

### III.

NOTE ON RUDDIMAN'S TABLE OF THE VALUE OF THE SILVER MONEY  
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Every one who has paid any attention to the study of the ancient coins of Scotland must have felt the difficulty of reconciling the values and weights given by the writers on Scottish Numismatics with the coins themselves. These values are founded, with some unimportant alterations and additions, on the tables given by Ruddiman in his preface to Anderson's "Diplomatum et Numismatum Thesaurus"<sup>1</sup> (Edin. 1739). Recent research has brought to light some important information which was not available at the time when he wrote, and it is now proposed to consider the effect which this will have in modifying the statements and calculations contained in these tables.

In the first place, if we consider his statement of the various values of the money coined out of the same weight of silver at different times, it will be seen that considerable alterations must now be made. A reference to the table will show that from 1107 to 1296 the author calculates as if the pound weight was equal to the pound current, or, in other words, as if 240 Scottish pennies exactly balanced the standard of weight in the

<sup>1</sup> See Anderson's Dip. Scot., Pref. p. 81.

early Scottish mints. But it is laid down in the assize of David I.<sup>1</sup> that the Scottish pound weighed fifteen ounces or twenty-five shillings, and was made up of 9600 wheat grains, or 7200 grains Tower weight, or 6750 grains Troy weight. Consequently, the pound with which Ruddiman commences his table was not the Scottish standard of weight, but the lighter English one of 12 ounces only.

In a comparative statement of the value of the coin it would have been of little moment what unit of weight was chosen, so long as the same amount was preserved throughout. The rate of deterioration could have been equally well shown either with the English pound or the Scottish pound. But it is evident that if one standard of weight is given at one time and a different one at another, the true proportion is not preserved. And this is what is done in the table now under consideration. For in 1367 we find that the pound weight of silver was coined into twenty-nine shillings and four pennies. And in an Act of the same year,<sup>2</sup> it is ordained that "*de libra ponderis jam fiant viginti novem solide et quatuor denarii numerales,*"—which is evidently Ruddiman's authority for his statement. But the pound weight referred to in this act is the Scottish pound of fifteen ounces, and not the pound of twelve ounces, which was never the standard of weight in the Scottish mints in early times. Ruddiman says, in a note on this section,<sup>3</sup> "*Dicendum ergo videtur Scotos eo tempore in nummis pendendis libra Anglica, non sua, fecisse usos.*" But this is entirely an assumption, not only unsupported by any evidence, but exactly opposed to the facts of the case. We know from original records that the Scottish pound was used in weighing money in the time of Robert Bruce,<sup>4</sup> and that the English pound was not in use in the time of James II.;<sup>5</sup> nor is there in any Act or record anything to prove that it ever was recognised as the standard of weight in the Scottish mint. And consequently the rate of deterioration is not truly shown by Ruddiman. For the same weight of metal which in 1367 was coined into twenty-nine shillings and four pennies, produced in Robert I.'s time twenty-six and threepence,<sup>6</sup> and in David I.'s, twenty-five shillings. And the pound which is given in the tables as producing twenty shillings in 1296

<sup>1</sup> Scots Acts, i. p. 309.

<sup>2</sup> Ibid., i. 144.

<sup>3</sup> Dip. Scot. p. 71, note.

<sup>4</sup> Jac. V., 2, 6, MSS. Advocates' Library.

<sup>5</sup> Chamberlain Rolls, 1438.

<sup>6</sup> Scots Acts, i. 309.

and twenty-one in 1329, produced in 1367, not twenty-nine and fourpence, but twenty-three shillings and fivepence and three-fifths.

Again, in 1393 we find in the tables the value of the money coined out of the pound of silver set down as thirty-two shillings. But in the Act of 1393 it is ordered<sup>1</sup> that "de sex unceis puri argenti viginti unus solidi erunt fabricati." And if six ounces were made into 252 pennies, each ounce must contain 42; and, therefore, even the English pound of twelve ounces would value two pounds two shillings, instead of one pound twelve; and the same weight of silver which in 1367 was coined into twenty-nine shillings and four pennies, in 1393 produced fifty-two shillings and sixpence; and consequently the rate of deterioration given in the table is altogether different from what it really was. It will be noticed that the expression in the statute is "puri argenti," here meaning fine silver. There is reason to believe, as will be seen afterwards, that in David II.'s time the currency was baser than it had been before his reign, but as Ruddiman gives the same purity down to the time of James V., this circumstance cannot have affected his reasoning.

