## **SCOTTISH FIREARMS**

By Claude Blair

Though a number of articles on groups of Scottish firearms or individual pieces have appeared since World War II, no general survey of the subject has been published since 1923, when Charles E. Whitelaw's "Treatise on Scottish Hand Firearms" was printed as part of Herbert J. Jackson's book European Hand Firearms. Whitelaw regarded this only as a preliminary survey, and intended eventually to write a separate book covering the whole field of Scottish arms, but died before he had completed his work on it. His material is now with Mr. William Reid, Director of the National Army Museum, London, but I understand that it is not sufficient to form the basis of a book of the kind originally envisaged by Whitelaw, and that it will only be possible to publish his biographical information about Scottish arms-makers. When I was invited to lecture to you, therefore, I thought that it might be of interest to give you an outline of the present state of our knowledge about Scottish firearms.

The romantic picture of Scotland, first painted by Sir Walter Scott in his poems and novels, has been responsible for many misconceptions about the country and its people. The popular idea that all Scotsmen before the middle of the 18th century habitually wore the tartan kilt and plaid, and went daily armed with claymore, dirk, target and pistols, is totally incorrect. This dress was essentially that of the Celtic, Gaelic-speaking inhabitants of the Highlands and Islands that occupy the central and western areas of the north of the country and, as they were a poor people, it was only the chiefs and their retainers who could afford to wear it in its full romantic glory. In the Lowlands, to the south and east, the inhabitants were racially more mixed, and included a very high proportion of Anglo-Saxon and Norman stock. They spoke a dialect of English, looked south towards England, or east towards the European Continent, for their cultural contacts, and dressed in much the same manner as did the other inhabitants of Northern and Western Europe. Until the brutal pacification of the Highlands that followed the failure of the Jacobite rising of 1745, it was only over the Lowlands that the central government — first in Edinburgh and later in London --- had any real control, and it was there that the main economic life of the country was carried on, including the manufacture of arms.

The highly distinctive firearms with which I shall be dealing in this lecture have in modern times always been associated with the Highlanders. They were undoubtedly used by them — perhaps mostly by them — but it is not unlikely that, until the 18th century at least, they were also used generally in Scotland for, so far as I can discover,



no Scottish-made firearms of conventional European form dating from before the 18th century are known. But even if they were used mainly in the Highlands and Islands, there is very little evidence to suggest that many of them were actually made there<sup>1</sup>. This is hardly surprising for, though some of the wealthier chiefs may have had their own private gunmakers, the conditions for setting up general centres of production — that is places where there was a ready supply both of manufacturing materials and of customers simply did not exist outside the Lowlands. As might be expected, therefore, gunmaking in Scotland appears to have started — probably not earlier than the 16th century — in the major Lowland towns like Edinburgh, Glasgow and Dundee, where there were already old-established guilds of smiths, Hammermen as they were called (figure 1). Subsequently, makers set up workshops in other towns and villages, most of which — like the most famous of them, Doune - were on the edge of the Highlands, along the so-called "Highland Line." At no time does there appear to have been anything more than a handful of gunmakers working in any one place, including the major towns, and the organisation of the craft was analogous to that of the makers of the Kentucky rifle in its golden age, as were probably the methods of production. There never was in Scotland a great centre of firearms manufacture like London, Birmingham, Suhl or Liège, and when really large numbers of guns were required for military purposes the majority were probably imported from the Continent or from England.

Cannon were in use in Scotland as early as 1348, and are regularly mentioned in the royal accounts thereafter<sup>2</sup>. There is no evidence to show that any were actually made in Scotland until the end of the 15th century, when cannon-foundries were set up at Stirling. Before this, most, if not all, cannon seem to have been imported from Flanders, among which was

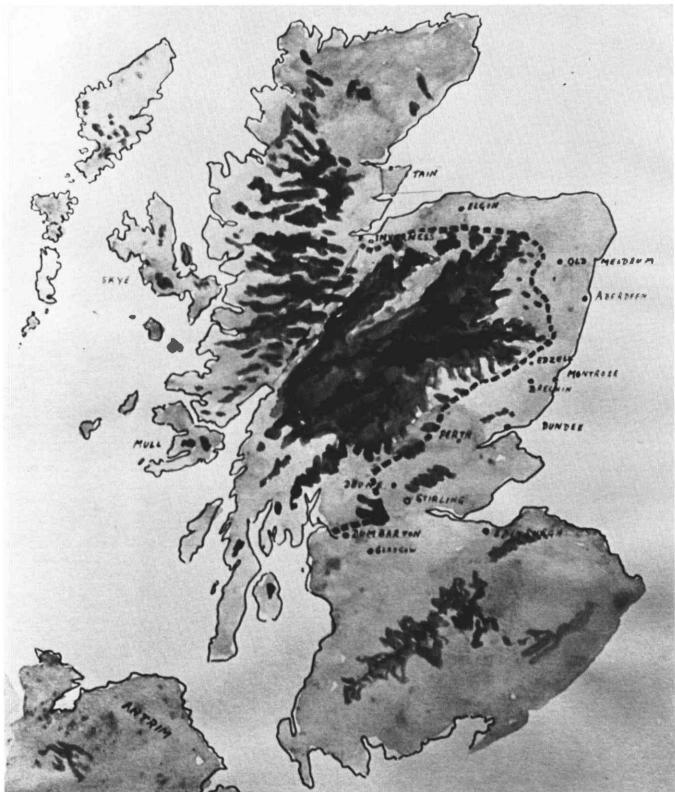


Figure 1: Seventeenth and Eighteenth Century Scottish gunmaking centers, the Highland Line marked by dots. (Drawn by A. V. B. Norman)

