THE GROATS OF EDWARD I

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In their classic study of the Edwardian coinage of 1279–1343 the Fox brothers investigated the introduction of the groat in Edward I's recoinage of 1279–81, and they identified seven distinct varieties, which they attempted to place in the context of their classification of the other denominations. The publication of Jeffrey North's important collection of Edwardian coins in 1989 provided an opportunity for a reappraisal of the subject, and North was able to propose a new classification. More recently, an analysis of the size and composition of the English silver currency between 1279 and 1351 by the author of this note included an estimate of the mint output of Edward I groats, based upon a die-study of fifty-three specimens. It is now possible to present a corpus and die-study of fifty-nine coins, which may help to clarify the classification and to provide new estimates of the numbers of dies originally used.

Edward I's new coinage introduced in 1279 consisted of the groat, the penny and the farthing from the outset, and the halfpenny was added to the range of denominations in 1280. 'The Form of the New Money' (*Forma nove monete*), which the Fox brothers suggested was compiled before the issue of the first dies for the reformed coinage in May 1279, includes the groat of four pence (*la grose mone de quatre esterlings*) in the specifications for the coinage.⁴ William de Turnmire's indenture as master of the royal mints, issued on 8 December 1279 to take effect from 2 January 1280, required the production of the groat on the same terms as the sterling or penny.⁵ As 243 sterlings were to be made from a Tower pound of silver, temporarily increased to 245 in 1280–1, groats would have been made at a rate of 60.75 or 61.25 per Tower pound, with a theoretical average weight of 88.89 grains (5.76 g) or 88.16 grains (5.71 g).⁶ The indenture of 1279 stipulated that the king should receive any profits derived from the lower production costs of the groat compared with the sterling, but this provision may have been disregarded in practice.⁷ The mint output of groats went unrecorded in the mint accounts, presumably because it had no relevance to the calculation of the King's profits.⁸ William de Turnmire was authorized by his indenture to strike the groat throughout England, but in the event its production was restricted to the London mint.

The Fox brothers associated the varieties of groat known to them with classes 1-4 in their classification of the Edwardian coinage, but North has argued that the latest groats probably belong to the period of class 3g, which was the last class struck at the recoinage mints of

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- ¹ H.B.E. Fox and S. Fox, 'Numismatic history of the reigns of Edward I, II, and III [part 2]', BNJ 7 (1910), 91–142, at pp. 99–100, 108–11, 113, 115, 119, 122–3, 125–7, Pl. V.
- ² J.J. North, 'The Fox classification and recent refinements', in The J.J. North Collection: English Silver Coins 1279-1351 with some Supplementary Examples, SCBI 39 (1989), pp. 4-41, at pp. 4-8.
- ³ M. Allen, 'The volume and composition of the English silver currency, 1279–1351', BNJ 70 (2000), 38–44, at pp. 41, 43, estimating a total of thirty-nine 'equivalent' obverse dies with an output of c.£20,000–£50,000.
- ⁴ Fox and Fox (as in n.1), pp. 100, 133; C. Johnson (editor), The De moneta of Nicholas Oresme and English Mint Documents (1956), p. 56. Johnson, as above, p. xxxii, argues that the Forma nove monete was compiled in the autumn of 1279, as the three mint-masters named in it were to be sworn in by Michaelmas 1279, but of these three William and Peter de Turnmire received a grant of an annual fee of £100 each on 12 March 1279 (Calendar of Patent Rolls 1272–1281, p. 305), and Hubert Alion of Asti had a grant of his fee of £200 on 28 April 1279 (as above, p. 313).
 - ⁵ Fox and Fox (as in n.1), pp. 112, 138; Johnson (as in n.4), pp. 60-1.
- ⁶ N.J. Mayhew, 'From regional to central minting, 1158-1464', in C.E. Challis (editor), A New History of the Royal Mint (Cambridge, 1992), pp. 83-178, at p. 134 tabulates mint charges and weight standards from 1278 to 1464.
- The production costs of groats would have been lower because the number of coins to be struck from a given weight of silver was only one quarter of the number of sterlings from the same weight.
- ⁸ The outputs of the London mint in the reign of Edward I (1272–1307) are tabulated by C.G. Crump and C. Johnson. 'Tables of bullion coined under Edward I, II, and III', NC⁴ 13 (1913), 200–45, at pp. 204–11, and Challis (as in n.6), pp. 674–7.

