Society of Antiquaries *of* Scotland

The Scottish Antiquarian Tradition: Essays to mark the bicentenary of the Society of Antiquaries of Scotland 1780-1980

Edited by A S Bell

ISBN: 0 85976 080 4 (pbk) • ISBN: 978-1-908332-15-8 (PDF)

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Erratum

In the original publication of *The Scottish Antiquarian Tradition* plate 4 'Sir George Steuart Mackenzie, 7th Bt, of Coul' was attributed to Sir John Watson Gordon. However it is now attributed to Sir Henry Raeburn.

Two Centuries of Scottish Numismatics

Ian Stewart

Two centuries ago the newly founded Society of Antiquaries of Scotland chose a nobleman as its (absentee) president and an archivist as its resident secretary. Each was, amongst other things, a numismatist, and each represented an important strain in the history of the subject. The President, James, 3rd Earl of Bute, Prime Minister in 1762-3, was the foremost Scottish coin collector of his time. The Secretary was James Cummyng, Keeper of the Lyon Records, and author of a paper on Scottish coins of the fifteenth century published in the Society's first volume of *Archaeologia Scotica.* Ever since their day the pursuit of Scottish numismatics has continued to fall chiefly to amateur collectors, or to curators with other primary responsibilities, like the distinguished Keeper of the National Museum who was President of the Society when this volume was launched.

By Scottish numismatics in this essay I mean the study of Scottish coins and coinage, and more widely of the currency of Scotland during the same period, from the twelfth to the seventeenth century. In another context the term might quite properly be taken to cover coins of earlier periods (notably the Roman and Saxon) found in Scotland, and of more recent times, since the currency of Scotland became part of that of the United Kingdom, although sometimes with characteristics of its own as in the token and countermarked issues of the end of the eighteenth and beginning of the nineteenth centuries. But each of these other series belongs in a different framework with a specialism of its own, and on the whole there is little interplay between them and Scottish numismatics of the sort considered in the following pages.

There has never been a professional post in Scottish numismatics, and very few in medieval numismatics at all except in museums. Philip Grierson, one of the outstanding medieval numismatists of modern times, held a personal chair at Cambridge, but there are now no full-time teaching posts in the historical faculties of our English or Scottish Universities. Two of the three great English Museum cabinets, the British Museum, the Ashmolean and the Fitzwilliam, have medieval coin specialists on their staff; but the attention paid by them to the Scottish series tends to be occasional and incidental, the result of personal inclination, such as Dr Michael Metcalf's interest in northern hoards, or of new finds with Scottish coins, like those of David I from Prestwich on which Miss Marion Archibald has been working in the British Museum. With neither University posts nor a flow of students, the academic continuity of British numismatics has inevitably been at times precarious, while for Scottish it has often been non-existent.

In practice the study of Scottish coins has tended to flourish when there have been active collectors of the series, and to have faded when there have not. The golden age of Scottish numismatics was undoubtedly the period from the 1850s to the 1880s. From the 1830s many coin-hoards had been discovered in the course of new building and the construction of the railways. John Lindsay's *View of the Coinage of Scotland* (1845) provided collectors with a convenient work of reference, and the interest that it stimulated led to the publication of supplements in 1859 and 1868 containing details of the many new varieties which it enabled collectors to identify. This vigorous phase of activity culminated in the appearance of two outstanding works of detailed scholarship that still provide the basic material for the subject a century later, R. W. Cochran-Patrick's *Records of the Coinage of Scotland* (1876) and Edward Burns's *The Coinage of Scotland* (1887).

The only other period of sustained work has been the last 25 years, coinciding with a great expansion of interest in coin-collecting generally, and in the case of Scotland assisted by the availability for the first time of a modern handbook, *The Scottish Coinage* (1955). Prior to the mid-nineteenth century and during the first half of the twentieth, Scottish coins were not widely collected and their study received only occasional attention. Of course many collectors, even at active periods, take only a superficial interest in their coins, but competition to acquire rare and interesting items seems to encourage them to look more closely at the material, and so to acquire a degree of technical knowledge from which it is only a short step to academic study. Conversely, a collection too easily acquired and a scarcity of fellow enthusiasts with whom to exchange ideas are not conducive to detailed work, and although some, like H. J. and C. H. Dakers in the 1930s, have overcome such drawbacks, more stimulating conditions might have encouraged them to put down on paper more of their knowledge for the benefit of others.

If there is one principal cause of this cultivation of numismatics by amateurs, and of its neglect by professional scholars, it must be the nature of the material. Coins are in many ways unlike most other forms of evidence available to the historian. Physically their affinities lie more with the world of archaeology than with the library or archive. Being more pervasive, continuous and durable than other classes of medieval artefact, they are generally much more abundant. Furthermore, this great mass of evidence is not concentrated in a limited number of public institutions, like most of the historical material, documentary and otherwise, with which students are concerned, but it is widely scattered so that collation of the material in any series is itself a difficult and lengthy task. This situation is the inevitable consequence of the attractions which coins hold for collectors. They are small, portable and usually of precious metal; they are varied and plentiful; and their designs are often of historical and artistic interest. As such they are almost ideally designed for the tastes of antiquaries and collectors, while in recent years they have also come to be regarded as a medium for investment. Before proceeding further, we therefore need to look at the nature of the material, its extent and its disposition, and this involves consideration of the role of the coin market as well as the parts played by museums and private collectors.

Scottish coins were first struck in 1136, when David I captured Henry I's mint at Carlisle. At this time, and until the middle of the fourteenth century, the basic coin in the British Isles was the penny, or sterling. In the 1140s the coinage of David and his son Earl Henry was little more than one among the many issues of rival factions in the Stephen Civil War, but when peace was restored a royal issuer and an independent territory enabled this one of them alone to survive. The emergent coinage of Scotland then became more isolated from England for the rest of the twelfth century, although two recoinages show that William the Lion recognised the convenience of having a currency that was interchangeable with the English. Scottish coins earlier than 1195 are rare: they probably number no more than 600 or 700 in all, more than half of them being of the crescent coinage of the 1170s and 1180s. The voided cross issues which followed, the Short Cross series of 1195-1250, and the Long Cross of 1250-c1280, are much more plentiful, partly because of the increase in minting which went with the great economic expansion of the thirteenth century and a favourable balance of payments, partly because of the recovery of several large hoards; and the same is true of the Single Cross coinage of Alexander III (1280s). At a guess, there might be some 6,000 Scottish sterlings from the thirteenth century extant today. Of these the least plentiful are those from the Short Cross period, since although some large hoards of the first half of the century have been found in England, such as Eccles (1864) with 96 Scottish sterlings, and Colchester (1902) with 168, Scottish coinage was not yet extensive enough to have formed more than a tiny part of the English currency. In contrast, Scottish Long Cross sterlings are relatively common as a result of the discovery in 1908 of the huge Brussels hoard, with over 2,000 Scottish in a total of above 80,000 sterlings from the British Isles, and of the 1969 Colchester hoard with 490 out of 13,000. The Single Cross sterlings of Alexander III are even more plentiful because of their regular occurrence in hoards buried during the Wars of Independence in the north of England and the Scottish lowlands. The 1969 find at Middridge, Co. Durham, with some 280 Scots out of a total of 3,072, is one of the most important recent discoveries in a series which includes Bootham (1953), Loch Doon (1966), Renfrew (1963) and many others over the years.

Later medieval coinage is characterised by the use of coins of higher face value, either of gold or of larger size in silver (groats). It was also a period in which all western coinages were debased in weight or fineness, though in differing degrees, and this caused a divergence of standards in the fragmentated currency of Europe. The Scots quickly fell below the very high standard maintained by the English, and their coins are thus much less well represented in hoards from England than they had been during the Sterling period. Scottish medieval gold does not seem to have been struck on more than a limited scale except in the 1390s and 1420s-1450s. Groats are more plentiful, although between the 1460s and 1520s an increasing proportion of the available silver was allocated to debased coins (billon) of lower value. Gold coins of the later middle ages can perhaps be counted only in hundreds, but silver and billon must run into a few thousand each. Similar totals, though probably with more billon, survive from the reigns of James V to James VI, a period only half as long. The sixteenth century saw a great expansion in European coinage, assisted by new sources of gold and silver from Africa and the Americas. It was also an age of rapid inflation in many countries, including Scotland, where successive coinages followed each other with increasing rapidity as the century progressed. Gold was still very limited until the 1590s, but issues of silver were erratic, with substantial amounts coined in the 1550s, 1570s and 1590s, alternating with huge issues of small change in billon from the 1540s. Although several thousand coins of Mary and James VI exist, most of them are billon; before the 1590s little of the silver was coined into smaller denominations, so that the total number of silver coins was relatively low.