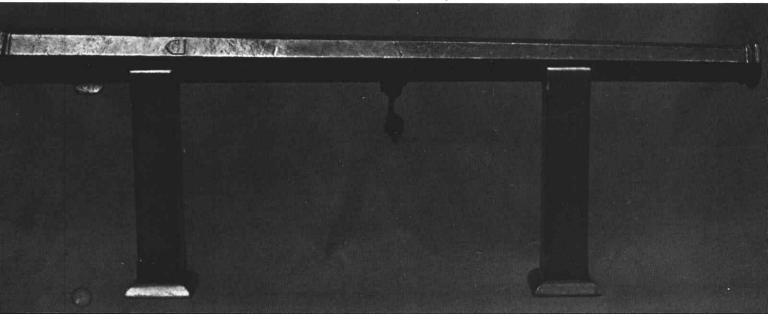
included the giant wrought-iron bombard at Edinburgh Castle, known from its place of manufacture as "Mons Meg," which was presented to King James II by Duke Philip of Burgundy in 1457<sup>3</sup>. Hand-guns must have been known in Scotland as early as the 14th century also, through contacts with England and the Continent, but the earliest reference to their military use by the Scots yet noted is in 14194. In 1522 it was reported to Cardinal Wolsey in England that the Scots army, among other arms, had 1000 "hagbushes," but it was not until 1535 that hand-firearms were included among the arms that landed men had to provide, as a form of tax, for the defence of the realm<sup>5</sup>. These were to be "hagbuts of found"<sup>6</sup> called "hagbuts of Crochert," and it was ordered that in future every merchant importing goods of a certain amount was also to import at least two hagbuts, or else metal — clearly bronze or brass — from which they could be made, together with powder and bullet-moulds. The guns were presumably Hackenbüchsen of the well-known Continental type with a recoil-hook (crochet) underneath the barrel. A barrel of this type, found in Ireland and now in the National Museum of Antiquities in Edinburgh, may be one of those made to comply with the order, for it bears a coat-of-arms of Western Isles type. (Fig. 2)

The terms of the 1535 order indicate that by this date there must already have been an established gunmaking industry in Scotland. It is uncertain when this was started, but it is not unlikely that it was first established by King James IV (reigned 1488-1513) who, like several other monarchs of the period, had an interest in mechanical and scientific matters, especially those with a military bias<sup>7</sup>. In 1502 he set up his own workshops for making armour, staffed with 14 Frenchmen, at Linlithgow, and it is recorded that in April, 1508, envoys sent from Henry VIII of England had difficulty in gaining access to him because he was experimenting personally in the manufacture of gunpowder. The reason for these experiments was

almost certainly the passion for shooting that James had developed with his acquisition, apparently from abroad, of what seems to have been his first hand-gun in January of the same year. During the next few months the accounts of the royal treasurer contain many references to payments for the beautifying of this culverin<sup>8</sup>, for the purchase of ammunition and accessories for it, for the settlement of bets lost in shooting competitions with his friends, in which canvas targets were used, for the expenses of expeditions to shoot deer and waterfowl, and also one payment of compensation to the owner of a cow that he had accidentally shot. There are also references to the purchase of at least four other culverins in 1508 and, though the records are not clear about their precise origins, it is possible that some of these were made in Scotland. But whether this is so or not, it seems reasonable to suggest that James's personal interest in firearms, coupled with the military preparations that preceded the campaign against England which ended with the King's death at Flodden in 1513, probably led to the production of hand-firearms in Scotland. It must be said at once, however, that there is no evidence for the existence there of any gunmakers capable of making anything more complex than culverins or hagbuts, presumably fitted with matchlocks, or of any widespread use of firearms, other than military ones, before the middle of the 16th century.

The first indication that firearms were coming into general use in Scotland is provided by an Act of the Privy Council, dated 19th April, 1550, banning the shooting of game with "halff haige or culvering or pistolate"?. The reference to pistols, which appears to be the first recorded in the English language, must mean that the wheellock, if not the snaphance, was now in general use, for matchlock pistols are virtually unknown in the West. Henceforth, "pistolettis" and, from 1561, the form of pistol called a "dag"<sup>10</sup> are mentioned with increasing frequency in the records, and by 1567 the use of hand-firearms had become so general

Figure 2: Early 16th century hagbut found in Lough Neagh (Antiquities Museum, Edinburgh).



that the Privy Council felt it necessary to issue an Act banning, on pain of death, the ownership by any civilian not needing them for state service of "culveringis daggis pistolettis and uther sic ingynis of fyrewerk"<sup>11</sup>. The reason given for this early example of a firearms control law is one that is frequently expressed today, though in different language, namely, that the use of these arms had caused men to be "cowartlie and schamefullie murtherit and slane."

In the nature of things, it seems highly probable that by the time of the 1567 Act a native gunmaking industry was well established. The first unequivocal reference to a Scottish gunmaker so far noted does not, however, occur until 1578. This is an entry of the 6th July of that year in the records of the Edinburgh Incorporation of Hammermen noting that William Blak had paid a fee of 20s. for the registration of his apprenticeship to "David Clerk dagmaker"<sup>12</sup>. As the latter was competent to take an apprentice, we may reasonably assume that he was not new to his craft, and that there was some tradition of gunmaking behind him. In any event, there can be no doubt that the craft was fully established by 1578, for henceforth references to gunmakers occur frequently in the Hammermen's records.

Before we turn to an examination of surviving Scottish firearms, a brief discussion of the small amount of documentary evidence available about the early use in Scotland of lock-mechanisms other than matchlocks is necessary. Wheellocks must have been known there by the mid-16th century through contacts with England and the Continent but, with one exception, the few recorded references to wheellock firearms date from the 17th century<sup>13</sup>, and there is no evidence to show that the lock was ever made in Scotland. The one 16th-century reference, though an indirect one, is clearly to a wheellock pistol. It occurs in a letter describing the murder of Queen Mary Stuart's Italian Secretary, David Rizzio, almost in her presence, at Holyrood Palace on the 9th March, 1566, which was written on the 27th of March by the English Earl of Bedford<sup>14</sup>. He says that "one Patricke Balentine . . . offered a dagge agaynste her (the Queen's) bellye with the cocke downe:" only a wheellock, of course, would have been ready to fire with the cock in this position.

Apart from this isolated mention of a wheellock pistol, probably an imported one, the only purely mechanical system of ignition that can be identified in 16th-century Scottish documents is the snaphance, though the name used is snapwork, often shortened to snap. The term is first recorded — in its full form — in a satirical poem from a manuscript collection of 1568<sup>15</sup>, where it is connected with "pistolis"; we may safely assume, therefore, for reasons already given, that snapwork here refers to a snaphance and not to some form of snap-matchlock. The snaphance lock must thus have been in sufficiently wide use in Scotland by 1568 to be mentioned without explanation in a poem intended for popular consumption, that is at least twelve years before the earliest evidence of its use in England, which dates from 1580<sup>16</sup>. The reference in the poem appears, in fact, to be the earliest mention of the snaphance mechanism in the English language, and it is interesting to note that the second earliest also comes from Scotland. The Burgh Records of Glasgow record that on the 15th July, 1578 "John Hannaye, snapmaker" was bound to serve "John Barry, Loremeir in making of snappis:" they also, incidentally, mention under the date 5 July, 1580, "ane lang caliver wt. snap" valued at  $\pounds$  4<sup>17</sup>. In light of these references, the generally-accepted view that the Scottish snaphance was derived from the English one should perhaps be reconsidered, though this is not the place to do so. It is sufficient to say that there are close connections between the two forms, but whether this means that one was derived from the other or, as is perhaps more probable, that both were derived from a common Continental prototype, it is impossible to decide at present<sup>18</sup>.