1279–81.9 The absence of halfpence and farthings from the mint accounts between 1281 and 1285 is consistent with the assumption that all of the new denominations of the Edwardian coinage were suspended in 1281 when the recoinage finished, leaving only the penny, and it seems likely that the production of the groat was entirely abandoned between 1281 and the revival of the denomination in 1351. The presence of two groats in the Dover hoard, which may have been deposited at the time of a French attack on Dover in 1295, probably indicates that Edward I's groats continued to have a role in the English currency until the mid-1290s at least. 10 This role seems to have been relatively minor, as there are no other English hoards that are known to have included Edwardian groats, apart from an apparently associated group of three groats found at Sprowston in Norfolk. 11 An Edwardian groat (no. 53 in the Appendix) was found in an archaeological excavation at the Bedern in York, and another coin (no. 38) is said to have been found in Cornhill in London. Many of the surviving specimens were used as jewellery. Fourteen of the coins listed in the corpus (nos 17, 19, 23-4, 26, 28, 30, 33, 39, 41, 48, 50, 55 and 58) have traces of mounting or gilding, or a combination of both. One of these coins (no. 41) was shown at the British Museum before the removal of a hook mount on the obverse, and presumably other groats in the corpus have undergone a similar process between discovery and eventual sale, 12

The corpus of groats in the Appendix has been restricted to coins either available for study or illustrated in print. Unillustrated coins in auction catalogues have not been relied upon as the sole record of a specimen, as they might be represented in the corpus from other sources, and by their very nature they could not be included in the die-study. Auction catalogues and fixed-price lists have provided thirty of the coins (two of these were also illustrated by the Fox brothers); two coins are only known from the Fox brothers' illustrations; another two have been included from casts in the Ashmolean Museum, Oxford, without record of provenance; one is in the collection of Lord Stewartby; and the remaining twenty-five coins (including one imitation or counterfeit in the Fitzwilliam Museum, Cambridge) are in public collections. Coins from forty-three of the forty-seven die-combinations represented in the corpus are illustrated (Pls 2–5). The plates also include two jetons from dies made with groat die-punches. The first jeton (Pl. 5, 61) is from an obverse die and a virtually identical reverse die closely resembling the central obverse design of North variety f1, but with drapery more characteristic of variety g. The other jeton (Pl. 5, 62) has a mitred ecclesiastical portrait with a face from the groat punch of varieties e to g. The plates are mitred ecclesiastical portrait with a face from the groat punch of varieties e to g. The plates are mitred ecclesiastical portrait with a face from the groat punch of varieties e to g. The plates are mitred ecclesiastical portrait with a face from the groat punch of varieties e to g. The plates are mitred ecclesiastical portrait with a face from the groat punch of varieties e to g. The plates are mitred ecclesiastical portrait with a face from the groat punch of varieties e to g. The plates are mitred ecclesiastical portrait with a face from the groat punch of varieties e to g. The plates are mitred ecclesiastical portrait with a face from the groat punch of varieties e t

In the Appendix the corpus of groats is preceded by descriptions of the obverse and reverse dies, with summaries of the definitive characteristics of the varieties identified by North. All of the dies listed can be accommodated within the North classification. The twenty-nine obverse dies have been given numbers with prefixes indicating their place in the classification (e.g. a1 is the first die of variety a), and the thirty-six reverse dies have the prefix r. The arrangement of the reverse dies is an attempt to harmonise the order suggested by the classification of the associated obverse dies with the chronological groups that may be indicated by the details of the reverse dies themselves (r3-r4, r5-r6, r7-r8, r9-r12, r13-r14, r15-r16, r18-r22, r23-r25, r26-r29, r30-r34, and r35-r36). At least some of these groups of reverse dies may have been produced and supplied together. Sixteen of the obverse dies have been recorded in combination with only one reverse die, nine with two reverse dies, and four with three reverse dies. The summary of dielinks between obverse dies in Table 1 seems to be generally consistent with the arrangement of the varieties in the North classification, showing links within varieties a and b, between varieties b

⁹ North (as in n.2), p. 8.

¹⁰ R.H.M. Dolley, 'The Dover hoard: the first English hoard with groats of Edward I'. BNJ 28 (1955–7), 147–68. The two groats from the Dover hoard are nos 3 and 22 in the corpus.

¹¹ Classical Numismatic Group, Triton V, 15–16 Jan. 2002, p. 266, describes lot 2454 (no. 57 in the corpus) as being 'Irleportedly found in 1990 by a farmer searching a field in Sprowston. Norwich. The farmer had previously found two other groats of Edward I which were sold in a Christie's auction in February 1989 [corpus nos 21 and 27].

¹² The Department of Coins and Medals at the British Museum has a replica of groat no. 41, made before the removal of the mount.

¹³ This jeton, which is 21 mm in diameter and weighs 2.03 g, was acquired by the British Museum in 1992 (accession no. 1992–1–1–1).