Scottish coinage of the seventeenth century is no less plentiful than that of the sixteenth, although it is very different in kind. One of the consequences of the Union of Crowns in 1603 was the harmonisation of the coinage of Scotland with that of England. As the century progressed, they began to diverge again until permanent unification finally came about with the Union of 1707, following which the Edinburgh Mint spent the last two active years of its existence recoining the old Scots money. Except in the earliest years of the century gold coinage was again sparse, and disappeared altogether after Charles I except briefly when a consignment of gold dust was sent to the mint by the Darien Company in 1701. In Charles I's reign minting machinery was introduced by the French expert, Nicolas Briot; at first only the copper coins were struck by machine, but from 1637 the whole coinage was made mechanically, although initially on an experimental basis. Although much of the silver seems to have been in the form of foreign dollars, they were not for the most part reminted in Scottish coins of equivalent size but into those of lower denomination, which were issued on a considerable scale under Charles I and are common today. Copper coins of a token nature replaced billon, and very large quantities of these were struck, particularly in the middle of the century. Because of this emphasis on the lower values, Scottish coins of the seventeenth century are probably more numerous today than those of earlier periods, although it is impossible to assess at all accurately how many turners and bawbees have survived.

It is equally difficult to estimate the total number of extant Scottish coins, but it could be of the order of 25-30,000 specimens, with the bulk of them belonging to the petty currency of the sixteenth and seventeenth centuries, which is of relatively little historical interest. From the middle ages, for which numismatic evidence is so much more useful to the historian, Scottish coins are unfortunately much rarer. The numbers of several series would undoubtedly have been considerably greater if until the middle of the nineteenth century and beyond it had not been customary to melt down many of the silver coins of commoner types from newly discovered hoards unless they were in particularly good condition. Some of the victims of this destruction would certainly have been acceptable to collectors in times of stronger demand and less discrimination, but the loss to study of so many specimens, particularly of the sterling period, which would now be regarded as legible, is painful to contemplate. The only really abundant medieval series are those of which substantial hoards have been found since 1900, notably the sterlings of the second half of the thirteenth century and the billon coins of James IV, although sterlings of the earlier thirteenth century and groats from 1358 to the 1460s have survived in sufficient numbers to enable a detailed picture of the coinage to be drawn.

All Scottish gold coins are rare — the country was not rich and they were never minted on a large enough scale to be otherwise. But, despite their rarity, we probably possess a fairly complete series of them because of the high survival rate of coins in precious metals. The best way to judge whether such is the case is to compare the contents of newly discovered hoards with known material. If, as with the gold crowns of James II from Fishpool, the sterlings from the Aegean, or the coins of David II from Aberdour, they are all or mostly from recorded dies, then it is likely that most of the varieties are already known. But to the extent that unrecorded items continue to appear, as among the billon pence of James III from the 1956 Glenluce and 1959 Rhoneston hoards, then we must admit to gaps in our knowledge so long as the process continues. Sometimes a hoard shows our previous knowledge to have been not so much incomplete as insignificant, in the way that the early coinage of David I was revealed by the 1972 Prestwich find to have been of an extent and variety that were quite unexpected. Beside such dramatic additions, there is a continuous accretion of less spectacular material from new finds which is gradually enlarging the body of available evidence and narrowing or eliminating the remaining lacunae. In time we may hope, almost perhaps expect, to attain something approaching a complete representation of the products of the mints of Scotland from 1136 to 1709. While new documents do appear and fresh sites are excavated, few branches of written history or archaeology can compete with such prospects, and in this respect numismatists are uniquely fortunate. New hoards from Scotland, or from elsewhere containing Scottish coins, are currently being discovered at a rate of more than one a year. Since treasure-hunting with metal detectors became a popular pastime in the 1970s the pace of discovery has quickened, but if the English experience is repeated, the chances of obtaining accurate reports of find-spots, context and total contents have correspondingly diminished.

Today the first pick from new finds goes to the National Museum of Antiquities in Scotland and to the British Museum in England. The Treasure Trove provisions are limited to gold and silver in England but in Scotland cover coins of any metal and so avoid dispute about billon and copper. The holdings of the two national collections and various other public collections probably amount to over ten thousand Scottish coins in all. Much the most important of them, and the only one to contain a systematic and comprehensive series, is the National Museum of Antiquities. With over six thousand specimens, it is one of the two largest collections of Scottish coins in existence today, and is particularly rich in the later period, from the fifteenth to the seventeenth centuries. It is based on three main cabinets, those of the Faculty of Advocates, the Society of Antiquaries, and Coats of Ferguslie, but significant additions have been made in the last fifty years from Treasure Trove and by purchases at the sales of great private collections such as Cochran-Patrick and Lockett. Other public collections in Scotland with notable material are the Hunterian Museum, Glasgow, which has Hunter's select series intact with some later additions, the Royal Scottish Museum, with a small but representative selection of high quality, and various regional bodies ranging from Aberdeen University and the City of Perth, each of which has a large part of the residue of a major medieval hoard (the 1886 find of sterlings from Aberdeen, and the 1920 Perth find of fifteenth-century coins), to the smaller museums which often contain items from local hoards and finds.

If Scottish coins in the main public collections are highly unrepresentative of the total material in their proportions, because of the process of selection, at the same time they are abnormally rich in varieties, particularly of gold and silver, especially when material from large hoards has been available. Conversely, the commoner, less glamorous and more uniform series, like groats of Robert II or the small silver of Charles I, have been relatively neglected. For these reasons and others, the coverage of the British Museum collection is rather patchy. Little attempt appears to have been made in modern times to compile a systematic series, and it therefore consists of a good, small general base, made up of the Museum's original holdings with some later gifts and bequests, to which have been added very important accessions from Treasure Trove. The hoard material is naturally strongest for periods when Scottish coins circulated extensively in England. These include the mid-twelfth century (Prestwich and Outchester hoards), the sterling period (with Short Cross sterlings from Eccles and Colchester 1902, Long Cross from Colchester 1969, and Edwardian from many sources, especially Dover) and the earlier seventeenth century (from hoards lost during the Civil War), but there are also important items at random from other periods, for example Robert III billon pence from Skipton and Attenborough. The opposite is the case for several series which are little found in England, such as the Crescent sterlings of William the Lion or the light silver and billon issues from the end of the Middle Ages.

There is a small, balanced collection in the Fitzwilliam Museum, Cambridge with some individual items of note, and a splendid cabinet of gold coins at Oxford presented to the Ashmolean Museum by the late Alderman Horace Hird, a Bradford industrialist. It is also well to remember that continental museums may contain significant find material, such as a unique penny of David I in Stockholm and Short Cross sterlings from the Ribe hoards in Copenhagen, in addition to specimens collected for one reason or another, like the fine Scottish gold in the Bibliothèque Nationale, Paris, which includes good coins of Mary, who was briefly Queen of France.

The number of Scottish coins in private hands probably equals if not exceeds that in museums, though its extent is difficult to measure since in the nature of things its disposition is continually changing between different collectors and the coin market. One collection has been put together on a scale comparable to that of the National Museum of Antiquities but with greater emphasis on the period up to the fourteenth century, for the purpose of compiling as complete a record as possible of all dies used and the combinations in which they are found. There are also a fair number of smaller private collections, some of them built up by students, others by collectors with varying degrees and angles of interest. Unlike public collections, private ones are of course fluid, individually as well as collectively. Their owners often replace one coin by another, either to have a better specimen, or to make their cabinet more representative. But most movement naturally takes place when whole collections are dispersed. Sometimes collectors have 'abandoned the pursuit', as nineteenth century sale catalogues quaintly note — a more recent example is that of Dr A. N. Brushfield, who gradually disposed of his other series, including a respectable sale of Scottish (1940), in order to concentrate on British Colonial in which he specialised. Others, because of high market prices (T. Mackenzie, 1831-1916), financial needs (H. A. Parsons, d. 1952) or failing health (R. Carlyon-Britton, d. 1960) have sold up only to collect again with greater vigour when circumstances changed. But disposal has usually taken place fairly soon after a collector's death, although their families have on occasions held on for generations (the Sharp, Bridgewater, Bute and Cochran-Patrick collections are examples).

