Keene for bringing this reference to my attention. It is possible that leaden seals were used from the beginning of the alnage. At a later date wax seals, none of which appear to have survived, were to be used on certain cloths according to Stat. 17 Ed. IV, c. 5.

But see H. Pigot, 'Hadleigh', Procs. Bury and W. Suffolk Arch. Inst. III (1863) 14-15, for a seal matrix which is claimed to date from the middle of the 14th century on heraldic grounds. I am grateful to Mr A. Betterton for bringing this reference to my attention. The matrix is in the Ipswich Museum collection, no. 1921.55.90, though it could not be located on a recent visit (August 1979). A seal from a similar die is in the Coventry Museum, no. 49/227.257. It is possible that further 15th century or earlier seals may be identified among those which have yet to be dated.


This name seems to have been applied to anyone whose duties included the actual examination of textiles, whether under the alnagers or on behalf of any other organization. Compare the 'overseers' to be appointed in cloth-producing towns according to the statute mentioned in note 75.

Stat. 52 and 53 Vict., c. 24; this act revoked, among others, a series of statutes regulating the cloth industry 'which have ceased to be put in force or have become unnecessary by the enactment of subsequent statutes'.


A contemporary account of the sealing of Suffolk sailcoths during the reign of Elizabeth is cited in V.C.H. Suffolk ii (London, 1907) 271.

The deputy alnager, John May, recommended that all saleable cloths should be subject to the alnager's scrutiny — silks and some linens were measured by others, who, in his view, 'have no right thereunto' — J. May, A Declaration of the Estate of Clothing Now Used within this Realme of England (London, 1613), Da Capo Press reprint (Amsterdam and New York, 1971) 14-15.
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the piece confiscated; op. cit. in note 67, 177-178.
104 V.C.H. Warwickshire II (London, 1908) 253-254. The apparent concentration on searching only some of the aspects of manufacture may simply be a reflection of the incompleteness of surviving records.
105 Op. cit. in note 89, 30. For probable examples of these seals, see G. Egan, 'Cloth Seals', London Archaeologist vol. 3, no. 7 (Summer 1978) 177, Fig. 1. From May's comments these 'woaded seals' seem to have been London's variation on a more usual (?) printed or other mark for dyed cloths.
106 Leake, op. cit. in note 76, 224-225, and op. cit. in note 89, 6-7.
108 Four hours' immersion was required to check the true dimensions in the 18th century; op. cit. in note 67, 409. Stat. 39 Eliz., c. 20 excepts northern cloths being examined at Blackwell Hall in London from immersion, though why measurement of these fabrics without soaking was considered adequate is not clear.
111 Stat. 4 Jac. I, c. 2, and Ramsay op. cit. in previous note, 58.
112 Stat. 4 and 5 Phil. and M., c. 5.
113 Stat. 21 Jac. I, c. 18.
116 Despite the chorus of complaints from merchants, there is little evidence that defective wares caused them such serious trouble as sometimes arose in the medieval period. On several occasions then traders were actually 'in danger to be slain', through handling (in all innocence) cloths which turned out to be far from well-made, when the buyers' fury at apparently being cheated erupted into violence. See 13 Ric. II, st. 1, c. 11.
117 Ramsay, op. cit. in note 99, 53.
119 Ibid., 242.
121 The Weavers Case on the Statute of Aulnage, (Anon.), [London] (?1698), Guildhall Library, broadside no. 5.2
123 Ramsay, op. cit. in note 99, 86-87.
124 Ibid., 87, 91-97 and 99.
127 Stat. 11 Gul. III, c. 20 includes this decision to end the aulnage and the subsidy 'for the better encouragement of the woollen manufactures of this Kingdom ...' when the 1664 60-year patent expired.
129 The only seal noted that seems to be of this type is incomplete, reading 'W. H. Rawson, Mill House Halifax' and '75'. It is however possible that it may have performed some other function. There was a 19th-century mansion in Halifax called 'Mill House', which belonged to the Rawson family, who were active in the textile business in the 18th and 19th centuries. The seal is in the Calderdale Museums service collection, Halifax.
130 Op. cit. in note 120, 6-7, Hill letter no. 23, written 3 February 1737.
131 Stat. 11 Geo. II, c. 28.
133 Op. cit. in note 67, ch. xii, passim.
134 Ibid., 416-417.
135 Ibid.
136 See note 84. H. S. Cuming mentions the sealing of cloths was 'a fashion not yet obsolete' less than 30 years before this, Jnl. Brit. Arch. Assoc. xviii (1862) 279.
137 Over 400 seals from a cargo of cloths have been recovered from the wreck reported in S. Molaug, 'Bamblevraket', Norsk Sjofarts-museum Årsberetning, 1977 (Oslo, 1978) 63-82.
138 P. Mayes, Port Royal, Jamaica, Excavations 1569-1970, Jamaica National Trust Commission (Kingston, Jamaica, 1972) 126 and 128, Fig. 44, No. 6.
140 J. M. Baart et al., Opgreving in Amsterdam (Haarlem, 1977) 110-125; several other
British seals have been recovered in the course of excavations in Amsterdam. I am grateful to Mr Baart for his great kindness and help.