¹⁴ This jeton (25 mm; 3.46 g) was found in the vicinity of Ely in October 2001, and it was purchased from the finder by the Fitzwilliam Museum (CM.1989–2001).

and c, and also between f and g, and more surprisingly a link between b and e, which might have been caused by the chance survival of an old reverse die. 15

TABLE I. Die-links between obverse dies

Reverse die	Linked obverse dies	
rI	a1, a2	
r5	a4, a5, a7, a8	
г8	a9, a10	
г9	b1, b2	
r10	b2, b3, c1	
г14	b5, e1	
r16	b5, c1	
r36	f5, g1	

The original version of the die-study, which identified twenty-eight obverse dies from fifty-three coins, provided a point estimate of thirty-nine 'equivalent' obverse dies for the whole Edwardian groat coinage. ¹⁶ The new die-study can be used to produce point estimates of the actual numbers of obverse and reverse dies, with ninety-five per cent confidence intervals, using a method perfected by Warren Esty. ¹⁷ The data required by the method of estimation are: n (the number of coins in the sample), d (the number of dies represented in the sample), and d₁ (the number of 'singletons' or dies represented by only one coin). These data can be used to calculate C_{est} (the coverage or fraction of the coinage that is from dies represented in the sample), D_{est} (the original number of dies), an integral point estimate of the number of dies, and the ninety-five per cent confidence intervals. Table 2 summarises the data and results.

TABLE 2. Die estimates

	Obverse dies	Reverse dies
Number of coins (n)	59	59
Recorded dies (d)	29	36
Singletons (d ₁)	13	23
C	0.78	0.61
C _{cst} D _{est}	45.53	77.85
Low endpoint of 95% confidence interval	33	52
Point estimate of number of dies	46	78
High endpoint of 95% confidence interval	63	118

The point estimate of the number of obverse dies (forty-six) is higher than the original estimate of thirty-nine equivalent obverse dies, but this is not difficult to explain. The estimate of equivalent dies was based upon the assumption that dies not represented in the study had the same average output as the dies represented, but it is more probable that the unrepresented dies had relatively low outputs on average, so that the estimate of equivalent dies might be expected to be an underestimate of the actual number of dies used. The new estimates seem to indicate that the ratio of obverse dies to reverse dies was probably slightly less than 1:2 (the ratio of the point

¹⁵ North (as in n.2), p. 6, records die-links between varieties b and c, and the link between b and e. He also notes a die-link between varieties f1 and f2, but I have been unable to confirm this.

Mossop, et al., The Lincoln Mint c.890-1279 (Newcastle upon Tyne, 1970), pp. 11-19, at pp. 16-17. The meaning of the estimate is that the Edwardian groat coinage was estimated to have been produced from thirty-nine obverse dies with the same average output as the twenty-eight dies actually found in the die-study.

W. Esty, 'Estimation of the size of a coinage: a study of comparisons and methods', NC 146 (1986), 185–215; W. Esty, 'How to estimate the original number of dies and the coverage of a sample', unpublished handout for the International Numismatic Congress, Berlin, 1997; T. Crafter, 'A die study of the Cross-and-Crosslets type of the Ipswich mint, c.1161/2–1180', NC 162 (2002), 237–51, at pp. 239–41.

estimates is 1:1.7). The estimates also demonstrate the incompleteness of the die-study, which is further emphasised by the relatively low average numbers of coins from the dies actually recorded: 2.0 coins per obverse die, and 1.6 coins per reverse die. Clearly there is much more to be learnt about the groats of Edward I, and one substantial hoard of them would probably transform our knowledge of the subject.

APPENDIX, CORPUS AND DIE-STUDY

Obverse dies

North variety a (Fox no. 5)