In 1424 we find the value of the pound of silver set down at thirty-seven shillings and sixpence. But that this is not correct is manifest, not only from what has been stated above, but for other reasons. And, *first*, because if it were so, it would make the Scottish coinage of Jas. I. equal in value to that of England, which we know from the indentures of the English mint varied from thirty shillings the Tower pound in 1412 (13 Hen. IV.), to thirty-seven and sixpence in 1416 (4 Edw. IV.) Now the groats of the fleur-de-lis, the only ones which are generally appropriated to James I., rarely exceed 35 grains Troy weight, or about one-half of what they should weigh if the pound of silver was at the value given by Ruddiman. And, *second*, that the Scottish coinage of this period was not equal to the English is plainly apparent from the outcry made by the English Parliament against the money of Scotland. In 1390<sup>2</sup> the northern coinage was reduced to one-half in England, and this agrees with the values we have elsewhere indicated; for the pound of the Tower standard was coined in England up to the 13th year of Henry IV. (1412) into 25 solidi, while in Scotland in 1393 the same weight of silver was struck into 42 solidi. The remonstrances of the English Parliament were

<sup>1</sup> Scots Acts, i. p. 209.

<sup>2</sup> Ruding's Annals, vol. i. pp. 244, 253, 207, 270.

repeated in 1411 and 1415, and in 1423 all manner of Scottish silver money was banished out of the realm of England,—an extreme measure, which would never have passed if the money of the two countries had been equal in weight and fineness. It is true that the first Money Act<sup>1</sup> of James I. recommends that the king “gar amende the moné and ger stryk it in lik wecht and fynes to the moné of Inglande;” but it is added that he is only to do this “quhen him lykis, and thinks it speidfull and profitable for the realme.” And the coins which have hitherto been assigned to this reign show conclusively that the recommendation was not carried out.

There is yet another reason apart from all this for doubting Ruddiman's value at this period. In Nicolson's *Scottish Library*, in the valuable chapter on coins and medals, frequent reference is made to Sir James Balfour's MSS. on the prices of the money in Scotland. I am indebted to Mr Hill Jamieson for a copy of this MS., now preserved in the Advocates' Library, which is highly interesting, and entirely confirms the values indicated above. It is entitled “Prysses of the cunzie in the hail tyme of Ja. 1, Ja. 2, Ja. 3, Ja. 4, Ja. 5, and Queene Mary;” and in it Balfour gives the value of the money coined out of the ounce of silver in the time of James I. as 5s., which would raise the pound of twelve ounces to L. 3 instead of 37 shillings and sixpence. Balfour considers that at this time the standard of fineness was equal to that of England. After this period the Acts which regulate the coinage during the reigns of the Jameses and Queen Mary sufficiently show the values of the coins at the rate of deterioration, by regulating the number of groats to be struck out of the ounce and the value at which the groats were to be current. It will not therefore be necessary to pursue this part of the subject any further.

It is necessary to observe that certain alterations took place in the standard of weight in the Scottish mints. It has already been seen that in the earliest times of which we have any authentic record,<sup>2</sup> the pound used weighed fifteen ounces, each equal to 450 grains Troy. There is no

<sup>1</sup> Scots Acts, ii. p. 6.