141 Bristol City Museum collection.
142 Winchester City Museum collection.
143 J. E. Cussans, History of Hertfordshire, II (London, 1874) 34.
144 Deal Maritime and Local History Museum collection.
145 Moyses Hall Museum (Bury St Edmunds) collection.
146 The Lynn Museum (King’s Lynn) collection.
148 No additional counties of manufacture have been noted on British seals found elsewhere, though a few town names appear only on examples found in the provinces or abroad.
149 One (incomplete) is in the Museum of London collection, no. 78.43/to6 (part of a generous gift of over Ioo cloth seals donated by Mr T. van Dongen); a complete six-lobed seal is in the collection of Air J. Auld.
152 Bromley and Child, op. cit. in prev. note, 79–8o.
154 E. g. D. A. Birk, ‘Recent Underwater Recoveries at Fort Charlotte, Grand Portage National Monument, Minnesota’, International Journal of Nautical Archaeology, 4, 1 (1975) 79–81. These packers’ seals, possibly for bales, can usually be distinguished by the presence of the word ‘packer’, along with a full personal and a town name. The terms ‘baling seal’ and ‘baling clip’ have sometimes been used erroneously to refer to cloth seals, e.g. Cotter, loc. cit. in note 139.
156 But see note 8o for a claim of a mid 14th-century cloth seal.

159 E.g. Museum of London collection, 77.22o, given by Mr J. Haywood.
160 Museum of London collection, 78.227/18, given by Mr A. Allen.
161 Stat. 5 and 6 Ed. VI, c. 6.
162 Coventry Museum collection, 49/277/327.
163 Museum of London collection, 78.227/13, given by Mr A. Allen. (This is part of a four-lobed seal.)
164 Mr. R. O. Dennys, the Somerset Herald of Arms, has traced 11 blazons in the record books at the College of Arms for the period circa 1530–circa 168o similar to the arms on the stamp. The absence of any indication of the tinctures on arms depicted on the seals precludes the elimination of any of the 11 by what is usually the most obvious heraldic variation. The only family among them which has the correct surname initial is Upton, recorded on the London visitation of 1687. Dr F. Hull, the Kent County Archivist (Kent County Council) does not know of any relevant record connecting a member of the Upton family with Kent, and he suggests the seal may relate to the Boteler family of Eastry, whose arms are similar — W. Berry, County Genealogies, Kent (London, 1830) 29. Again, no link between the Botelers and the alnage has been noted, and the initial appears to invalidate the suggestion. I am most grateful to Mr Dennys and Dr Hull for devoting their time to my enquiries. Neither claimed that his research into these points was exhaustive.
165 Cf. Stats. 4 and 5 Phil. and M., c. 5 and 14 Eliz., c. 10, on the lengths and weights of kersies. These acts specify between 17 and 19 yards as the maximum length for each kersy, which was to weigh at least 19 lb.
168 A Record of Some Worthie Proceedings in 1611, Anon. (1641) 35.
170 In Thirsk and Cooper, op. cit. in note 93, 249.
171 It is possible that the engravers who worked for the Mint also cut the dies for some of these inner lobes, just as they had engraved dies for
The Sealing of Cloth in Europe

alnage seals during the previous century. I am grateful to Dr C. Challis of the University of Leeds for his information on the 16th-century engravers.