Flat crown with a thin shaped band and pellet ornaments. A late variety (a9-a10) has crescents above the band, between the ornaments, as in variety b. Small face with short hair. Drapery of two wedges with a rosette below. Trefoils in the spandrels, with pellet centres (a1-a5) or annulet centres (a6-a10). Colon stops.

```
a1
+GDW/\RDVS:D'I:GR/\righthansel';
a2
+GDW/\RDVS:D'I:GR/\righthansel';
a3
+GDW/\RDVS:D'I:GR/\righthansel';
a4
+GDW/\RDVS:D'I:GR/\righthansel';
a5
+GDW/\RDVS:D'I:GR/\righthansel';
a6
+GDW/\RDVS:D'I:GR/\righthansel';
a7
+GDW/\RDVS:D'I:GR/\righthansel';
a8
+GDW/\RDVS:D'I:GR/\righthansel';
a8
+GDW/\RDVS:D'I:GR/\righthansel';
a9
+GDW/\RDVS:D'I:GR/\righthansel';
a9
+GDW/\RDVS:D'I:GR/\righthansel';
a9
+GDW/\RDVS:D'I:GR/\righthansel';
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North variety b (Fox no. 6)

Crown with four crescents carrying the pearl ornaments above the band. Trefoil central fleur in the crown. Larger face than variety a, with less bushy hair. Drapery is an indented band with a rosette in the centre. Triple pellet stops.

+@DW/TRDVS:D'I:GR/T':R@X:/TNGL':

b4

+@DW/TRDVS:D'I:GR/T\":R@X:/TDGL":

h5

+@DW/TRDVS:D'I:GR/T':REX:/TNGL':

North variety c (Fox no. 3)

Crown with a thick plain band, a central fleur from the same punch as variety b, and pearl ornaments. Face and hair of variety b. Drapery is a curved double band with hooked ends and a rosette in the centre. Colon stops.

C

+@DW/TRDVS:DI:GR/T':R@X:/TDGL':

North variety d (Fox no. 7)

Crown with a tall central fleur and spearhead ornaments. Face and hair from new punches. Curved drapery with a rosette in the centre. Triple leaves in the spandrels. Thick-waisted S. Colon stops.

d1

+GDW/TRDVS:D'I:GR/T':RGX:/TDGL':

12

+€DW/\RDVS:D'I:GR/\T':REX:\T\\\\GL':

d3

+@DW/TRDVS:D'I:GR/T':R@X:/TNGL':

North variety e (Fox no. 4)

Crown of variety d. Wider face than variety d, with pellet in oval eyes and bushier hair. More curved drapery with no ornament in the centre. Thin- or thick-waisted S. Colon or triple pellet stops. New small commas on some late dies (e4, r28, r29).

e

+€DW/\RDVS:D'I:GR/\A':\REX:\A\\GL' [large commas]

e2

+@DW/TRDVS:D'I:GR/T':R@X:/T\ngL':

e3

+CDW/TRDVS: | I:GR/T':RCX |]/TNGL":

e4

North variety f (Fox nos 1 and 2)

Crown of varieties d—e. New face and hair. Drapery is two wedges with three pellets in the centre or below. Thick-waisted S. Triple pellet stops. Small commas. Variety f1 (die f1) has a tressure of three lines, as in varieties a—e, and a small pellet at each end of the drapery. Variety f2 (f2—f5) has a tressure of two lines, as in variety g. X with a curved end to the lower left limb on some reverse dies.