<sup>2</sup> The old pound of Caithness was probably an earlier standard, and is conjectured to have contained 16 ounces. (Robertson's *Historical Essays*, p. 68.) It was to be used in buying and selling in all Scotland, according to the Assize Regis David (Scots Acts, i., p. 12.)

authority for Ruddiman's statement that the English Tower pound was ever used in these times in weighing money. But it appears from the moneyer's accounts still preserved in the Chamberlain Rolls that, at some time prior to 1436, a pound of sixteen ounces had been introduced. The expression, "libra continente sedecim uncias ponderis de Troya," constantly occurs after this date both in the published Rolls<sup>1</sup> and in the later unprinted ones still preserved in the Register House. This change took place in all probability during the earlier part of the reign of James I. In 1425,<sup>2</sup> in the Parliament held at Perth, it was enacted that a "stane" be made—"quhilk sall way xv. lele Troyis pundis," and that the "stane be dividyt in xvj lele Scottis pundis." . . . In the "assisa de ponderibus" of the same Parliament it is ordained that the "stane" is to "contein xvj pundis Troyis; ilka Troye's pund to contein xvj unce," &c., &c. . . . It is difficult to know what to make of these statements. At first I was inclined to think that possibly the figures might have been wrong in the printed Acts, especially as in Sir T. Murray's edition the stone is said to contain 15 pounds; but among other obligations for which I am indebted to Mr Thomas Dickson of the Register House was the opportunity of examining the original record, where the figures are most certainly those given in the folio edition of the Acts.

Another change is to be noticed in the weight of the ounce. Originally the ounce weighed 450 grains Troy. In 1565<sup>3</sup> we learn from an Act of Council given in the appendix to Keith's History<sup>4</sup> that the Mary Ryal was ordered to be coined—"the fynes of eleven deniers fyne, and of wecht ane unce Troie wecht," . . . . . and the two-thirds of it are to be "of wecht equivalent, . . . . to witt xvj deniers and the third part viij deniers." From this it appears that the denier of Paris had supplanted the grain as a weight, and the ounce of twenty-four deniers is equivalent to  $(24 \times 19.7) 472\frac{1}{2}$  grains Troy, and heavier than the early ounce of

<sup>1</sup> Vol. i. p. 396.

<sup>2</sup> Scots Acts, ii. 10; see also an Act passed in 1555 (vol. ii. p. 496), where it is implied that the Lanark stone was introduced at this period; see also Acts, vol. ii. pp. 226, 246, 376, 496, 540.

<sup>3</sup> In 1554 we find in the Treasurer's accounts the expression "lie drop wecht" used of Scottish gold. This drop was equal to  $29\frac{3}{4}$  grains Troy.

<sup>4</sup> Keith's History, App. p. 118, quoted by Cardonnel. The original will be found in the Reg. Sec. Con. Acta, vol. 1563-7, p. 151.

King David. At what period this change was introduced cannot be determined exactly. Snelling is of opinion it was in use in the reign of James III., but his reasons for this are founded mainly on the weights of the coins of an incertain issue. In a treatise on the "Ancient Metts and Wechts" of Scotland, written by Alex. Hunter, and printed in 1624, the stone weight of Lanark is said to consist of 16 pounds, each pound of two marks, each mark of eight ounces, and each ounce of 576 grains. I am indebted to Mr E. W. Robertson, amongst many other favours in connection with this subject, for pointing out that the grain of the Lanark stone is the grain of Paris. But it is very probable that the stone weight of Lanark was introduced in the year 1425, and it certainly was in use in 1552, when it is specially mentioned<sup>1</sup> in the Records of the Convention of Royal Burghs. And in 1578 it is more particularly ordered that each Troy weight "keip the just wecht of xvj unces for the pund conforme to the Frenche wecht."<sup>2</sup>

In 1587 a commission<sup>3</sup> was given to sundry persons—amongst whom was Sir Archibald Naper, General of his Highness' Cunzie House—to inquire concerning the laws and acts relating to weights and measures, and to make and establish a weight and measure to be common and universal among all the lieges for buying and selling. This commission reported that having considered the ancient laws and Acts of Parliament anent metts and weights in bygone times, and among others the pound Troy and the stone proportionate thereto, they find that, "maist wisely," the proportion and grounds of all these have been so established of old, that, each controls the other, and accordingly agree that the same shall be observed in all time coming. They accordingly establish the stone of 16 pounds Troy,<sup>4</sup> of which each Troy pound is to contain 16 ounces as the universal weight. This was confirmed in 1607; and in 1618<sup>5</sup> another Act was passed for settling weights and measures, which provides "that there shall be only one Just Weight through all the parts of this kingdome, which shall universallie serve all his majestie's lieges (by the which and no other) they shall buy and sell" . . . "to wit, the frensh Troy Stone

<sup>1</sup> Vol. i. p. 2.