Collections are sometimes sold *en bloc* to a dealer, or even to another collector (like A. B. Richardson's to J. G. Murdoch), but the more important ones have generally been dispersed at auctions and so, since the rise in prices of recent years, have many lesser ones as well. Whereas collections are usually broken up suddenly, they are often gathered together gradually over many years. Dealers therefore play an important part in handling the material, both in the disposal of whole collections and the formation of new. At times of neglect by collectors, when the supply of coins exceeds demand, significant proportions of those available may remain in the stocks of dealers. When Matthew Young's stock of coins was sold in 1839-41 after his death, it included hundreds of Scottish coins with many rare and interesting ones among them; and for ten years after the last War, before collecting interest revived in the 1950s, the market held extensive stocks from the dispersed collections of the previous generation. At other times, as in the present or a century ago, demand is so keen that good material is quickly bought up, collectors buying direct from auctions or soon afterwards from dealers' trays.

One of the consequences of an active market and strong collector interest is that the literature of numismatics differs considerably from that of most branches of historical study. Since the basic material of the subject consists chiefly of the coins themselves, any publication which includes illustrations or descriptions of individual specimens may be of use. Since collections are rarely catalogued during the lifetime of their owners, sale catalogues prepared for the purpose of their disposal by auction are a primary source for the student, and the best of them — Cochran-Patrick, Bute and Lockett are among the most often used — constitute works of reference in their own right. Even commercial lists issued periodically by dealers are of value if items for sale are well illustrated, and some of them, like Spink's *Numismatic Circular* (cited as *Num. Circ.*) and Seaby's *Coin and Medal Bulletin* (*SCMB*), also contain a section of articles and notes of general interest. Because of this, and of the popularity of other collectors' magazines, it is unusually easy for an aspiring numismatist to get into print, and the very uneven quality of numismatic writing reflects this. However, even the least scholarly articles often contain observations or photographs which should not be overlooked, while serious work of a scholarly standard, like Col. Murray's explanation of the Stirling bawbees of Mary, may appear in a trade publication. In recent years more important papers on Scottish numismatics have tended to appear in the *Numismatic Chronicle* (*NC*) and the *British Numismatic Journal* (*BNJ*), published respectively by the Royal and British Numismatic Societies, although the *Proceedings* of the Society of Antiquaries of Scotland (*PSAS*) still attracts contributions from time to time on Scottish coins or coins found in Scotland.

Although most of the history of Scottish numismatics belongs to the last two hundred years, it did not have a sudden beginning, and we need to look briefly at its origins. During the sixteenth century, the antiquarian interest of the Renaissance in the ancient world gradually extended to medieval and contemporary culture. With the spread of literacy, more legible Roman lettering replaced Gothic on the coinage and attention was paid to the designs and inscriptions of contemporary coins for various purposes. George Buchanan remarked on the significance of the titles on the earliest silver coins of 1565, which showed Henry's name as king, before that of Mary, and under his tutorship James VI grew up to take a close personal interest in his coinage. Modern coins and medals soon began to figure alongside antiquities in the cabinets of collectors and, whereas almost all medieval coins extant today derive from hoards, some of the best preserved from the sixteenth century and more from the seventeenth were undoubtedly taken from circulation or put aside at the time of issue and have been preserved casually or in collections ever since. Many of the items in the cabinet of the Earls of Bridgewater, dispersed at auction in 1972 but originating in the 1640s, come into this category, which explains the exceptional richness of the collection in great rarities of the period. Apart from non-numismatic contexts, such as the money lists of merchants and exchange dealers, which often contain important information (a gold coin with the name of John Duke of Albany as Regent for James V is known only from a rubbing in a French tariff book of the 1520s), the earliest illustrations of Scottish coins that I have found are, strangely enough, in Spelman's *Life of Alfred* (1678), in which some confused engravings of pennies and groats of Alexander III to Robert II have been added to one of the plates of Anglo-Saxon coins 'ne nimium vacaret haec tabula'.

By the end of the seventeenth century more serious efforts were being made to build collections and study their contents. William Nicolson's *Scottish Historical Library*, published in 1702, contained a chapter on coinage for which he acknowledged help from two of the leading collectors of the series, John Sharp (1645-1714) and James Sutherland (d. 1718). Sharp, who was Archbishop of York from 1691 until his death, had some two hundred Scottish coins amongst a large general collection on which he based his *Observations* on the coinages of the British Isles. These were not published until 1785, but had been available privately to others like Nicolson who were interested in the subject. Sutherland was Professor of Botany at Edinburgh University and sold his fine general collection of coins, including a rich Scottish series, to the Faculty of Advocates in 1705. In the same year, James Anderson received a grant from the Scottish Parliament to undertake publication of ancient Scottish charters. Eventually published in 1739 as *Selectus Diplomatum et Numismatum Scotiae Thesaurus*, with an introduction by Thomas Ruddiman, this work included a section on the coinage which, with sixteen plates of coins and medals, constitutes the earliest illustrated account of the series.

The eighteenth century, particularly the later part of it, witnessed a broad advance in antiquarian studies. Coin collecting became more popular and this led to the appearance of professional dealers, one of whom, Thomas Snelling, published a series of well-illustrated studies on British and other coinages of interest to his customers. His brief but competent *View of the Silver Coin and Coinage of Scotland* was published posthumously in 1774, accompanied by plates of gold and billon for which the text had not been written. In 1773 an unreliable English translation of Ruddiman's preface to Anderson was printed, but growing need for a work of reference on Scottish coins was not met until Adam de Cardonnel published his *Numismata Scotiae* in 1786. Cardonnel remarked that Anderson's book was now 'seldom to be met with' beside being very expensive for anyone who wanted it 'merely for the coins alone'; while even Snelling was 'remarkably scarce'.[1] Although unflattering about both Snelling's plates and his descriptions, Cardonnel used his material extensively. But his work did achieve a step forward, and not only in being the first to contain descriptions and illustrations of coins in all metals, since he added an appendix containing extensive extracts from Acts of Parliament relating to the coinage and so began the process of detailed reconciliation between documents and coins which was to be substantially completed by Burns a hundred years later. Cardonnel also recorded the discovery in 1780 of a hoard at Dyke, Moray(shire), consisting of sterlings of the crescent type which he was able to attribute for the first time to William the Lion.

Although now superseded for most purposes, eighteenth-century numismatic works should not be neglected today, and not only for their own elegance and interest as early books with charming though often rather quaint engravings. Cardonnel's first plate contains drawings of a selection of the crescent sterlings from Dyke accurate enough to indicate the composition of the hoard. Sometimes important but untraced coins are illustrated, like the 60s piece of William II (1699) figured by Anderson (who seems unlikely to have invented it, in a work so close in date) or the James IV gold half-unicorn with I in the centre of the reverse (S. fig. 299), which was figured by Snelling but escaped the notice of subsequent writers on Scottish coinage, as it lay in the Bute collection for nearly two centuries. Many of the other specimens illustrated in these early books can be identified today, and this may provide useful information about pedigree or provenance. They are also of value in establishing the current attributions of the time, so that references to coins of a particular type or reign in other contexts can be interpreted. The greatest area of confusion was in the coinages of the five Jameses, which have engaged the attention of many students from Cummyng in the 1780s to Mrs Murray in the 1970s, and even now are not yet finally resolved at every point. The early period also provided a number of problems such as the division between issues of Alexander II and III and the identification and attribution of the earliest coinages of the Scottish kings. Anderson and Snelling had attributed an Alexander short cross sterling to Alexander I and Snelling, while aware of the existence of coins of David I, Malcolm IV and William the Lion of the annulet, cross fleury and crescent types, had consigned them to the early kings of Man where a find of them had been made. Correct attributions did not, however, always prevail upon the popular imagination. Snelling and Cardonnel had both recognised that groats were first struck by David II, but this did not prevent coins of Robert II being associated with the illustrious Bruce. One writer early in the nineteenth century, for instance, interpreted the reverse inscription of a groat of Robert II, *D(omi)n(u)s P(ro)tector M(eu)s & Lib(er)ator M(eu)s* as *Dominus Protector Meis Ibat Turmis*, words that must 'unequivocally allude to providential deliverance from imminent danger . . . demonstrably applicable to Robert Bruce alone', and saw the piece as 'probably one of a number of medals struck to commemorate the battle of Bannockburn'.[2]