f1

+&DW/\RDVS:D'I:GR/\T':R&X:/\T\GL'

f2

+@DW/XRDVS:D'I:GR/X':R@X:/XNGL'

f3

+@DW/TRDVS:D'I:GR/T':R@X:/TNGL'

f4

+GDW/TRDVS:D'I:GR/T':RGX:/TDGL'

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f5
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+@DW/TRDVS:D'I:GR/T':R@X:/TNGL'

North variety g (Fox -)

Crown with bifoliate side fleurs. Face from the same punch as variety f with new 'wire-line' hair. Drapery of converging lines in wedge shape. Tressure of two lines. Trefoils in the spandrels composed of three annulets. 'St Andrew's cross' X on the obverse. Colon stops, with two annulets after TNG.

g1

+@DW/TRDVSDI:GR/T:REX:/TNGL:

Reverse dies

LON/DON/IAC/IVI in the inner circle.

r1

:DV'S / hIBN' / GDVX / TOVT [stop between the words in the inner circle]

12

:DII'S / HIBN' / KDVX / TOVT

r3

:DN'S / hIBN' / EDVX / TYQVT

r4

:DN'S / HIBN' / ADVX / TYQVT

r5

:DN'S / hNBD' / GDVX / TOVT

r6

:DN'S / hNBN' / GDVX / TYQVT

r7

:DN'S / HIBN' / GDVX / TYQVT

г8

:DN'S / HIBN' / RDVX / TYQVT

r9

:DN'S / HIBN' / GDVX / MOVT'

r10

:DN'S / HIBD' / GDVX / TYQVT'

r11

:DN'S / HIBN' / CDVX / TOVT'

r12

:DN'S / HIBN' / EDVX / TYQVT'

r13

:DN'S / HIBN' / GDVX / MOVT

r14

:DNS / HIBDY / GDVX / TOVT

r15

:DN'S / HIBN' / GDVX / TOVT'

r16

:DNS / HIBN' / GDVX / MOVT'

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r17
:DN'S / HIBN' / GDVX / TYQVT'
r18
:DUS / HIBN' / GDVX / TYQVT
r19
:DUS / HIBD' / GDVX / TYQVT
:DUS / hIBN' / GDVX / TYQVT
r21
:DUS / hIBN' / GDVX / TYQVT
r22
:DUS / HIBN' / GDVX / MOVT
r23
:DU'S / HIBRY / GDVX / TYQVT'
r24
:DU'S / HIBN' / EDVX / TOVT
r25
:DU'S / HIBN' / EDVX / MOVT'
r26
:DNS/h[]IBN'/ED[]VX/TOVT
r27
:DN'S / HIBN' / EDVX / TOVT
:DN'S / HIBN' / GDVX / TYQVT'
r29
:DN'S / HIBN' / GDVX / TOVT'
:DN'S / hIBN' / GDVX / TOVT' [X with curved end to lower left limb]
*DN'S / hIBN' / GDVX / TOVT' [X with curved end to lower left limb]
:DN'S / hIBN' / GDVX / TQVT' [X with curved end to lower left limb]
:DN'S / hIBN' / GDVX / TQVT' [X with curved end to lower left limb]
!DN'S / hIBN' / GDVX / TAVT' [X with curved end to lower left limb]
:DN'S / HIBD' / GDVX / TYQVT'
r36
:DN'S / HIBN' / EDVX / TOVT'
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Coins and die-combinations

The coins recorded from each die-combination are listed, with one sequentially numbered entry for each specimen. Weights are listed when known, including weights recorded in grains by auction catalogues.