The earliest recorded firearms — or rather parts of firearms - that can be ascribed with reasonable certainty to Scottish makers are four detached gun-barrels dated respectively 1583 (figures 3 & 4), 1585 (figure 5), 1589 (figure 8) and 1595<sup>19</sup> (figure 6). The last of these is simply inlaid with inscribed brass bands, but the others are all inlaid with elaborate designs in engraved silver or gilt copper, or both, for the most part consisting of running foliage and flowers, involving small plaques and bands bearing foliage and inscriptions, accompanied on the two earliest by coats-of-arms, and on those of 1583 and 1589, by figures of saints. The ornamental motifs are much closer to those current in Europe in general at the period than to traditional Scottish ones, and there would be no obvious reason for ascribing any of the barrels to Scotland, if it were not that the coats-of-arms and/or monograms and names that three of them bear show that they were made originally for Scottish gentlemen. These are: 1583, Sir Walter Ogilvie of Deskford and Findlater, High Chancellor of Scotland (figures 3 & 4); 1585, David, 11th Earl of Crawford (figure 5); 1595, William Gordon of Gycht in Aberdeenshire (figure 6). The inscription on the 1589 barrel is indecipherable, but the general style of the decoration is so close to that on the 1585 one that it is likely to be a product of the same workshop. On only the 1583 barrel has a maker's mark been discovered — a very small DEL(?) stamped under the breech and, as the owner of this cannot be identified, it is impossible to say definitely where any of them were made. However, an undated barrel of similar character in the Museé de l'Armée, Paris (No. P.O. 370-175), bearing the arms and initials of an unidentified member of the Gordon family, includes in its decoration a stylised pot of lilies, a device that also occurs in the coat-of-arms of the



Figures 3 and 4: barrel dated 1583 made for Sir Walter Ogilvie of Deskford and Findlater, High Chancellor of Scotland. (Banff Museum, on Ioan to the Antiquities Museum, Edinburgh).



Figure 5: barrel dated 1585 made for David, 11th Earl of Crawford (Historical Museum, Moscow).

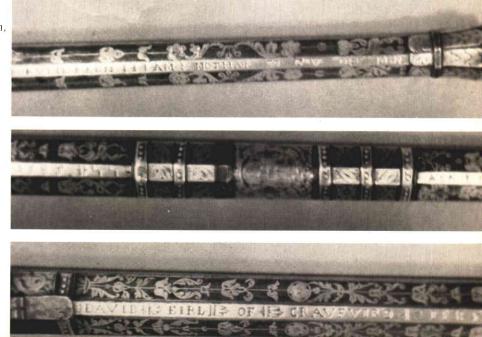




Figure 6: barrel dated 1595 made for William Gordon of Gycht in Aberdeenshire. (Antiquities Museum, Edinburgh).



Figure 7: Late 16th century barrel with the arms of Gordon (Musée de l'Armée, Paris).





Figure 8: Barrel of 1589 (Harold H. Lutiger Collection).

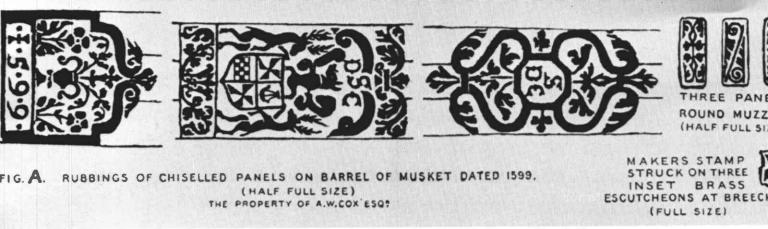


Figure 9: 1599 barrel made for Sir Duncan Campbell of Breadalbane (after Whitlaw's "Treatise").

Borough of Dundee, which appears to have been the leading Scottish centre of high-quality gunmaking in the late-16th and early-17th centuries (figure 7). The same device, together with the date 1599 and the arms and initials of Sir Duncan Campbell of Breadalbane, is chiselled on a long gun-barrel in an English private collection, which can almost certainly be identified with the "lang hagbute that wes maid in Dundie, gilt with the Lardis armis" in the Breadalbane inventory of 1600<sup>20</sup>. It seems likely, therefore, that some, if not all, of these early barrels were made in Dundee (figure 9).

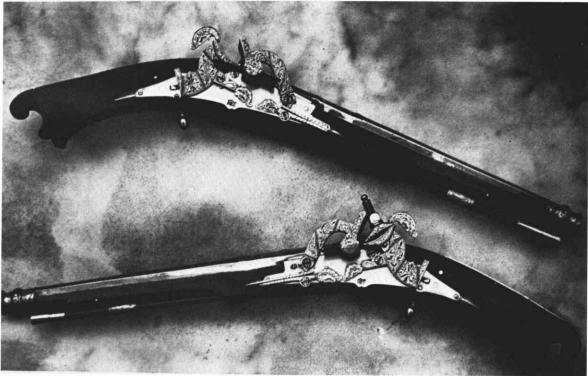
All the barrels, with the exception of the rather plain one of 1595, are sophisticated pieces of work, and show that the Scottish craftsmen were in no way inferior to any but the most outstanding of their European contemporaries. It should be noticed, incidentally, that all have muzzles that are, or have been, flared and/or marked off from the rest of the barrel with a moulding or inlaid band, features that are generally regarded as characteristic of Scottish barrels, though they do also occur on English ones of this period. The other Scottish characteristic, a deep flange containing the rearsight on the back of the breech is found only on those of 1595 in rudimentary form and 1599.