The growth of industrial towns led to the discovery of more hoards of this period, but unfortunately, while they were regarded as a welcome source of material for collections, their archaeological value was usually ignored. In many cases we can only guess at the existence of eighteenth-century and earlier finds which might have provided valuable evidence for the content of the currency. Archbishop Sharp's small collection, for example, includes a group of twelve sterlings of William the Lion, mostly of Hue Walter but lacking his latest varieties, most or all of which probably derived from a single hoard of some size that would have been of the greatest interest for the dating and sequence of this series. He also had four of the very rare halfgroats of James III and IV out of only six silver coins in all of the two reigns, undoubtedly drawn from a crucial but unrecorded find. Coins from new finds made their way not only onto the collectors' market but also directly or indirectly into the new institutional collections of Britain which often date from the late eighteenth century. One of these originated with the magnificent personal cabinet of William Hunter (d. 1783), the distinguished anatomist, which forms the basis of the collection in Glasgow University's Hunterian Museum. A different course was followed by the newly constituted Society of Antiquaries in Edinburgh (1780) which received 109 specimens from Hunter himself in 1781, but otherwise tended to rely on small gifts from fellows and occasional purchases until the Treasure Trove arrangements were altered in the Society's favour in 1808. A list of the Society's collection of Scottish coins in 1820 noted 187 different varieties and more than twice as many 'duplicates'.

The French Revolution and the Napoleonic Wars appear to have interrupted the intellectual recreation of such as in the eighteenth century had had the leisure and resources to collect and study coins. Meanwhile the Industrial Revolution in Britain began to create a new industrial and mercantile class whose leaders were in turn to move into fields that had previously been the preserve of the nobility and gentry, or of those in the Church or the professions, like Sharp and Nicolson, Sutherland and Hunter. Although the early nineteenth century was not a period of great numismatic activity, there was a gradual re-awakening of interest which culminated in a new period of broad advance in the 1830s and

1840s throughout Europe. Occasional attempts had been made previously to produce numismatic periodicals, but the new phase saw the founding of societies and journals in England, France, Germany, Belgium and elsewhere, many of which are still flourishing today, and the publication of major works of synthesis on medieval coinage, amongst which Joachim Lelewel's *Numismatique du Moyen Age* (1835) and Felicien de Saulcy's works on the coinages of the Byzantine Empire (1836) and of the Crusades (1847) were outstanding. Lindsay's series of *Views*, which covered the coinages of the Parthians, the Anglo-Saxon kingdoms and Ireland as well as Scotland, can be seen as part of this movement. Interest in the Scottish series was now developing fast, and not only among the traditional kind of collector in Scotland, such as William Ferguson, an Edinburgh lawyer, or lairds like W. W. Hay Newton of Newton Hall, Haddington. J. D. Cuff (1781-1853), who lived at Clapham and was an official in the Bank of England, and J. W. Martin (d. 1859), a founder member of the Numismatic Society in London (1836) and a Kentish vicar, exemplify English collectors who included a significant Scottish element in their cabinets of British coins. James Wingate of Linnhouse, Hamilton (1828-77), a marine insurance broker in Glasgow, and Thomas Coats of Ferguslie, Renfrewshire (1809-83), of the Paisley cotton family, who specialised in Scottish coins and formed two of the best collections of their time, both represented the new commercial prosperity of Clydeside.

During the first half of the nineteenth century, the supply of Scottish coins exceeded the demand. However, the existence of copies of a Hue Walter sterling of William the Lion and a gold noble of David II, based on two of the very few Scottish medieval coins engraved on the plates of John Pinkerton's *Essay on Medals* (3rd ed. 1808), perhaps points to a shortage of earlier sterlings as well as the obvious rarities of the series. In 1868, when interest in the subject was such as to encourage Wingate to publish an illustrated record of his splendid collection, he saw the Hay Newton sale of 1861 as a turning point, remarking that Scottish coins had previously been 'little sought after, but at the dispersion of that small but select cabinet, the prices realised were greatly in excess of the market rates of previous years'.[3] Writing to Cochran-Patrick in 1874, Burns commented that he believed 'Scotch coins to be far rarer than is generally supposed'; many of the rarer items that had been occurring in sales were now seldom seen, some having gone to museums and the rest being spread amongst an increasing number of collectors. Competition between them raised the price of some items at this time, like the rarer mints of Alexander III, to levels not again reached until the 1950s.

One of the most valuable parts of Lindsay's book was an Appendix listing all the finds made in Scotland that he could trace, amounting to about eighty in all, mostly from the previous seventy-five years. Although the information is often sketchy, it is still of value today not only for the overall picture that it provides, but also because it sometimes enables unprovenanced groups of coins to be associated with a recorded discovery. Thus a group of seven crescent sterlings of Roxburgh and a York Short Cross penny of Henry II acquired in the 1960s by a London dealer from a northern source coincide exactly (allowing for the revised attribution of English Short Cross coins since Lindsay's day) with the record of a small find made at Baddinsgill in Peeblesshire in the summer of 1834.[4] The first scientific hoard report from Scotland was the work of J. H. Pollexfen, an English clergyman with a specialist interest in Scottish coins, who published an admirable paper on the small but important find of David I sterlings on the Isle of Bute (1864) — still the only hoard of the period recorded from Scotland. Unfortunately his example was not always followed, although Burns published a scholarly account of the Robert III groats from Fortrose Churchyard (1880) and in his book made extensive use of hoard evidence, especially that of the great find of sterlings and early groats from Montrave (1877).

While the archaeological aspects of coin-finds thus began to be recognised, Lindsay's work also illustrates the more systematic description of types and varieties that was characteristic of European numismatic work in the middle of the nineteenth century, and it made a further step forward in collating the documents and bringing them to bear on the arrangement and dating of issues. These developments paved the way for the emergence of numismatics as a modern science with its own methods and disciplines in the later part of the century. That this step was achieved earlier and more successfully in Scotland than almost anywhere else in Europe was due to the good fortune that brought together two scholars of such outstanding ability as Burns and Cochran-Patrick. Robert Cochran-Patrick of Woodside (1842-97) was an Ayrshire landowner of remarkable energy: Member of Parliament for North Ayrshire (1880-5), Permanent Under-Secretary for Scotland (1887-92), an ardent collector, and author of three works on Scottish mining, coinage and medals that still hold the field today. He was a close friend of Edward Burns (1823-86), a man of antiquarian interests, whose deafness prevented him from following a career in the church or business as he had planned, and so led him to devote the later years of his life to numismatics. In 1875 he went to Ferguslie to catalogue the Coats collection, and in the following year he made a selection from it to exhibit at the meeting of the British Association in Glasgow. The two volumes of Cochran-Patrick's *Records*, which also appeared in 1876, provided Burns most opportunely with the written evidence for the history of Scottish coinage that he needed over the next ten years to accompany his detailed work on the coins themselves.

Cochran-Patrick's work is much more than a collection of extracts from nearly 800 Acts of Parliament and Privy Council, Mint and Exchange Accounts and so on, which touched upon his subject, although that in itself was a major contribution, since two-thirds of them had not previously been published. It contains in addition a long introduction devoted to various general themes that has served as a starting point for most subsequent study. Among the most useful of its sections are those on the published works on Scottish numismatics from the early eighteenth century up to the author's own time; on the organisation of the mints, especially in the sixteenth and seventeenth centuries; on their sources of bullion and methods of assaying and coining; and on the weights, values and fineness of the coins. There is also a substantial chronological survey of the records themselves that incorporates many advances in the process of identifying the coins to which each refers and — an important innovation — a set of photographic plates to illustrate them. Photography first came into use for numismatic books in the 1870s and quickly established itself as a new tool of enormous importance to the future of the subject. The photographs were usually taken from plaster casts which, being of consistent colour and matt surface, enabled coins varying in appearance to be reproduced in an even tone. By using photographs and casts it now became possible for comparison to be made of a much greater number of specimens than could ever have been brought together physically for study.