Abbreviations:

AM Ashmolean Museum, Oxford

BM British Museum

FM Fitzwilliam Museum, Cambridge

wnr weight not recorded.

a1 r1

(1) F.A. Walters sale, Sotheby & Co, 24–27 Oct. 1932, lot 138; ex A. Mann sale, Sotheby, Wilkinson & Hodge, 29–31 Oct. 1917, lot 202; ex J.G. Murdoch sale, part 1, Sotheby, Wilkinson & Hodge, 31 March–4 April 1903, lot 273; ex H. Montagu sale, part 2, Sotheby, Wilkinson & Hodge, 11–16 May 1896, lot 401; ex T. Bliss sale, S. Leigh Sotheby & John Wilkinson, 4–5 Feb. 1863, uncertain lot; 82.6 gr. (5.35 g); Pl. 2, 1.

a2 r1

(2) FM; Queens' College loan; 4.99 g; Pl. 2, 2.

a3 r2

(3) BM; SCBI 39, no. 1; ex Dover hoard; 5.79 g; Pl. 2, 3.

a3 r3

(4) FM; Peterhouse loan; 5.80 g; Pl. 2, 4.

a3 r4

- (5) SCMB 666 (Feb. 1974), no. 1295, wnr.
- (6) NCirc 95 (1987), nos 2199, 7106; NCirc 96 (1988), no. 5482; wnr.

a4 r5

- (7) AM; Keble College loan; 5.59 g.
- (8) BM; Bank of England collection; BNJ 7 (1910), Pl. V, no. 5; SCBI 39, no. 2; 5.67 g; Pl. 2, 8.
- (9) NCirc 94 (1986), no. 7620; ex SCMB 674 (Oct. 1974), no. 8236; ex L.V. Larsen sale, Glendining, 1 Nov. 1972, lot 87; wnr.
- (10) NCirc 99 (1991), no. 7998; NCirc 100 (1992), no. 6578; NCirc 101 (1993), no. 3447; wnr.

a5 r5

(11) BM; 5.80 g; Pl. 2, 11.

a6 r6

(12) FM; SCBI 39, no. 3; ex J.S. Henderson bequest, 1933; 5.41 g: Pl. 2, 12.

a7 r5

(13) R.C. Lockett sale, English coins part 1, Glendining, 6–9 June 1955, lot 1208; wnr: Pl. 2, 13.

a8 r5

(14) NCirc 101 (1993), no. 3448; NCirc 103 (1995), no. 116; NCirc 104 (1996), no. 723; wnr; Pl. 2, 14.

a9 r7

- (15) Hermitage Museum, St Petersburg; SCBI 55, no. 213; ex J.J. Reichel purchase, 1858; 5.71 g.
- (16) L.A. Lawrence sale, English coins part 2, Glendining, 14 March 1951, lot. 459; wnr.
- (17) Lord Stewartby; traces of mount on obverse and gilding on reverse; 5.05 g; Pl. 2, 17.

a9 r8

(18) SCBI 39, no. 4; uncertain provenance (cast in AM); wnr; Pl. 2, 18.

a10 r8

(19) SCBI 39, no. 5; uncertain provenance (cast in AM); traces of mount on obverse; wnr; Pl. 2, 19.

b1 r9

(20) NCirc 91 (1983), no. 6670; wnr; Pl. 3, 20.

b2 r9

(21) Christie's, 28 Feb.-1 March 1989, lot 211; ex Sprowston hoard; wnr; Pl. 3, 21.

b2 r10

(22) BM; SCBI 39, no. 7; ex Dover hoard; 5.75 g; Pl. 3, 22.

b3 r10

(23) BM; ex Spink; ex R. Carlyon-Britton sale, Sotheby, Wilkinson & Hodge, 17–18 Oct. 1921, lot 1; traces of mount on obverse and gilding on reverse; 5.30 g; **Pl. 3, 23**.

b3 r11