The earliest complete Scottish firearms recorded are a pair of snaphance pistols in the old Saxon Electoral Armoury at Dresden (figure 11), which are dated 1598 on the barrels and fences of the pans (figure 10). The lockplates are stamped with a marker's mark comprising the initials I.K. separated by a cross-crosslet, or perhaps a halberd head, which Mr. A. R. Dufty has suggested to me may be that of John Kennedy, dagmaker, who was admitted freeman of the Incorporation of Hammermen of Edinburgh in 1596<sup>21</sup>. I shall deal with them in relation to the history of Scottish pistols shortly, and confine myself for the moment to a discussion of the locks which are, of course, the earliest Scottish examples recorded and, on the basis of later examples, can be regarded as merely smaller versions of the kind of locks that were fitted to contemporary long-guns.

The locks are already fully-developed specimens of the classic Scottish snaphance, found on many 17th-century guns and pistols, from which they differ only in one minor detail: the lower edge of each plate is broken in the centre by a small dimpled projection of uncertain purpose. The construction is the same as that found on a number of early snaphances, including all English ones, in which the cock is held back by the nose of a horizontally-moving sear which projects through the lockplate and engages over a heel on the cock. The cock and its spindle are made in one, and the latter is secured to the tumbler, against which the mainspring acts, by a cross-pin. A lever attached to the tumbler opens a sliding pan-cover as the cock falls, and there is no safety position. Other features found also on English locks are the fence, in this case angular, at the end of the pan, the buffer screwed to the plate to arrest the fall of the cock, and the ornamental combs at the ends both of the buffer and of the lower arm of the steel-spring. They each differ, however, from English locks in having an ornamental point at each end of the plate — instead of at the front only — and, above all, in having an ornamental back-turned comb on the cock and in the form of the jaws for the flint. The inner faces of these last are concave and ridged, and are held together by a bolt which has its spatulate lower end secured in a vertical slot in the bottom jaw by a cross-pin underneath the jaw. The top jaw, which works freely on the bolt, is adjusted by means of a square nut above, while its rear end is slotted to fit over the base of the comb and so prevented from twisting. This arrangement appears to have been used on all Scottish snaphances down to the 1630s and, in this precise form<sup>22</sup>, is not recorded on firearms made outside Scotland. Subsequently, a jaw-screw of conventional form seems to have been generally used, though the snaphance lock itself, as dated specimens testify, continued to be made, with only minor variations in detail, until the very end of the 17th century, and possibly later. One minor modification found on some later locks is a slot in the heel of the cock to take the sear.

The barrels of the Dresden pistols already show the classic 17th-century Scottish form, found also on long guns, with moulded, almost thistle-shaped muzzles and flanges at the breeches. The etched and gilt decoration on them and on the buffers, external moving parts, and steel-springs of the





Figures 10 and 11: Pair of fishtail butted pistols dated 1598, perhaps by John Kennedy of Edinburgh (Historisches Museum, Dresden).

locks are derived partly from the general European vocabulary of ornament of the period. It also, however, includes running scrollwork bearing palmette-like leaves which, though ultimately Romanesque, is in this context clearly derived from traditional Celtic sources, for it occurs on contemporary Scottish objects of other kinds.

For the period after 1598 a fairly comprehensive series of complete Scottish firearms survives, though it includes only 28 long-guns, of which 13 are in the Seafield family armoury<sup>23</sup> (figure 12 & 13). Many firearms must have perished as a result of the attempts to disarm the Highlands after the Jacobite rebellions of 1715 and, in particular, 1745, and the higher survival rate for pistols can probably be attributed to the greater ease with which they could be hidden. As the guns are so few I propose to deal with them first, though the earliest comes chronologically after several pistols. Before doing so, however, I must mention that the study of surviving Scottish arms is rendered particularly difficult by the fact that the Scots are both a conservative and a frugal race. Styles were retained in use by them, with little modification, over considerable periods, and old parts, especially barrels, were commonly remounted long after they were made: one of the Seafield guns, for example. is dated 1667 on the barrel and 1671 on the lock. Other difficulties are caused by the rarity of contemporary illustrations of Scottish firearms the earliest dates only from c.1660 (figure 34) and the almost complete absence of fully-documented specimens. Only towards the end of the 17th century did makers begin to sign their work in full: before that they normally applied a mark which, in most instances, consisted of their initials. The only available method of identifying these marks is to equate them with the names of gunmakers in the records, but, unfortunately, there is often more than one maker with the same initials, or even the same names. This last factor of course complicates the problem of correctly attributing fully-signed pieces as well.

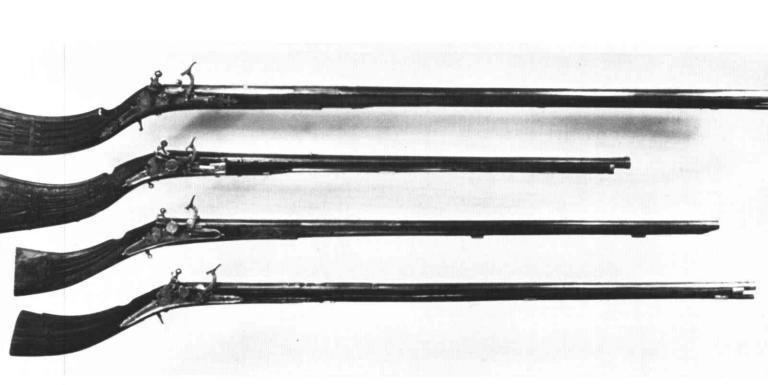
The earliest known Scottish long-gun is a little fowling-piece in the Tower of London Armouries (No. XII.63), which is dated 1614 and bears on the lock the mark attributed to Robert Allison of Dundee (figure 14). The lock is closely similar to those on the Dresden pistols, except that the plate and pan are of gilt brass — a common feature on Scottish firearms before about 1640 — while the barrel also, which is partly engraved with gilt-strapwork and roses, is of similar form to theirs. The full stock is made of Brazil wood, a red coloured imported wood (guilandina echinate) that was very popular in Scotland until the mid-17th century for stocking firearms. It is inlaid in engraved silver with thistles, roses and geometric designs. The narrow, paddle-shaped butt is of the form found on all true Scottish long-guns, that is with flat sides, concave upper edge, and convex lower one. There is a straight, baluster-shaped trigger and an angular silver guard. The gun is of special interest in that it is stamped with the inventory-number 129 of the Cabinet d'Armes of Louis XIII of France, and is described in the inventory of this collection as "Un petit fusil irlandois." At the period in question, all the Gaelic-speaking inhabitants of Scotland and Ireland were commonly called Irish, so, in all probability, the description merely means that its author regarded the gun as Highland Scottish.