Before the late nineteenth century it had often been thought that if two coins were found to be from the same pair of dies they must be modern forgeries, but scholars were now able to establish that two or more specimens often survive from individual dies and that each obverse or reverse was not always combined with the same pair. The implications of this discovery were fundamental to the analysis and arrangement of any series of coins and revolutionised the whole subject. It was brilliantly exploited by a Swiss collector of Greek coins, Friedrich Imhoof-Blumer (1838-1920), from the 1880s; but it was not applied systematically to medieval coinage until the twentieth century, except by Edward Burns. (Sir John Evans was one of the few numismatists of the time capable of achieving comparable progress in the study of English coins, but most of his energies were devoted to archaeology on a much wider scale.) It is no exaggeration to say that with the publication of Burns's great work in 1887 the study of Scottish coinage had reached a more advanced stage than that of any other state in Europe, and it would be proper to regard him as the pioneer of medieval numismatics as a modern science. Burns first developed his technique of die study in 1875 on the sterlings of David I, which are so poorly struck that several duplicates are often needed to complete a reading. This exercise therefore necessitated the collation of specimens from many private collections, as well as those of the British Museum and the Society of Antiquaries, and from it Burns developed his plan to apply the same treatment to the whole Scottish series, using the Ferguslie cabinet as the nucleus. This plan was triumphantly fulfilled in the three volumes of *The Coinage of Scotland.*

The book contains illustrations of over a thousand coins and detailed descriptions of many more. Burns recorded the weights of individual specimens, noting their relevance to the arrangement of several series, like the successive issues of David II; he also recognised that fineness could throw light on problems of attribution and chronology — he even commissioned the destructive analysis of a thistle and mullet groat in order to determine how base the issue was. Indeed, only in the second half of the twentieth century have numismatists begun to take the use of metrological evidence much beyond the stage reached by Burns. He was one of the first numismatists to appreciate the value of hoards in indicating the relative date of types and varieties, and he made further progress in the interpretation of the documentary evidence. But his greatest achievement was probably to recognise the implications of the fact that both the dies used in medieval coinage and the punches from which the dies were made were often replaced by others with slightly differing features. Since die replacement did not occur simultaneously, he found that some coins were struck from an obverse of one issue or variety and the reverse of another. Such coins, now known technically as mules, assisted in establishing the sequence within a series, often with a high degree of accuracy as in the case of the Edinburgh groats of Robert III. The observation of individual dies and their relationships, and the progressive wear or damage they exhibited from extended use, also revealed aspects of the anatomy of the coinage, one of the most important of which concerned the combination of certain obverse dies with reverses carrying names of different mints. Attention to letter forms and other minutiae of design and ornamentation then showed that the dies themselves could be arranged in approximate sequence of manufacture by noting the deterioration of individual punches and their gradual replacement by others. By such means an entirely new technique was evolved for the analysis of medieval coinage and the Scottish series, ideally suited to such treatment because of its manageable size, was the first to benefit from it. During the twentieth century it has been applied to English, Irish and some other European coinages, but even today there are major continental series which are amenable to such treatment but have not yet received it.

Burns died while his book was in the press, and its publication brought to an end a generation of intense and fruitful study. While some classic works of scholarship serve as a foundation on which further advances are quickly built, others perversely seem to bring progress to a halt. That *The Coinage of Scotland* proved to be one of the latter kind may have been due in part to the natural cycle of academic fashion, after a period of so much attention, but it certainly reflected also the comprehensive nature of a work so far ahead of its time. In 1901 Adam Richardson, the Society's honorary curator of the coins in the National Museum, published a catalogue of its Scottish collection, a single, well illustrated volume, easy to use and of convenient size; but out of an original edition of only 250 copies some dozens remained unsold over half a century later. Richardson's catalogue was arranged faithfully according to Burns, but few others seem to have been willing or able to acquaint themselves with the classification on which it was based. As a result progress in Scottish numismatics actually went into reverse for a number of years, and some of the ground which had been gained in the second half of the nineteenth century was lost in the first half of the twentieth.

The process was begun by H. A. Grueber, Assistant Keeper in the Department of Coins and Medals at the British Museum, in his *Handbook of the Coinage of Great Britain and Ireland* published in 1899. Influenced perhaps by the primitive state of English numismatics, to which the new Scottish methods had yet to be applied, Grueber appears to have felt free to make capricious adjustment to the Burns arrangement on subjective grounds, without understanding that the detailed framework constructed by Burns was a coherent whole and not amenable to such selective amendment. Justifying this approach with the lofty comment 'In our order we have not followed the view of any one writer; but have adopted such a classification as the coins themselves would appear to warrant', he transferred from James III to James IV, without explanation, both the heavy portrait groats (Group VI) and one of the issues of gold riders (even noting in the latter case that riders found no mention in the documents of the later reign) and to James V the thistle and mullet groats (Group II) because 'the omission of the outer legend on the reverse is against an early attribution'.[5] Unfortunately Grueber's reattributions of these two types of portrait groat appeared to be supported by the absence of both of them from the Perth find of 1920. That Sir George Macdonald, a distinguished classical numismatist, was called upon to publish this important hoard reflected the absence of anyone in Scotland at the time who specialised in the later medieval period. He also recorded some large Edwardian hoards as well as other significant finds of fifteenth century coins, the hoard of groats from Whitburn (many of the coins from which ought to have gone to the National Museum but went to the British Museum instead) and the site finds of copper pennies and farthings of similar date from the drains of Crossraguel, which led him to speculate that these coinages might have been struck at the abbey itself.

During the early decades of the twentieth century English coinage was gradually subjected to scientific analysis of the kind that Burns had provided for Scotland, although many more students were needed for a series so much larger. Among the most successful of these were G. C. Brooke, L. A. Lawrence and the brothers J. Shirley Fox and H. B. Earle Fox. Brooke's *British Museum Catalogue* of Norman coins and Lawrence's and the Foxes' studies on the coinages of Henry II to Edward III greatly advanced understanding of their series and have only in recent years required amendment and extension. Brooke's *Catalogue* gave detailed treatment of the coinages of the Scottish border and northern counties which are relevant to the origins of Scottish coinage under David I and Prince Henry. Lawrence's papers on Short and Long Cross coins, which drew on newly discovered material from the 1902 Colchester and the 1908 Brussels hoards, supplied a scientific classification and a more refined chronology for the long series of English sterlings, to which the Scottish sterling coinages from William the Lion to Alexander III are related. The same was done for the Single Cross coinages of 1279 to 1344 by the Fox monograph. This was particularly notable for its correlation of the coins with the documents, although the problems of arrangement in this difficult series had previously been largely resolved by Burns himself in a brilliant digression on the English coins from the Montrave hoard. Thus, although Scottish coins themselves tended to be neglected during these years, progress in knowledge of the English coinages with which they ran parallel laid the foundations for a more detailed chronology of both series to be obtained from future hoards.

Along with this academic interest in English medieval coinage went a revival of collecting, although as with Scottish numismatics in the nineteenth century it is not entirely clear which of the two did more to stimulate the other. More detailed classification, however, undoubtedly led to more comprehensive series in the cabinets of collectors. Established firms of dealers like A. H. Baldwin & Sons, W. S. Lincoln, Spink & Son and from 1926 B. A. Seaby sought out varieties more diligently for their customers, and a number of general collections of high quality were formed. Some of their owners, like Lawrence, H. A. Parsons and F. A. Walters, wrote extensively about the series they collected. Of the many other active collectors of the time, much the most prominent were Lord Grantley and R. C. Lockett, who both collected on the grand scale over the broad range of ancient and medieval European coinage. Like many who collected more modestly, Grantley and Lockett devoted a due part of their attention to the Scottish coinage. Some respectable series of Scottish coins were compiled as a result, but very few collectors specialised in the series, and only H. J. and Captain C. H. Dakers, father and son, wrote much about them.