<sup>2</sup> Ibid. p. 76.

<sup>3</sup> Scots Acts, vol. iii. p. 437.

<sup>4</sup> It is to be noted that the Troy weight here and elsewhere mentioned is the French Troy standard of 472½ grains to the ounce.

<sup>5</sup> Scots Acts, iv. p. 585.

weght, containing sexteine Troy Pounds in the stone and sexteine Troyes Unces in the Pound, and the lesser weghts and measures to be made in proportion conforme thereto."

This Act was confirmed in 1621<sup>1</sup> and in 1625.<sup>2</sup> From another passed in June 1686,<sup>3</sup> it appears that a scale of weights was then in use in the mint divided into seconds, primes, grains, and deniers corresponding to the French standard, and with the denier equal to 19·7 grains modern Troy standard. As the ordinary weights in common use are also given, it appears that the drop weight mentioned by Nicolson in his weights of the Scottish gold coins was merely a different subdivision of this scale, with the drop equal to one and one-half deniers, or to 29·53 grains modern Troy standard, the ounce and the pound being the same in each. The seventeenth article of the Treaty of Union between England and Scotland provides that from and after that date the weights and measures then in use in England were to be the standard in the United Kingdom.<sup>4</sup>

There is then no reason to believe that the English Troy standard was ever used in the Scottish mint. From a MS. preserved in the British Museum,<sup>5</sup> it appears that the "ounce english doth overpoyse the ounce Scottish viij graynes and three quarters english, and after yt. rate xij oz. english doth overpoyse xij ounce scotish iiij penny wt. ix graynes English."

Nor is Ruddiman altogether accurate in his view of the fineness of the silver coin. For it will be observed, on referring to the table, that he gives the sterling standard of 11 oz. 2 dwt. from the earliest period down to 1529. There is reason to believe that this statement is not warranted by the evidence available. For it is probable, as will be afterward seen, that the standard of purity in the Scottish coinage was originally finer than the English. In 1355, we find in Rymer's *Fœdera*<sup>6</sup> a precept of Edw. III. of England, which says—"Antiqua moneta scotiae ejusdem ponderis et allaise sicut fuit moneta nostra sterlingi angliae ante hæc tempora esse consuevit—propter quoad in regno nostro angliae habuit cursum suum"—but that lately it had become of baser alloy and less weight than the English.

<sup>1</sup> Acts, vol. iv. p. 614.

<sup>3</sup> Ibid. vol. viii. p. 604.

<sup>5</sup> Cott. MSS. Otho Ex. 241.

<sup>2</sup> Ibid. vol. v. p. 186.

<sup>4</sup> Ibid., vol. xi. p. 451.

<sup>6</sup> Vol. v. p. 813.

This debasement was sanctioned by an Act of Parliament in 1367, when we learn that the pound of fine silver “*minuatur in pondere decem denariis ponderis;*” and yet the money to be coined was ordered to be as fine as that of England, which would seem to imply that previously the standard had been finer than that of England. I am again indebted to Mr E. W. Robertson for an important and interesting note on this point, which I cannot do better than transcribe:—