The downcurved form of butt, though at this period used only apparently in Scandinavia and Scotland, is an early one: it is found, for example, on Henry VIII's two breech-loading guns at the Tower, one of which is dated 1537, and on two Spanish muskets of c.1560 at Vienna<sup>24</sup>. The 17th-century Scottish and Scandinavian versions of it probably represent two independent conservative traditions stemming from a common source, though a closer connection cannot be ruled out in view of the links that have always existed between the two areas.

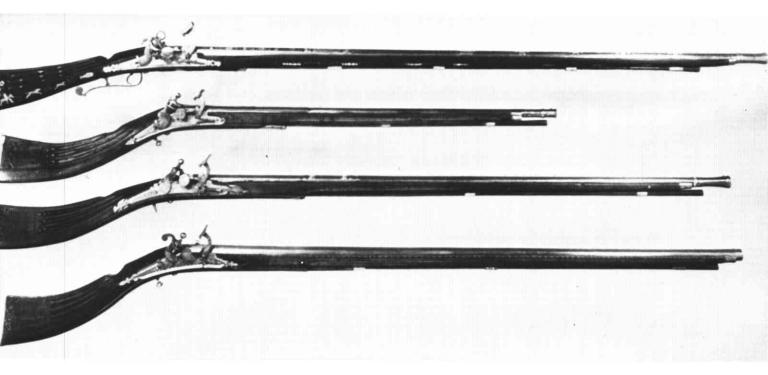
The next surviving gun, in the Seafield Armoury, is dated 1635 and bears a mark attributed to Andrew Philp of Dundee (figure 13, top). It is similar to the Tower gun, though the details of decoration differ, except that the sides of the butt are partly fluted longitudinally. This feature is found on all known true Scottish long-guns of subsequent date. The butts on these later guns are more curved, and much wider at the rear than those just described, and are carved with Celtic designs, including a fern-leaf motif. A gun made for James Graham, as fifth Earl of Montrose, between 1626 and 1644 has a rather slender version of this later form of butt, and may represent a transitional stage in its development from the earlier type<sup>25</sup>.

All the known dated Scottish guns of the later type date from the second half of the 17th century, and resemble each other so closely in form and decoration that no detailed discussion of them is necessary here (figures 12 and 13). All are snaphances, some with and some without buffers for the cock; an example in the Tower of London is fitted with an English type of snaphance with a one-piece steel and pan-cover and an extra sear on the sear-lever giving half cock on the tumbler (figure 16); some have simple ball-shaped triggers without guards, others have triggers and guards of conventional form, which may be replacements, while one, in the Seafield Armoury, is a rifled turn-off breech-loader. Though the latest dated example, in the Tower Armouries (figure 16), is dated 1690, the type almost certainly continued to be made until well into the 18th century. One of the Seafield guns, for example, is fitted with a "Highland" lock of the kind found on 18th-century scroll-butt pistols, which I shall discuss later, while another, apparently fitted with a similar lock or a flintlock, is depicted on a portrait painted in 1714 of the Seafield champion, Alistair Grant<sup>26</sup> (figure 17).

Before leaving the subject of long guns, three unusual examples must be mentioned. Two of these, which have come to light only during the last few years, are almost a pair, though one, now in the Tower Armouries<sup>27</sup> (figure 18), has had its original lock replaced. It bears on its barrel a partly-obliterated date that must be 1612, 1618 or 1619, while the other gun, now in the Scottish National Museum of Antiquities, Edinburgh, is dated 1624 on both barrel and lock: the latter also bears the mark attributed to James Low of Dundee (figures 19, 20, & 21). The two are unique amongst recorded Scottish long-guns in being made entirely of brass, except for the mechanical parts of the surviving original lock. The barrels and this lock are similar in design to those on the Tower gun of 1614 — though the lock has a small safety-device, like a back-catch, that hooks over the nose of the sear — but the butts are shaped very much like those on a modern gun, a form that was only just beginning to come into general use in the early-17th century. Most of the surfaces, which were originally entirely gilt, are covered with



Figures 12 and 13: 17th century guns in the Armoury of the Earls of Seafield, Cullen House, Banffshire.



finely-engraved running palmette foliage, together with strapwork, rosettes and key, chevron, and fern-leaf patterns. Also engraved on the butt of the Tower gun are pairs of addorsed "C"s. similar to those found on objects that belonged to King Charles I of England and Scotland, from which it appears that this gun must have been made for him when he was still Prince of Wales. A royal association for both guns is made likely by the fact that each has a movable butt-extension shaped and pierced as a royal crown. This is attached to a notched slide that works in a socket within the hollow butt and can be locked in any of six positions by a spring bolt (figure 21). The reason for these adjustable butts is unknown, but similar devices are recorded on a few other early firearms, including a late-16th century snaphance gun of English type, bearing the arms of the Scottish family of Spens<sup>28</sup>, and on a pair of brass pistols, also by James Low, which I shall discuss shortly. The third unusual Scottish gun that must be mentioned is in an English private collection and is unusual in that, although its form and construction are those of a standard late-17th century English sporting gun, its butt is carved with a little fern-leaf ornament of the kind found on the guns previously discussed. It is dated 1703 and signed IOHN STVART, a maker who has been identified, with no certainty, as the one who marked a gun in the Seafield Armoury with the monogram I.S. and Inverness. This is the earliest known gun of conventional design by a Scottish maker<sup>29</sup> (figure 22).

We can now turn to the pistols which, because they survive in greater numbers than the guns, are much better known. Despite this, very little has been added to our knowledge of them since Whitelaw published his treatise in 1923 — though additional specimens have come to light — and his method of classification, based on butt-shapes, has still to be bettered. I therefore propose to follow this in the remainder of my lecture, merely amplifying or modifying Whitelaw's conclusions where appropriate.

Type A. Fishtail butt. This form of butt is slab-sided with straight upper and lower edges that diverge slightly towards the bottom, where it terminates in three lobes reminiscent of a fish's tail. It appears in its fully-developed form on the Dresden pistols (figure 10 & 11) which, it will be recalled, are dated 1598 and ascribed to John Kennedy of Edinburgh. As already noted, these are fitted with barrels and snaphance locks of Figure 15: Pistol from Figure 14, dated 1612.

Figure 16: Guns in the Tower of London, the upper one being dated 1690.