On the subsidy and alnage fees see note 73 and op. cit. in note 67, 199-203 and cf. op. cit. in note 120, 52 (Holroyd letter No. 140) and 55 (Holroyd letters nos. 188 and 218). It is possible that the figures given on the seals include an alnage fee of 1d. per cloth, giving a subsidy of 1d. for an undyed broadcloth (taken to be the equivalent of a quarter of a full cloth of assize, which was assessed at 4d.), though it is more likely that the sum for the subsidy alone is stated.

Cloth imprints on four-lobed seals are mainly known on Suffolk and Kent (some of these are Canterbury seals) examples.

Exceptions from the alnage period are a sealed piece of cloth, acquired in London (National Museum of Wales collection, 20.420114) and another (unprovenanced) in the British Museum Dept. of Medieval and Later Antiquities, 71. 7-14. 115. Seals C13753 and C13950 in the Cuming Museum collection are also still attached to fragments of cloth, though these postdate the alnage.

The impression of a say cloth on a seal found in the Floating Harbour at Bristol, Bristol City Museum collection T9417, has a thread count of 23-2 per cm (ex info. Mr D. P. Dawson), compared with approximately 11 threads per cm for bay cloths (counted on the impressions on a number of seals).

Undertaken by Frances Pritchard of the Department of Urban Archaeology, Museum of London, to whom I am indebted for the comments on fabric imprints in this paper (see Fig. 11 and previous note).

Cf. the ‘improved’ of modern advertising. A tendency towards gimmickry in the names coined for Norwich stuffs was noted in the 1650s — ’... when they began to tire in sale, [they] are quickened with a new name.’ T. Fuller, cited by Corfield, op. cit. in note 126, 281.

The impression on a Colchester bay cloth seal in the Colchester and Essex Museum collection seems to show two grades of fabric, possibly a selvedge and the cloth itself.

See Egan, loc. cit. in note 105. Cf. the seals with an ‘M’ for madderred cloths, as specified in Stat. 23 Eliz., c. 9. (none of which appears to have been recovered).

181 Stat. 4 Ed. IV, c. 1.
182 Stat. 5 and 6 Ed. VI, c. 6.
183 Stat. 4 and 5 Phil. and M., c. 5. One such seal is illustrated in I. Noel-Hume, A Guide to Artefacts of Colonial America (New York, 1974) 270, fig. 88, no. 2.
184 Op. cit. in note 89, 44 and 47.
185 Leake, op. cit. in note 76, 225.
186 Museum of London collection, 78.227/7, gift of Mr A. Allen.
187 Museum of London, Department of Urban Archaeology, Trig Lane site, layer 78, small find no. 82. Although presumably of early 17th-century date, the seal is notable in view of the comments by Leake in 1577 on the poor quality of Northern cloths (‘... the Northe partes, wher no true clothes are made.’), op. cit. in note 76, 214. Cf. op. cit. in note 67, 137 and 139, and Stat. 39 Eliz., c. 20. (This seal may have been specifically authorised by Stat. 21 Jac. I, c. 18.)
188 The seal mentioned in note 177.
189 R. Larr et al., ‘The Mid Seventeenth Century Merchant Ship found near Mullion Cove, Cornwall’, International Journal of Nautical Archaeology, 3, 1 (1974) 78. The ship is thought to have been the Santo Christo de Santella, which sank en route from Amsterdam to Genoa in 1667.
190 Baart et al., op. cit. in note 140, 118 no. 70 and 120 no. 77.
191 York Archaeological Trust, Union Terrace site, 72.18, no. 3. I am grateful to Mr A. MacGregor of the Trust for allowing me to mention this object in advance of the publication of the site finds report.
193 Ibid., 397.
194 P. Morant, The History and Antiquities of Colchester (London, 1748) book I 74-75. Morant gives a detailed account, presumably taken from an eyewitness, of the sealing of cloths by the Dutch in Colchester. It is unfortunate that this published version exhibits the kind of confusion which can arise in writing up at length from brief notes too long neglected.
195 The example referred to in note 191 was used almost a century later than the date it bears, assuming that the wreck has been correctly identified.
An example is in the collection of Mr A. J. Essery.

The counterfeiting of cloth seals appears to have been a problem before the '1571' Colchester ones were in use, since Stat. 5 and 6 Ed. VI, c. 6 outlaws false seals.


Stat. 12 Car. II, c. 22.