“The fineness of old French silver was originally  $\frac{2}{3}\frac{3}{4}$ , according to Le Blanc; that is to say, 1 denier of alloy to 23 deniers of pure silver in the ounce. The ounce was that of the old Byzantine standard (still used in the Swedish mint), weighing 405 grains Troy; and as the denier weighed 16·875, this ounce of fine silver contained 388·125 grains of pure silver to 16·875 of alloy. The sterling standard of fineness doubled the alloy, but spread it over a rather larger surface of silver. 11 oz. 2 dwt. of fine silver in the lb. gives 18 dwt. of alloy, or three half-pence in every ounce; and then three half-pence = 33·75 grains Troy, or  $2 \times 16\cdot875$ . Thus an ounce of sterling silver weighing 450 grains Troy contained 416·25 of pure silver to 33·75 of alloy, or in the proportion of  $13\frac{1}{3}$ , instead of 24. But an ounce weighing 450 grains Troy of the French standard of fineness would have contained  $\frac{1}{2}\frac{1}{4}$ , instead of  $\frac{1}{13}\frac{1}{3}$  of alloy, or, in other words,  $450 (\frac{450}{2\frac{1}{4}}) = 18\cdot75 = 431\cdot25$  of pure silver; that is to say ( $431\cdot25 - 416\cdot25$ ), 15 grains more of pure silver than the sterling standard. When David II., in order to assimilate Scottish currency to the English standard of fineness, deducted 10 dwt., or 225 grs. Troy, from the pound of fine silver weighing 15 oz., each ounce must have been mulcted of 15 grs. of fine silver; in other words, Scottish fine silver before the change in question must have been of the old French standard of  $\frac{2}{3}\frac{3}{4}$ , or 11 oz. 10 dwt., instead of the sterling standard of fineness, 11 oz. 2 dwt.

“When the old Register of the French Mint (quoted by Du Cange) was compiled in the fourteenth century, and all the money in the world was alloyed, and its value raised or depressed by the Marc de la Rochelle dit d’Angleterre, in other words, the sterling standard of *two* deniers of alloy in the ounce was universal. When two deniers instead of one was deducted from the Paris ounce of 24 deniers, the standard of fineness became  $\frac{2}{3}\frac{3}{4}$ , or 11 oz. fine and 1 oz. of alloy. . . .

“David II. accordingly, when he altered the standard of Scottish fine



silver from 11·10 to 11·2 (or from the old French to the sterling standard) seems to have only followed the steps of the continental mints.”

In 1393 we have the first mention in the records of a base or billon coinage authorised by Act of Parliament. A statute then passed enacts<sup>1</sup>:—  
 “Et erunt denarii fabricati in quibus quatuor denariis erit tantum argentum sicut in uno grosso sed ponderabunt sex denarios *causa laii quod imponitur*. Etiam erunt obuli fabricati de eadem materia et ponderacione proportionabiliter secundum quantitatem denarii: et quinta pars hujus monete erit fabricata in denariis et obulis.”

From this time down to 1423 the remonstrances of the English Parliament show that some portion of the coinage of Scotland was below the English standard. In 1525 it appears from a record preserved in the Books of Council and Session, and quoted by Lindsay,<sup>2</sup> that in the agreement between the Lords of Secret Council and James Atchison the groat was only to be x<sup>d</sup> fine, and not xi<sup>d</sup> fine, as given in the table.

In 1555,<sup>3</sup> it is ordered that the silver coin (probably the testoon) be xi<sup>d</sup> fine, and the same standard was fixed for the Ryal of 1565.<sup>4</sup> But in the same reign, in 1558–59, the 12<sup>d</sup> groats were only vi<sup>d</sup> fine. In 1571–76 Ruddiman reduces the standard to ix<sup>d</sup> and viij<sup>d</sup> fine, and this is called in question by some of the later writers on Scottish numismatics. But there is satisfactory evidence to show that at the time in question some part of the currency was very much debased. In the “Diurnal of Occurrences,”<sup>5</sup> it is stated that in May 1572 ½ merk and 40<sup>d</sup> pieces were coined in Dalkeith only vi<sup>d</sup> fine.

In 1579 the standard was recalled to xi<sup>d</sup> fine, at which it seems to have remained till the Act of 1686.<sup>6</sup> It will thus be seen that considerable modifications must be made on Ruddiman’s Tables before they can be accepted as accurate. There are some other points in connection with this subject which are far from clear; but I refrain from entering on these at present.

<sup>1</sup> Scots Acts, p. 207.

<sup>2</sup> View of the Coinage of Scotland, p. 130.

<sup>3</sup> Haddington MSS. Advocates’ Lib.

<sup>4</sup> Act of Council given in Keith’s App.

<sup>5</sup> Maitland, Aw., pp 297, 298.

<sup>6</sup> By the Act of 1686, eleven deniers two grains is declared to be the standard of fineness of Scottish silver coin in all time coming.