While the demand for Scottish coins remained relatively subdued in the absence of specialists, the supply was increased by sales and hoards. Towards the end of the nineteenth century pressure on the market had been eased by the dispersal of some of the major private collections and by three sales by the Society of Antiquaries. In 1872 the Society had acquired the Sutherland cabinet from the Faculty of Advocates, and decided in 1873-4 to sell almost 1,700 of the so-called duplicates that resulted in order to defray the cost of purchase. Since 1858, when the Society's museum was given to the government and so became an official national collection, the Treasure Trove regulations had begun to work more positively in its favour, and some weeding out may have seemed justified on this occasion and further in 1899, when Richardson undertook a reorganisation of the collection for the purpose of preparing his *Catalogue.* This shows that, although the museum possessed at the time a very thorough and well balanced collection of the main varieties, a great number of coins must have been dispersed in the sales that would now be regarded as valuable for the comparison of minor varieties and individual dies. These losses were partly offset when Sir Thomas Glen-Coats of Ferguslie presented his father's Scottish collection to the museum in 1921, with the provision that it should be kept intact as constituting the type-series constructed by Burns (the remainder of the Coats collection was given to the Hunterian Museum at the same time). Meanwhile new finds were continuing to add to the stock of material. Most important was the Brussels hoard of 1908 which multiplied by several times the number of specimens known of the Long Cross coinage of Alexander III. A. H. F. Baldwin, who purchased the British portion of this hoard *in toto* for his firm, produced a manuscript catalogue of the Scottish section. This fresh body of material enabled Baldwin to work out a new and more satisfactory classification of the coinage than Burns had been able to do on inadequate evidence, but there was so little general interest in the series that for some years, until the imminent dispersal of the Lockett collection led to its publication in 1956, the only printed version of the new arrangement was to be found in the sale catalogue of the Drabble collection. Although Lockett acquired over 300 of the Brussels Scottish from Baldwin, and other customers like Drabble and Dakers had good representative series, over 1,600 remained in stock as late as 1970. Among many Edwardian hoards, that from Boyton, Wilts. (1935) was admirably published by D. F. Allen, but Scottish coins in medieval hoards tended to receive less attention because of the difficulty of recording them by a classification as detailed as that in Burns, and much important evidence was probably thereby lost.

The new impetus in English numismatics during the first quarter of the twentieth century began to wane in the second. The coin market was not helped by the economic problems of the 1930s, by the ensuing war or by the austerity of its aftermath. The premature death of G. C. Brooke, and the loss of promising students like Captain Dakers and Lieutenant W. S. Marshall on active service, constrained the progress of British numismatics. Of the few whose involvement spanned the war years, mention should be made of Derek Allen, Christopher Blunt and James Davidson. The last of these was one of the very few pre-war Scottish specialists, and the other two have both made an enormous contribution to British numismatics generally. Dr Davidson improved the fine collection made by his father and brought to completion the detailed work on groats of David II begun by H. J. Dakers. In addition to reports on the hoards that came Allen's way during his spell as an Assistant Keeper at the British Museum in the 1930s, some of his other work was of direct relevance to the Scottish series — on the origins of the Carlisle mint (discussed in connection with the coinage of Henry II in his *British Museum Catalogue*), on Irish forgeries of David II and Robert II groats, and on Thomas Simon's work for the Scottish Mint under Charles II. Mr Blunt's earliest work was a definitive study of the coins of Berwick under Edward I, II and III, which is essential for understanding the Scottish issues of a mint that alternated between the two sides during the Wars of Independence.

Many of the best general collections with Scottish coins were sold between the 1930s and the 1950s — Walters (1932), Drabble (1939 and 1943), Grantley (1943-4), Lingford (1951), Parsons (1954) and, last and greatest, Lockett (1957 and 1960). Also dispersed were two of the great old collections, Cochran-Patrick (1936) and Bute (1951), and that of the Dakers (1946), formed between the wars. In the 1940s and 1950s coin collecting was still a relatively unusual occupation and the coin market, without the great generalists of the past, was not very active. Interest in Scottish coins was very slight and much of the material remained in the stock of dealers. During the 1950s a major revival in medieval numismatics took place, centred on the British Numismatic Society and its *Journal*. Coverage of English coinage from the twelfth to the sixteenth century was by the 1960s at last brought up to the standard reached for Scottish more than seventy years before.

Just as a new generation of student-collectors was emerging, increasing affluence and anxieties about inflation began to turn investors towards works of art and antiquities, amongst which the attraction of coins was obvious. The effect on prices was dramatic. The fabulous Lockett sales, at which prices for ordinary coins in prime condition were often two or three times those previously prevailing, revealed a growing demand for choice specimens as well as rarities, and the trend has continued ever since. Even the recession of 1974-6 caused only a temporary pause. Comparable coins today often fetch prices twenty or thirty times higher than in the Lockett sales. Relatively few good series of Scottish coins have been through the saleroom since — the most important were the ancient Bridgewater collection (1972) and the post-Lockett collections of H. Hird (1974), mostly in gold, and Mr Sheldon P. Fay, specialising in the reign of Mary (1976). The last of these, sold anonymously as the Dundee Collection in Los Angeles, illustrates both the new internationalism of the coin market and the reluctance of many owners to display their resources in an age of confiscatory taxation.

The huge increase in prices, as demand has outstripped supply, has had other effects. Before the war only the larger and more notable collections were normally sold at auction; smaller ones, odd groups of coins and even some of the better collections (like that of T. Bearman, d. 1922, whose Scottish coins were bought by Baldwins and formed the original nucleus of Lockett's collection) were generally sold privately. This pattern continued for a while after the war — Seaby handled the three British medieval collections of Raymond Carlyon-Britton, containing some important Scottish, which were sold in 1940, 1949 and 1959, and Spink bought the good Scottish collections of H. J. Marr and N. J. Asherson, a solicitor and a surgeon, in the 1960s. But vendors have since the 1960s turned increasingly to the saleroom in the hope of obtaining more competitive prices on a market almost perpetually short of good coins. Even hoard material, returned to finders under the Treasure Trove arrangements, now often goes to auction, as have many coins from the Prestwich, Colchester, Middridge and other hoards in the last few years. High prices have also flushed out many smaller collections and parcels of coins which their owners had not previously regarded as of much value, and most mixed sales with British coins now contain a few Scottish from various sources which are apt to include rare and unrecorded varieties that have not been on the market in recent years. Growth of collector interest in the series led to the publication in 1972 of the first dealer's catalogue, P. F. Purvey's well illustrated *Coins and Tokens of Scotland* in Seaby's series of Standard Catalogues, which provides convenient references to individual types and varieties for most purposes. But many of the prices given in it have soon been left behind by subsequent increases, partly encouraged perhaps by use of the catalogue itself.

As coins have gradually been dispersed into more and smaller collections, some of them overseas, it has become more difficult to consult the full range of available material, but this problem has to some extent been mitigated by great advances in coin photography, including the use of Polaroid cameras, by means of which serviceable pictures can be made very quickly and cheaply. Up to Lockett the plates of all major sale catalogues were still made by photographing plaster casts, but although this process produced excellent illustrations it proved too time-consuming and expensive for the more hectic market conditions of recent years. Most catalogues, like dealers' lists and many books and articles, are therefore now illustrated by direct photographs, often of high quality. Photography is also now much more extensively used for purposes of record. All the English and Scottish coins in the Lockett collection were photographed before dispersal and the plates are invaluable for reference and research. The contents of new hoards are now regularly recorded in this way, which will be of enormous value to future students.

As in the nineteenth century, a period of great collecting activity has been accompanied by significant progress in the study of Scottish coinage. By 1950 the standard work on the subject was more than sixty years old and its massive contents had been increasingly ignored by collectors, dealers and others except for the occasional purpose of looking up individual coins. It therefore seemed opportune to develop my working notes on the series, with an introductory text and illustrations, into a form suitable for publication as *The Scottish Coinage* (1955). That nothing of the kind existed on the subject is evidence of the measure of neglect that it had suffered for so long. The book was based on Burns, with a few slight rearrangements and the addition of some material that had come to light subsequently. Though it did seek to reverse the slippage caused by Grueber, it did not therefore pretend to advance the subject materially so much as to provide a summary of the state of knowledge at the time. As such it performed much the same kind of function for its time as Lindsay's *View* had done just over a century before, in providing a starting point for future enquiry, and in the same way it was followed by a supplement (1966) after a few years of renewed interest in the subject. Again very few students have been involved. One difference between the current phase and that from Lindsay to Burns is that recent work on Scottish coinage has been carried out in parallel with a broad advance in detailed research on English and Irish coinage. There has therefore for the first time been a team of students working in consultation on the coins of the British Isles who could pool their resources in studying new finds and obtaining the maximum information from them. This is especially important for the sterling period where scholars like Miss Archibald, Mr J. D. Brand, Mr C. J. Wood and Mr P. Woodhead have greatly advanced our detailed knowledge of English pennies of the thirteenth and early fourteenth centuries.