See op. cit. in note 153, fig. 7 and J. E. Hodgkin, *Rariora*, 1 (London, 1902) 102-103, nos. 29 and 30 for some examples of this range.

Collection of Mr S. Wheeler.

Collection of Messrs I. and R. Smith (dated 1619).

Museum of London collection, A 9633-9637. These are parts of five identical seals, dated 1640, which were recovered from a well in London. Also from Coggeshall, but of a different design and dated 1621, is the seal published in the *Guildhall Museum Catalogue* (London, 1908) 321, no. 25 (Museum of London collection, 79.4283).


Essex Records Office, Chelmsford, museum class 37. The patina on this object suggests that it, like the only other cloth seal matrix known to the writer (see note 80), has been recovered from the soil.

Museum of London collection, 78.22720, given by Mr A. Allen, and collection of Mr J. Hagland respectively.


Ibid., fig. 79.

Several have been recovered in London, Winchester and probably King's Lynn, while apparently isolated examples have turned up in Essex, Lincolnshire, Oxfordshire and Suffolk. The single finds probably represent a considerable market for these fabrics.

WALTER ENDREI AND GEOFF EGAN

C. Platt and R. Coleman-Smith, *Excavations in Medieval Southamptom 1953-1969* (Leicester, 1975) vol. 2, 269-270, no. 1907, fig. 246. This seal is probably from a cloth, but the French customs used the same type on general merchandise until recently. (See op. cit. in note 143, 34.)

Haarlem seals are illustrated in op. cit. in note 153, fig. 79 and in Hodgkin, op. cit. in note 204, 103, no. 59 (found in London). A similar example excavated in Amsterdam is in op. cit. in note 140, 115, no. 58.

The Göteborg Museum, for example, has seals from Ypres, Hamburg, Bremen, Amsterdam, Scotland and other places.

Those in the reserve collection of the Musée de Cluny in Paris, for example.

Before the First World War a number of papers were published in France on the subject by: A. Sabatier (*Sigillographie Historique. Plombs Historiés de la Saône et de la Seine* (Paris, 1912), and see note 57), L. Dancoisne (*Les Plombs des Draps d'Arras*, in *Bulletin de la Commission des Antiquités du Département des Monuments Historiques du Pas-de-Calais* VI (Arras 1885) 26 f.), M. D. Mater (*Bulletin Numismatique et Sigillographique* 21, in *Mémoires de la Société des Antiquaires du Centre 1900* (Bourges, 1901) 394 f.), J. Pierre ('Le Drap "du Seau" ', in *Revue du Berry et du Centre* 46 (1917) 140 f.) and others, but an overall survey has yet to be carried out.

Very little work appears to have been done on Iberian cloth seals, for example, though a few examples are known.

See note 137. The presence of over 150 London seals in this group is a reminder of the key role of the capital's cloth market in England's textile trade — indeed the hundreds of seals found in London from cloths manufactured all over the country constitute the most complete primary evidence anywhere in Europe for this aspect of trade regulation.
APPENDIX 10

Below are a few examples of the record cards held by the writer at the Museum of London for individual seals. Several of the seals featured here appear in photographs in the thesis, allowing close comparison with the data recorded.

The cards give more details than are reproduced in Appendix 1 - e.g. the orientation of the connection strip relative to the stamps, the reason for the incompleteness of the devices (P = partial stamp; A = abraded; O = offstruck; W = weakly struck; etc.), the kind of border around the device (lb = line border; db = dotted, i.e. beaded, border; rb = cable border), if the rivet is of the split-pin form (dt = double tongue); S = scratched; D = double-struck; C = cast; etc.

This level of detail may be useful for checking whether a particular seal has already been recorded (it may have changed hands), and it may perhaps provide the raw data for certain statistical exercises, but none of the information categories excluded from Appendix 1 is felt to be useful in this synthesizing thesis.

Note: collection codes which do not appear in the list at the end of Appendix 1 refer to owners of private collections.
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**ALIA:** York seal

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**ALIA:** Yorks. seal (2 pieces)

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ALIA: Yorks. Seal | cf nos. 944 |

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BIBLIOGRAPHY

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H.M.C. Historical Manuscripts Commission
Pat. Rolls Calendar of Patent Rolls at the Public Records Office
S.P.D. Calendar of State Papers, Domestic Series
V.C.H. Victoria County History of the County of...

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