(24) BM; ex T.B. Clark-Thornhill bequest, 1935; traces of mount on obverse and gilding on reverse; 5.40 g; Pl. 3, 24.

b4 r12

(25) FM; SCBI 39, no. 6; 5.36 g; Pl. 3, 25.

b4 r13

(26) SCMB 802 (July-Aug. 1985), no. E230; traces of mount on reverse and gilding on obverse; wnr.

(27) Christie's, 28 Feb.-1 March 1989, lot 211; ex Sprowston hoard; wnr; Pl. 3, 27.

b4 r15

(28) SCMB 661 (Sept. 1973), no. H3787; NCirc 82 (1974), no. 6298; SCMB 687 (Nov. 1975), no. H5350; traces of mount on obverse and gilding on reverse; wnr.

b5 r14

(29) BNJ 7 (1910), Pl. V, no. 6; wnr; Pl. 3, 29.

b5 r16

(30) NCirc 82 (1974), no. 6297; traces of gilding; wnr.

c1 r10

(31) BM; *SCBI* 39, no. 8; ex E.H. Wheeler sale, Sotheby & Co., 12–14 March 1930, lot 204; ex W. Talbot Ready sale, Sotheby, Wilkinson & Hodge, 15–19 Nov. 1920, lot 261; 5.39 g; **Pl. 3, 31**.

(32) L.E. Bruun sale, part 1, Sotheby & Co., 18–22 May 1925, lot 276; ex H. Montagu sale, part 2, Sotheby, Wilkinson & Hodge, 11–16 May 1896, lot 402; ex W. Brice; 81.6 gr. (5.29 g).

c1 r16

(33) BNJ 7 (1910), Pl. V, no. 3; NCirc 95 (1987), no. 1369; traces of mount on obverse; wnr; Pl. 3, 33.

c1 r17

(34) AM; SCBI 39, no. 9; ex Bodleian Library; 5.81 g; Pl. 3, 34.

d1 r18

(35) BNJ 7 (1910), Pl. V, no. 7; SCMB 670 (June 1974), no. 4353; wnr; Pl. 3, 35.

d1 r19

(36) BM; SCBI 39, no. 10; 5.18 g; Pl. 4, 36.

d2 r20

(37) AM; SCBI 39, no. 11; ex Bodleian Library; 5.41 g; Pl. 4, 37.

d3 r21

(38) BM; ex T.B. Clark-Thornhill bequest, 1935; found in Cornhill, London; 4.86 g; Pl. 4, 38.

d3 r22

(39) NCirc 92 (1984), no. 178; ex R.C. Lockett sale, English coins part 3, 4–6 Nov. 1958, lot 2988; ex W. Talbot Ready sale, Sotheby, Wilkinson & Hodge, 15–19 Nov. 1920, lot 262; traces of gilding; wnr; Pl. 4, 39.

e1 r14

(40) BNJ 7 (1910), Pl. V, no. 4; wnr; Pl. 4, 40.

e1 r23

(41) NCirc 101 (1993), no. 8424; traces of mount on obverse; wnr; Pl. 4, 41.

e1 r24

(42) *NCirc* 89 (1981), no. 2167; ex R.C. Lockett sale, English coins part 3, 4–6 Nov. 1958, lot 2987; ex F.A. Walters sale, Sotheby & Co., 24–27 Oct. 1932, lot 139; ex L.E. Bruun sale, part 1, Sotheby & Co., 18–22 May 1925, lot 278; ex W. Talbot Ready sale, Sotheby, Wilkinson & Hodge, 15–19 Nov. 1920, lot 260; 86 gr. (5.6 g); **Pl. 4**, **42**.

e2 r25

(43) Clonterbrook Trust sale, Glendining and A.H. Baldwin, 7 June 1974, lot 66; ex R.C. Lockett sale, English coins part 4, Glendining, 26–27 April 1960, lot 3967; wnr; **Pl. 4, 43**.

(44) Patrick Finn List 15 (1999), no. 134; 85.4 gr. (5.53 g).

e3 r26