Figure 14 Below: Gun by Robert Allison of Dundee, dated 1614, and pistol, marked C.A., dated 1612 (Tower of London Armouries).







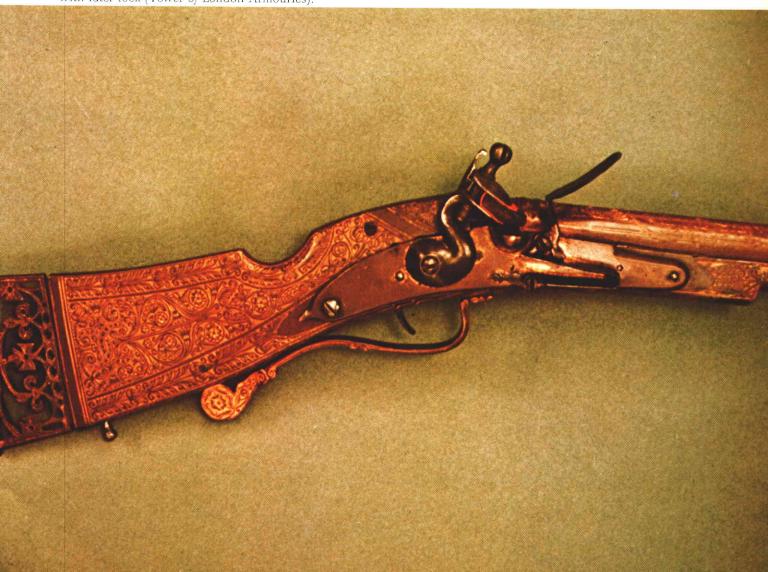


Figure 17: Portrait painted in 1714 by Richard Waitt of the Seafield Champion, Allistair Grant. (Collection of the Earl of Seafield, Cullen House, Banffshire) characteristically Scottish form. The latter are on opposite sides, indicating that, as was commonly the case with Scottish pistols until the end of the 17th century, they were designed for left- and right-handed use. The stocks are of Brazil wood, and each is fitted on the inner side with a long flat, steel belt-hook; there are no trigger-guards and no butt-caps. The last-named features appear for the first time on the next earliest known pistols, a fishtail-butted pair by James Low, dated 1602 and with silver and gilt brass mounts<sup>30</sup>, and thereafter are normally found on all wooden-stocked pistols. Virtually all Scottish pistols of all types and periods have belt-hooks of the same form as the 1598 pair and are without trigger-guards.

The fishtail form of butt is found on a number of late-16th and early-17th century English snaphance pistols: for example, two in the Palazzo Ducale, Venice, and another depicted on the well-known portrait of Captain Thomas Lee, dated 1594<sup>31</sup>. Whether or not this, like the similarities between the Scottish and English lock-forms, indicates a direct connection, or merely a common Continental prototype, is uncertain. It is worth noting, however, that there are documents of 1589 and 1597 referring to the export of Scottish pistols to England<sup>32</sup>, so it is by no means impossible that Scottish styles were copied in London long before James VI ascended the English throne as James I in 1603.

All the Scottish fishtail-butted pistols known to me — which are few — date from before the end of the first quarter of the 17th century, and are closely similar to each other in form and construction. The only major differences found are in the materials from which they are made. The majority have Brazil wood stocks, mounted in silver and gilt brass, steel and locks that are entirely of steel, or with their plates and pans of brass. One example, dated 1616 and marked I.G., which was stolen a few years ago from the Museum at Goteborg, Sweden, was made entirely of steel, while a few specimens made entirely of brass except for the mechanical parts of their locks are known. The finest of these last, and perhaps the finest Scottish firearms in existence, are a pair of pistols by James Low of Dundee in the Antiquities Museum. Edinburgh. Beautifully shaped and balanced, they

Figure 18: Brass gun by James Low of Dundee, dated 1612, 1618, or 1619, with later lock (Tower of London Armouries).



are dated 1611 and decorated all over with engraving, originally gilt, similar to that on the two brass guns mentioned previously (figures 24 and 25). Engraved on the barrels are the royal arms of France, and the inscription LOVIS XIII ROY DE FRAC, and the pistols can be identified as item No. 190 in the inventory of the King's Cabinet d'Armes, though, unfortunately, the description throws no light on their origins.

Type B. Lemon or globose butt. This is the Scottish version of a form of butt that was widely used all over Europe in the late-16th and early-17th centuries, the characteristic feature being an ovoidal pommel. Snaphance pistols of very similar type were used in England, and also in America, a well-known example being the John Thomson pistol at Pilgrim Hall, Plymouth, Massachusetts, which, incidentally, has a ball-shaped trigger like those found on the majority of Scottish firearms<sup>33</sup> (figure 26). The classic Scottish version of the lemon-butted pistol differs from the English one, however, in having a lock and barrel of the same distinctive design as those found on fishtail-butted pistols, and in bearing similar decoration. It also sometimes has a feature found on most later Scottish pistols, namely, a

small pricker with a rounded head screwed into the centre of the butt, and designed for clearing the touch-hole.

Dated examples of this type of pistol cover a period extending from 1613 to 1634, so it must be regarded as a contemporary variant of the fishtail form. Like the latter, examples are found stocked in wood (figure 27), sometimes with barrels and lockplates of brass, or made entirely of brass or, more rarely, steel. The three finest pairs known to me are made entirely of gilt and engraved brass, apart from the mechanical parts, and are of quite exceptional length, averaging about 2 ft. from butt to muzzle. Two, dated respectively 1613 and 1629, are in the Royal Armoury, Stockholm, and the earlier one bears the arms of the Swedish Chancellor, Count Axel Oxenstierna (1583-1654) and a mark attributed to John Alison of Dundee<sup>34</sup>. The third pair, in an English private collection, are dated 1614 and bear the mark of James Low (figures 28 & 29). They are unique in having both trigger-pressure adjusting screws and pommels that are attached to brass extension-rods concealed in the hollow butts. Each pommel can be unscrewed and pulled out until the threaded upper end of its rod engages in the threads of the same hole,

Figures 19, 20, and 21: Brass gun by James Low of Dundee, dated 1624 (Antiquities Museum, Edinburgh).









Figure 22: Gun dated, probably 1703, by John Stuart. (R. T. Gwynn Collection).

Figure 23: Portrait of Lord Duffus circa 1700 by Richard Waitt. (Scottish National Portrait Gallery, Edinburgh).





gures 24 and 25: Pair of brass pistols made for King Louis XIII by James Low of Dundee dated 1611. Plow pistol from above with gun from figure 19. (Antiquities Museum, Edinburgh).