Greater attention to hoard evidence has been one of the most significant features of post-war numismatics, especially in England. For the medieval period the foundations were laid by J. D. A. Thompson's *Inventory* (1956), an indispensable classic for all its inaccuracies of detail. Other notable contributions to this line of study have been made by Professor Dolley, whose lists of hoards from the Viking age to the fourteenth century should not be overlooked because of the unlikely contexts in which they have been published; by Dr Metcalf, who has specialised in Scottish and northern hoards, and has lately produced a list of some 260 medieval finds from Scotland; and by Dr I. D. Brown who with Professor Dolley has compiled a bibliography of hoards buried after 1500. Certain groups of hoards have also formed the subject of special studies by M. Yvon (Short Cross sterlings from France), Messrs Seaby and Stewart (fourteenth century groat hoards) and Messrs Stevenson and Porteous (seventeenth century). Such work has obvious relevance to the study of the currency as well as of the coinage, and has proved of growing interest to economic historians. A Symposium held at Oxford in 1977 on Coinage in Medieval Scotland heard papers from Messrs Mayhew, Metcalf and Stewart based largely on the hoard evidence, with particular reference to the sterling period, while others by Dr Challis, Professor Nicholson and Mrs Murray, dealing with the later Middle Ages and the sixteenth century, drew more on documentary and more general historical evidence. Since the 1960s academic conferences of this kind and international congresses have been held more frequently. It is a development which, if not overdone, can be of considerable benefit to scholars, particularly those in more isolated fields like numismatics, by facilitating the exchange of ideas between related disciplines and communication between those from different countries and backgrounds.

The economic implications of coinage are thus now receiving more attention. Commercial considerations were of course a major influence on the location of mints. Carlisle, the cradle of Scottish coinage, had a mint to convert silver from the Cumbrian mines; Roxburgh's status as the principal, indeed sometimes the only mint, of William the Lion and Alexander II must have been due in part to its annual fair; and its replacement by Berwick from 1250 probably reflects the growing importance of the major wool port in the north-east of Britain. But such factors were not the only ones which determined the choice of mint towns. A royal residence (Kinghorn for Alexander III), a new palace (Linlithgow for James I), the centre of government (Perth for

Robert III), internal emergencies and civil war (Dumbarton under Robert III, Aberdeen for James III and Stirling for Mary of Guise), a siege (Roxburgh in 1460) and other such instances can be shown to have played their part. This whole topic, and its relevance to the arrangement and chronology of the coinage, has recently been reviewed in a monograph on *Scottish Mints* (1971), which supplements and in part replaces the relevant passages in the text of *The Scottish Coinage*, especially for the earlier centuries.

Some of the other general themes of Scottish coinage are now beginning to receive more systematic attention. Of much historical interest are the designs and inscriptions on the coinage. James III was responsible, surely personally, for the earliest Renaissance portrait coin in northern Europe, and one which from its relationship to the king's head on the Trinity altarpiece poses unresolved questions for the art-historian; the coinage of James VI shows a more concerted use of numismatic propaganda (foreshadowing its widespread adoption in the Thirty Years War) than any since the Roman Empire; and the imitation of foreign types — English groats, French crowns, Flemish riders, etc. — in Scotland and of Scottish types overseas illustrates the cultural and dynastic as well as the economic dimensions of Scotland's relations abroad. These aspects have already been discussed in print but many others await consideration. The personal names of moneyers, like Baldwin at Perth and Cnut at Aberdeen under David I; comparative features on seals and coins, like the saltire and annulet that occur on both the great seals and the silver groats of James I and II; heraldic details, like the modified tressure in the royal arms on gold unicorns, in accordance with the Act of 1471; the Reformation motto *Iustus Fide Vivit* on the coinage of catholic Mary — these are a few examples of the evidence that qualifies coins as historical documents in their own right but which in many cases awaits recognition, let alone interpretation.

In a limited but undeniable way coins are also of value to the historian as records of administrative activity. For example, a highly organised recoinage, like that of 1250, can hardly have been the work of a disorganised government, however little other evidence there may be for the efficiency of the administration at that time. Again in the fifteenth century, a more detailed picture of the coinage, say between 1424 and 1484, can probably be constructed than of any other relatively continuous function of government during that poorly documented period. As well as the general evidence of variations in output, quality of production, choice of metals, weights, designs and so on, which build up a view of the organisation behind the coinage, it is sometimes possible to deduce more specific information about events otherwise unknown or unreliably recorded. Thus the coins show that obverse dies used at Roxburgh in 1460 were subsequently used at Perth and Edinburgh in that order, suggesting an unrecorded visit by the travelling mint, and so perhaps also by the court, to Perth after the death of James II. Die-links between mints also hint at a brief association of Dundee (a known mint only on this one occasion) with Perth and Edinburgh towards the end of the reign of Robert II, perhaps c. 1385 when the English are said to have sacked all three towns, although the mention of Dundee in this context by Froissart has not been regarded by historians as very credible. An undocumented and very rough issue of groats of the later 1480s (S. fig. 124) could be a product of the final struggle of James III with the nobles, when the King's mint went to Aberdeen — but it certainly demonstrates the great gulf of technical competence between professional moneyers and the non-specialist metal workers who were sometimes called upon to produce coin dies. Seen as products of applied technology, medieval coins are not without their interest. Even Baldwin the Lorimer, despite his reputation in other forms of metalwork, made a pretty amateur job of his dies. With the advent of mass production at European mints in the thirteenth and fourteenth centuries a kind of international guild of moneyers, many of them from Italy, France and the Low Countries, came into being. There is a marked contrast between their work, evident in the brief issues of Robert Bruce and the 1358 recoinage, for example, and that of the local die-sinkers who were presumably responsible for most of the coins of John Balliol and the early pennies of David II. No one has yet attempted systematically to trace the international movement of moneyers by the coincidence of details of ornament and epigraphy in different places; but the clues are clearly there, like the occurrence of mullets indented with flowers, which apparently occur in only two cases, almost simultaneously, at Edinburgh in 1358 and Luxembourg in 1358-9.

Before such wider aspects of the coinage can be properly considered, it is necessary to determine its structure and chronology as accurately as possible. This is one of the main justifications for the record of minutest detail that occupies so much of the attention of numismatists but may seem pointless to the uninitiated. Much progress has been made in this respect in recent years as the techniques evolved by Burns have been developed and applied with increasing refinement to a growing volume of material in the various series. Because there are virtually no documentary references before 1358, the numismatic evidence is of most historical importance for the sterling period, and much work has been directed here in the last few years. The structure and dating of the sterling coinages have become more apparent as a result of die-analysis based on many more specimens than were seen by Burns. Except for the Single Cross coinage of Alexander III, all the Scottish sterling series have been, or are in the process of being, studied on the basis of individual dies. This long and difficult task is still far from complete, but some of the conclusions which are emerging have been summarised in chapters III to V of *Scottish Mints.* Examples of the more detailed work which underlies them can be found in papers on the Long Cross coins from the Brussels and Colchester hoards, while an overall estimate of the volume of early Scottish coinage has been made by combining the evidence of dies with the proportions of Scottish to English coins found in hoards. Reconsideration of the hoard evidence has also been helpful in establishing a more exact chronology: for example, the recognition of an interval between the burial dates of the Short Cross hoards from Eccles (1230) and Colchester (c. 1237) suggests that coins in the name of Alexander II may have started earlier than was thought before.

Die-study of the silver and gold coinages of the later Middle Ages is also under way, and promises to be of particular value in providing chronological indicators for the long and superficially uniform coinage of Robert II. The credit for this work is due to Mrs Murray, who has also made important progress with the complex issues of the later fifteenth century, most notably with her rearrangement of the gold unicorns. Technical numismatics are less useful for coinages of the sixteenth and seventeenth centuries, when the issues were often shorter, much written evidence is available, and many of the coins bore dates, but Colonel Murray has shown that there is much of value to learn. His most substantial achievement has been to produce a satisfactory arrangement of the difficult coinages of Charles I, where Burns seems to have left his text in need of revision at his death. Although die-study scarcely seems to have been attempted in the English milled series, analysis of the Scottish copper coinages of 1691-7 proved unexpectedly illuminating.