(45) FM; ex C.E. Blunt; ex Shirley-Fox bequest 1939; 4.63 g; Pl. 4, 45.

e3 r27

(46) Spink London Sale 155, 3 Oct. 2001, lot 410; wnr.

e4 r28

(47) BM; ex T.B. Clark-Thornhill bequest, 1935; SCBI 39, no. 12; 4.99 g; Pl. 4, 47.

e4 r29

(48) Mike R. Vosper Fixed Price List 90 (April–June 1996), no. 159; traces of mount on obverse and gilding on reverse; wnr; Pl. 4, 48.

f1 r30

(49) BM; ex C.H.E. Van den Bugh; ex F.A. Walters sale, Sotheby, Wilkinson & Hodge, 26–30 May 1913, lot 89; *BNJ* 7 (1910), Pl. V, no. 2; *SCBI* 39, no. 13; 5.29 g; **Pl. 4, 49**.

f2 r31

(50) AM; ex P. Jackson, 1943; traces of mount on obverse and gilding on reverse; 4.74 g; Pl. 5, 50.

f2 r32

- (51) BM; ex J. Pierrepoint Morgan; ex J. Evans; SCBI 39, no. 14; 4.66 g; Pl. 5, 51.
- (52) NCirc 107 (1999), no. 4441; ex L.R. Stack sale, Sotheby's, 22–23 April 1999, lot 704; ex H. Phillips sale, Glendining, 19 May 1965, lot 472; ex Capt. R.D. Wills sale, Glendining, 6–8 Dec. 1938, lot 441; ex E.H. Wheeler sale, Sotheby & Co., 12–14 March 1930, lot 203; ex W. Talbot Ready sale, Sotheby, Wilkinson & Hodge, 15–19 Nov. 1920, lot 258; BNJ 7 (1910), Pl. V, no. 1; wnr.
- (53) Yorkshire Museum, York; E.J.E. Pirie with M.M. Archibald and R.A. Hall, *Post-Roman Coins from York Excavations 1971–81*, The Archaeology of York 18/1 (York, 1986), no. 90; found at the Bedern, York, 1979; 3.95 g.
- (54) Baldwin's Auctions 30, 7-8 May 2002, lot 79; wnr.

f3 r33

(55) L.A. Lawrence sale, English coins part 4, Glendining, 28 Nov. 1951, lot 1058; traces of mount on obverse; wnr; **Pl. 5, 55**.

¹⁸ See n.12.

f4 r35

(56) BM; ex F.A. Walters sale, Sotheby, Wilkinson & Hodge, 26–30 May 1913, lot 91; *SCBI* 39, no. 15; 5.50 g; **Pl. 5, 56**.

f5 r34

(57) Classical Numismatic Group, *Triton V*, 15–16 Jan. 2002, lot 2454; ex *NCirc* 99 (1991), no. 166; ex Sprowston hoard; wnr; **Pl. 5, 57**.

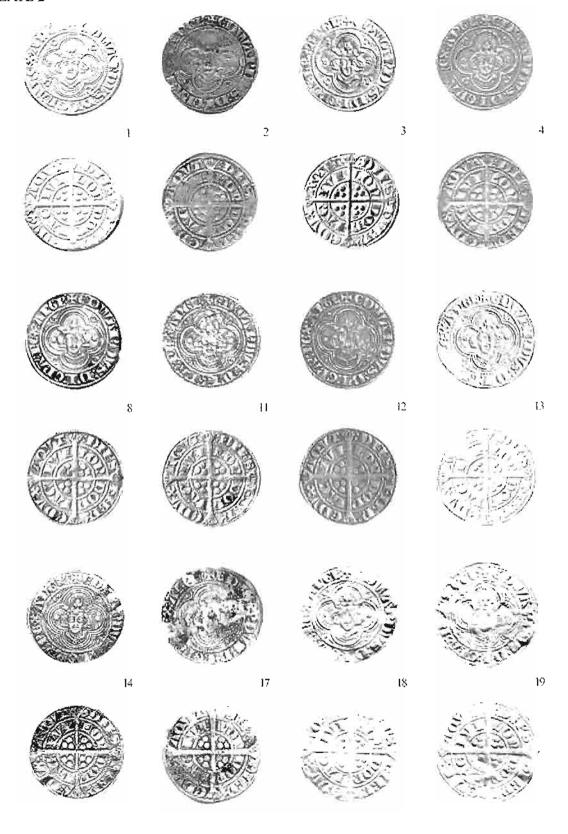
f5 r36

(58) NCirc 96 (1988), no. 6748; NCirc 99 (1991), no. 3596; traces of mount on obverse; wnr.

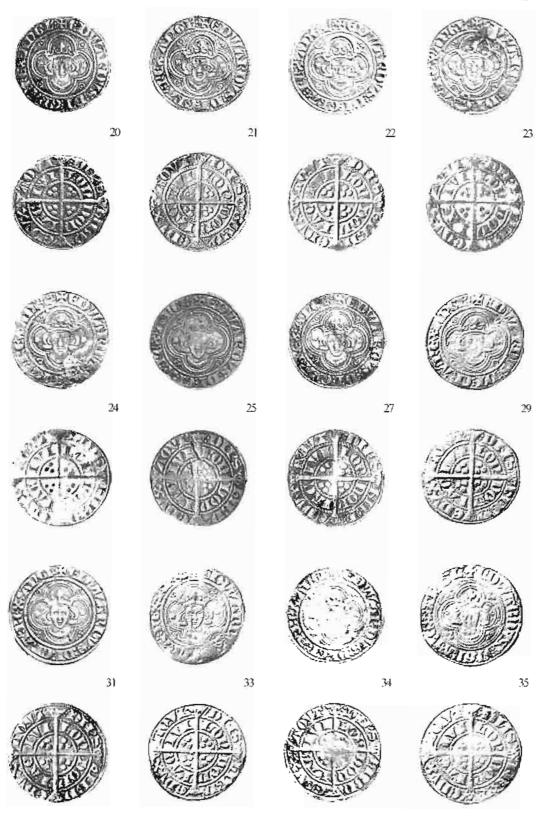
g1 r36

(59) SCBI 39, no. 16; R.C. Lockett sale, English coins part 1, Glendining, 6–9 June 1955, lot 1209; wnr; Pl. 5, 59.

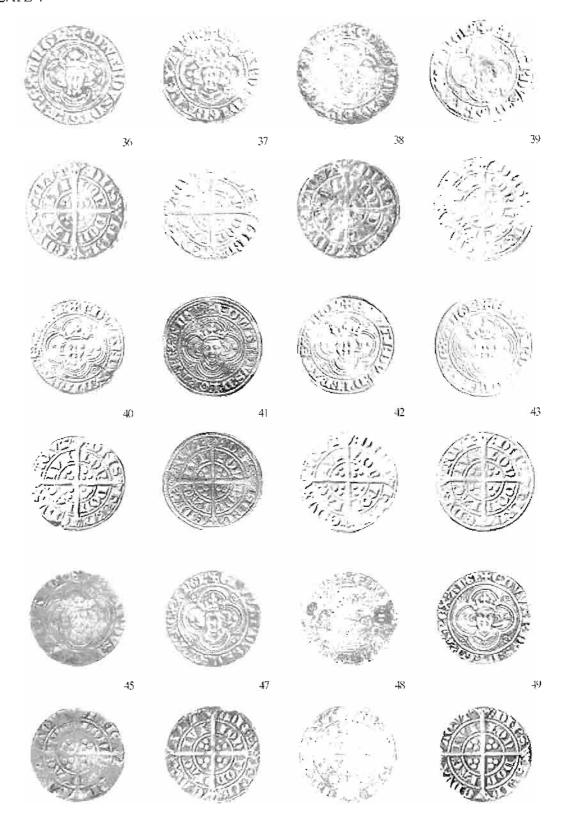
Counterfeit (or contemporary imitation?) copying variety f2 (eighteenth- or nineteenth-century?) (60) FM; Trinity College loan; 6.53 g; Pl. 5, 60.



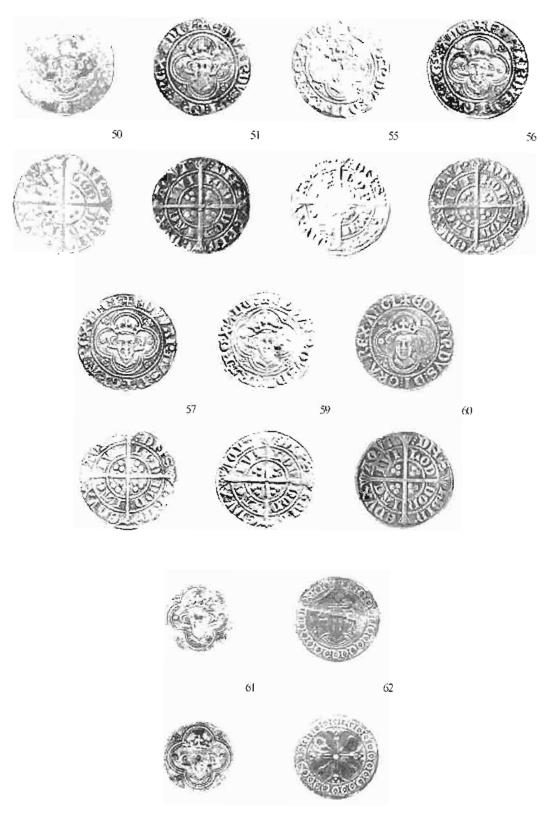
ALLEN: THE GROATS OF EDWARD I (1)



ALLEN: THE GROATS OF EDWARD I (2)



ALLEN: THE GROATS OF EDWARD I (3)



ALLEN: THE GROATS OF EDWARD I (4)