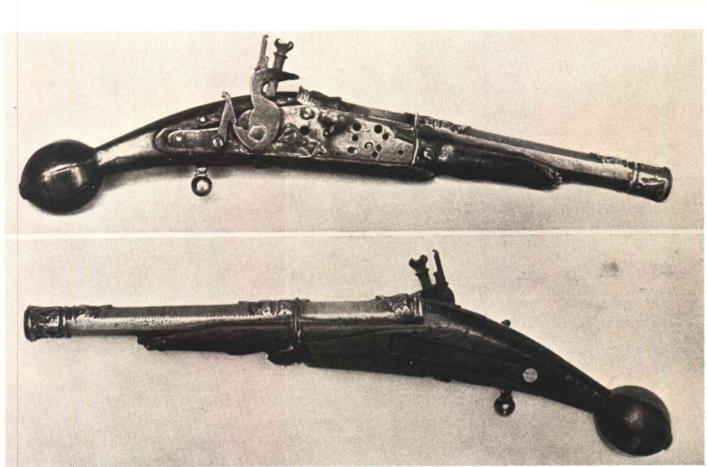


Figure 26: John Thomson's early 17th century English Snaphance pistol at Pilgrim Hall, Plymouth, Massachusetts.

Figure 27: Wood stocked pistol marked R. M. and dated 1625 (Antiquities Museum, Edinburgh).





Figures 28 and 29: Pair of brass pistols by James Lowe of Dundee dated 1614. Below with butt extended (R. T. Gwynn Collection).



thereby extending the total length from  $23\frac{1}{4}$  in. to 28 in. The only explanation that I can offer for this arrangement is that it was intended to convert the pistols into carbines that could be fired from the shoulder.

The type A & B pistols, as I hope I have made obvious, are closely related to each other, and, indeed, were often made by the same craftsmen. There is a gap of some thirty years between them and the earliest of the pistols that still remain to be discussed, which is filled by only one transitional pistol which I shall describe in a moment. I am unable to explain this gap, though it is likely to have had something to do with the Covenanting Wars that started in 1638, merged into the English Civil Wars and did not end until 1651. The sacking of Dundee in the latter year by Cromwell's troops, in particular, appears to have had a catastrophic effect on the firearms industry there. But whatever the cause, the gap exists and marks a great change in the history of Scottish gunmaking, for the firearms produced subsequently are much less sophisticated, and much further away from the mainstream of European development and much more a part of Scottish folk art than those belonging to the earlier period. Their decoration, which was always engraved, often on inlaid bands and panels of silver, was now normally almost entirely Celtic in its inspiration, involving such motifs as knotted strapwork, trumpet scrolls, and the swastika<sup>35</sup>, a fact that probably points to production having spread away from the old centres to workshops along the Highland Line.

These later pistols are of three types, of which the last is merely a variation of the second.

Type C. Heart butt. The distinctive feature of this type is a pommel formed like a heart with its point uppermost, a pricker normally being screwed between the two lobes (figure 30). It appears to have been made exclusively in centres in the Eastern Lowlands, such as Inverness<sup>36</sup>, Elgin, Aberdeen and Dundee, but there can be little doubt that it developed from the lemon-butted type. This is indicated by a transitional pistol, made entirely of steel and dated 1647, in the Antiquities Museum, Edinburgh (figure 31). The butt on this ends in a rounded pommel that is, in effect, a softened version of the lemon form which would only require flattening and shaping slightly to produce a heart-butt. The lock, incidentally, is a late form of snaphance in which a horizontallymoving sear engages over a flange on the tumbler to give full-cock.

The fully-developed heart-butted pistol is first recorded in the 1660s and survived until about 1730 (figure 32). The majority of specimens are made entirely of steel, but brass barrels and stocks and, much more rarely, wooden stocks are encountered. Before about 1690 the butt was rather straight and set at only a very slight angle to the line of the barrel: thereafter; it tended to curve down more. As with all authentic Scottish pistols

dating from the 1660s ownard — and some of the earlier ones — right-hand butts are cast off and the left-hand ones cast on. Before about 1690 also locks are usually either snaphances of the type found on the earliest pistols - sometimes with a slot in the cock or a flange on its inner face for the sear — or like that on the transitional pistol of 1647, or else an improved version of this with a one-piece steel and pan and a horizontally-moving sear giving both full- and half-cock on the tumbler. All these retain the fence on the pan and are often fitted with back-catches. Subsequently an improved version of the third type was normally fitted, no longer equipped with a fence on the pan, and externally resembling a standard European flintlock, though still often retaining the back-catch. The horizontally-moving sear was also retained, but the arrangement of the flanges on the tumbler with which it engaged was slightly modified<sup>37</sup>. It seems likely that the two versions of this last mechanism were derived from the so-called "English" lock, which is recorded at a very much earlier date in the 17th century.

Apart from the above, a few late heart-butted pistols are found equipped with true flintlocks or locks of the so-called "Highland" type, which I shall describe in the next section. Before moving on to this, however, I must mention one unique early-18th century heart-butted pistol of outstanding quality in the Antiquities Museum, Edinburgh. Signed by John Stuart — possibly the same as the maker of the gun of 1703 I spoke of earlier — it is stocked in wood, possibly rosewood. and has a lock with a horizontal sear of the late type (figure 33). The external appearance of the lock, with a "blister" on the front of the steel, and a grotesque mask chiselled on the cock-screw, is so like that of many contemporary Continental flintlocks that it seems likely that Stuart took one as a model.