An essay of this kind could be annotated almost without limit. It has seemed to me more useful to confine the references in the text to a few specific points and quotations but to append a comprehensive bibliography in which most of the works referred to in the text can be identified without difficulty. Except for special reasons, I have not included minor items which have in effect been entirely superseded by later publications. Nor have I attempted to list all or indeed many of the vast number of notices and reports of hoards from Scotland, or from elsewhere containing Scottish coins, since references can be found in the cited works of Thompson, Metcalf, Dolley and others. Thesaurologists should have an easier task in future since the publication of an annual list of *Coin Hoards* (Royal Numismatic Society, 1975-), in which summary notes of new finds are recorded as well as new information on old ones. When I have included papers on individual hoards it has generally been because they contain illustrations, descriptions or discussion of Scottish coins or illustrate aspects of the currency concerning them. So far as possible I have divided the works into three chronological sections covering the sterling, groat and post-medieval periods. The first of these contains items relating to the Anglo-Scottish coinages of the Stephen Civil War and the last a number of works which treat the Edinburgh issues of 1707-9 as part of the English coinage. The general sections include respectively the main works of reference in modern use; the principal earlier works; a group of miscellaneous items including hoard lists and papers which relate to more than one of the three periods; and the most useful sale catalogues of the major private collections. Further information about earlier works can be found in Cochran-Patrick's introduction (pp. ii-xi), and there is a general bibliography of numismatic books published before 1800 by J. Lipsius, *Bibliotheca Numaria* (Leipzig, 1801), which has recently been reprinted (London, 1977), including a supplement of works up to 1866 by J. Leitzmann (Weissensee, 1867).

A good introduction to the history of the subject is E. Clain-Stefanelli's *Numismatics, An Ancient Science* (New York, 1965), but for its technical progress to the nineteenth century reference must be made to the introductions to the great works of synthesis on ancient and medieval coinage, E. Babelon's *Traité de monnaies grecques et romaines* (vol. 1, Paris, 1901) and A. Engel and R. Serrure's *Traité de Numismatique Du Moyen Age* (vol. 1, Paris, 1891). P. Grierson is the author of the best general bibliography, *Bibliographie Numismatique* (2nd ed., Brussels, 1979), as well as an admirable short modern survey of the whole subject, *Numismatics* (Oxford, 1975). He has also written more specifically on medieval numismatic method (*Later Medieval*

Numismatics, London, 1979, reprinting earlier papers). But the earliest and still one of the best expositions of the applied techniques of medieval numismatics that has ever been written is *The Coinage of Scotland* by Edward Burns. Having myself been fortunate enough to learn the subject first by this means, I would like to express a profound debt to those who have helped me on from there, in particular Christopher Blunt and Philip Grierson. I am also most grateful to the many who have assisted me directly or indirectly in the preparation of this paper, but to none more than Colonel and Mrs Murray who over many years have made the pursuit of Scottish numismatics so much more agreeable for me and, I hope, more fruitful.

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Auction Sale Catalogues of Principal Collections

(Note: unless otherwise stated, all collections were sold in London, by Sotheby before and by Glendining after 1937.)

Addison, R., 3-8 Dec. 1855 (good general sale, with over 400 Scottish; many from Pembroke and Thomas).
Antiquaries, Society of, 'Advocates Duplicates', Edinburgh, Dowell, 22 April 1873 and 5-6 June 1874; 16-18 Jan. 1900 (mostly early, with 28 gold of James I-II).
Bridgewater House (formed by Earls of Bridgewater in 17th and 18th centuries and including many 16th and 17th century varieties), Sotheby, 15-16 June 1972.
Brushfield, A. N., 28 March 1940 (unique halfgroat of James IV, lot 50).
Burns, E., 17-18 Dec. 1869 (catalogued by vendor).
Bute, Marquess of, Sotheby, 11 June 1951 (important 18-19th-century collection).
Carfrae, R., 8 July 1901 (select series).
Christmas, Rev. H., 1 Feb. 1864 (poor catalogue of a good collection without gold).
Cochran-Patrick, R. W., 30-31 March 1936 (major 19th-century collection; a few miscellaneous and duplicates were sold later, Sotheby, 9 Dec. 1957, lots 126-155; the medals were sold by Sotheby on 8 Nov. 1949).
Cuff, J. D., 8 June-4 July 1854 (part of lavish British collection).
Dakers, H. J. (and Capt. C. H., joint collection), 8-9 Oct. 1946 (important specialist series, inadequately catalogued).
Drabble, G. C., 4-6 July 1939 and 13-14 Dec. 1943 (good British general collection, with extensive series from Brussels hoard).
Duncan, Mrs M. (Aberdeen), 5 July 1972 (sold anonymously; lots 254-332).
(Fay, S. P.), 'Dundee Collection', Los Angeles, Spink with Bowers and Ruddy Inc., 19 Feb. 1976 (strong in coins of Mary).
Ferguson, W., 14-15 July 1851 (extensive series of collector who advised Lindsay).
Ford, J. K., 12-18 June 1884 (strong Scottish section, known to Burns).

Grantley, Lord, part V, 18 May 1944 (Scottish part of great universal collection); there were some Scottish in his earlier sale of gold coins, part I, 29 Nov. 1943.
Hay Newton, W. W., 18 March 1861 (many of his coins had gone to NMA).
Hird, H., Glendining and Spink, 6 March 1974 (sold anonymously; personal Scottish gold collection of Ashmolean benefactor).
Larsen, L. V. (of Coshocton, Ohio), 1 Nov. 1972 (English collection, with illustrations of good Edinburgh series of Anne).
Lindsay, J., 14 Aug. 1867 (over 600 coins in all metals; strong in groats of David II-James III).
Lingford, H. M., part I, 24-6 Oct. 1950 (major collection of crown-sized coins, with a few Scottish); part II, 20-21 June 1951 (excellent, specialist series of James VI and I).
Lockett, R. C., part I, 18-19 June and part II, 26 Oct. 1960 (major 20th-century collection); numbered parts V and XI of whole sale.
Mackenzie, Sheriff T., Chapman, Edinburgh, 14 March 1883 (well catalogued by Burns) and Sotheby, 21-2 February 1921 (extensive series of variable quality, poorly catalogued).
Mann, A., 29 Oct. 1917 (good general collection).
Marshall, Lieut. W. S., 29 April 1946 (several from Drabble and Grantley).
Marsham, Hon. R., 19-26 Nov. 1888 (good Scottish section).
Martin, Rev. J. W., 23 May 1859 (discriminating collector of means; had David noble).
Murdoch, J. G., 11-13 May 1903 (rich series, much drawn from A. B. Richardson and S. Addington) and 14-16 Dec. 1904.
Napier, D. S., 30 May 1956 (included unique halfpenny of James III, in lot 218).
Oman, Sir Charles, Christie, 31 Oct. 1972 (general British collection of distinguished historian and son, C. C. Oman).
Parsons, H. A., 28 Oct.-1 Nov. 1929 (James VI-Anne only) and 11-13 May 1954 (important British general collection, with strong Scots silver).
Pegg, H., Spink & Son Ltd, no. 11, 8-9 Oct. 1980 (interesting Scottish within good general British collection; lot 697 James II Edinburgh penny, class D).
Pollexfen, Rev. J. H., 26-28 June 1900 (important student's series; many now in Royal Scottish Museum, especially Mary gold).
Roth, B., part II, 14-17 Oct. 1918 (Scottish section includes many from Carfrae and Murdoch).
Ryan, V. J. E., part I, 28-30 June 1950 (English and Scottish gold); part II, 22-24 Jan. 1952 (silver).
Sinkler, W. (Philadelphia), 24-25 Feb. 1960 (good small selection of Scots).
Walters, F. A., 24-27 Oct. 1932 (lot 628, David II Edinburgh halfpenny probably genuine and unique).
Wills, R. D., 6-8 Dec. 1938 (gold only, investment collection).
Wingate, J., 29 Nov.-1 Dec. 1875 (superb series published in Wingate's *Illustrations*).