Type D. Scroll or ramshorn butt. With this type we come finally to the pistol that most people probably think of as the true Scottish or Highland one. Its name is, of course, derived from the pair of horn-like scrolls<sup>38</sup>, with a pricker between, at the base of the flaring, slab-sided butt. It seems likely, for obvious reasons, that it developed from the early-17th century fishtail form, though no transitional models are known. It is first recorded. apparently fully developed, on the earliest known illustration of a Scottish firearm of any kind, Michael Wright's Portrait of a Highland Chief (figures 34 & 35) of c.1660 in the Scottish National Portrait Gallery<sup>39</sup>, and a number of dated examples of the same decade are known. It subsequently remained in use for some 200 years, though during the later part of this period it was merely an adjunct to Highland military and fancy dress. With the exception of an extraordinary pair of wooden-stocked pistols made for an officer in a Highland regiment by the London gunmaker Durs Egg at the end of the 18th century, in an English

private collection<sup>40</sup>, all the examples known to me have stocks of steel or, more rarely, brass. Those made before about 1700 (figure 36) tend to be rather heavy and angular, with almost straight butts, but thereafter a more graceful, curved form came into use and remained more-or-less standard. They appear to have been worn normally on the left side, either hooked into the diagonal sword-belt or a waist belt, but they are sometimes shown on portraits projecting from under the plaid below the left armpit, apparently secured to a special shoulder-belt. On one portrait of c.1700 in the Scottish National Portrait Gallery, called Lord Duffus, a single pistol is shown suspended in front of the sitter's right thigh, apparently by passing its belt-hook through a hole in the skirt of his doublet<sup>41</sup> (figure 37).

All the forms of snaphance lock described in this lecture are found on scroll-butted pistols of the 17th century, but after this period, until the end of the 18th century, the majority were fitted with the so-called "Highland" lock (figure 38), though the true flintlock was also sometimes used. The Highland lock is first recorded in a Scottish context on a pair of scroll-butted pistols dated, 1678 and signed by Thomas Caddell, the founder of the Doune gunmaking industry<sup>42</sup> (see figure 51 at end of text). It has a one-piece steel and pan-cover, and a horizontal sear-lever with two sears, of which the forward one projects through the lockplate and engages over the front of the breast of the cock to give half-cock, while the rear one engages with a projection on the tumbler to give full-cock. A similar mechanism is recorded on a pistol of c.1630 by Prevot of Metz at Skokloster, Sweden, but all the other known examples, of which there are many, appear to be Scottish, so the name by which it is called by collectors is an acceptable one. I should mention, incidentally, that a uniquely Scottish feature found on many 18th-century locks of this type is a disc-shaped ornament, decorated with piercing and engraving, behind the jaws of the cock.

The scroll-butted pistol is, of course, particularly associated with the village of Doune in Southern Perthshire, where many of the finest examples were produced, but they were also made in a number of other places, including Edinburgh and Stirling. The finest examples, most of which are by Doune makers, are characterised by their elegance of form and decoration, the restrained use of engraved Celtic designs (figures 39 and 40) combined with silver inlay being particularly pleasing, but it must be admitted that mechanically they are somewhat crude in comparison with contemporary English and Continental work. Throughout the 18th century, as I have already indicated, the design of these pistols varied very little, and examples are very difficult to date unless, as began to happen in the last quarter of the century, they are decorated with other than traditional designs. The most famous families of

Figure 30: Heart butt pistol, circa 1700, by John Burges of Elgin (Tower of London Armouries).



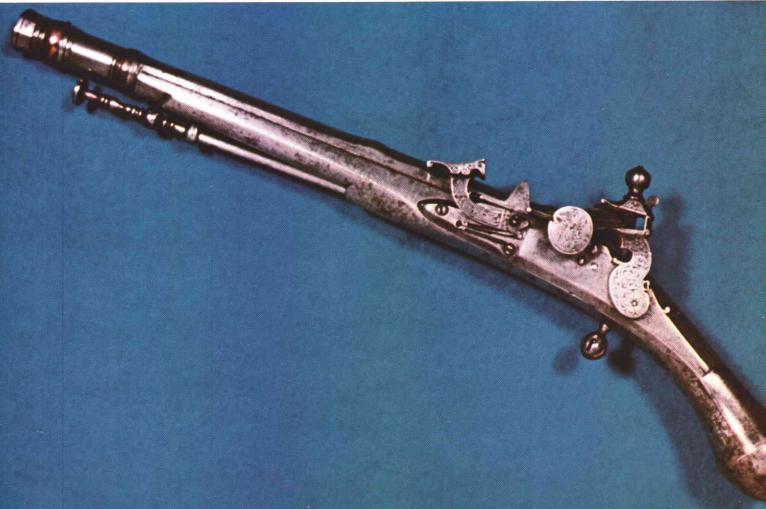
makers were the Murdochs, Christies, Campbells and Caddells of Doune, and many examples of their work survive, among them being the pair of John Murdoch pistols with which Major Pitcairn is said to have fired, at the Battle of Lexington, the first shots of the War of Independence<sup>43</sup> (figure 41). Little trace of any of them can be found by the modern visitor to Doune, though there is a local tradition that a low, two-story stone building behind Main Street (figure 51), now used as a store, was originally the Caddell workshop<sup>44</sup>, and that the Campbell workshop is hidden inside a baker's shop on the other side of the street.

There can be little doubt that the decline of the traditional Scottish gunmaking industry began with the Proscription Act of 1746, resulting from the Jacobite Rebellion of the previous year, by which the Highlanders were forbidden to bear arms or to wear their national dress. There is evidence to show that after this date some makers from Doune emigrated to other towns45 and one of them, Thomas Murdoch, moved to Leith, near Edinburgh where he is recorded as operating from before 1774 to about 1792. He is particularly known as the maker of the one category or Scottish pistol that I have not yet mentioned, the Type E or lobe butt, though the names of other Doune makers are found on examples. This resembles the normal scroll-butted pistol in every respect except that the

butt is of circular section, more sharply downcurved, and terminates in a lobe-like dome (figures 42 and 43). It appears to have been made only in the latter part of the 18th century and one suspects that it represents an attempt to make the Highland pistol closer in form to the normal English pistol of the period, perhaps to attract Lowland custom. Surviving examples are comparatively rare, but among them are the pistols by Thomas Murdoch, "taken from the enemy", that were bequeathed by Washington to Lafayette<sup>46</sup> (figure 44).

The royal forces were, of course, exempted from the Proscription Act of 1746, and both the officers and men of Highland regiments were equipped with pistols of traditional form, the latter until 1795 and the former in some regiments, until the 1860s. The old gunsmiths were no doubt able to make some sort of living producing these, and also a few presentation pieces, some of which are amongst the finest scroll-butted pistols in existence. The official regimental pistols, however, were made in Birmingham and were of very poor quality. Two types are encountered, both of which are decorated with only a minimum of coarse engraving. The first was a standard, all-steel, scroll-butted pistol, and examples usually bear the signature of Isaac Bissell and the marking R.H.R. for "Royal Highland Regiment" (figure 45). The

Figure 31: Transitional pistol dated 1647. (Antiquities Museum, Edinburgh).



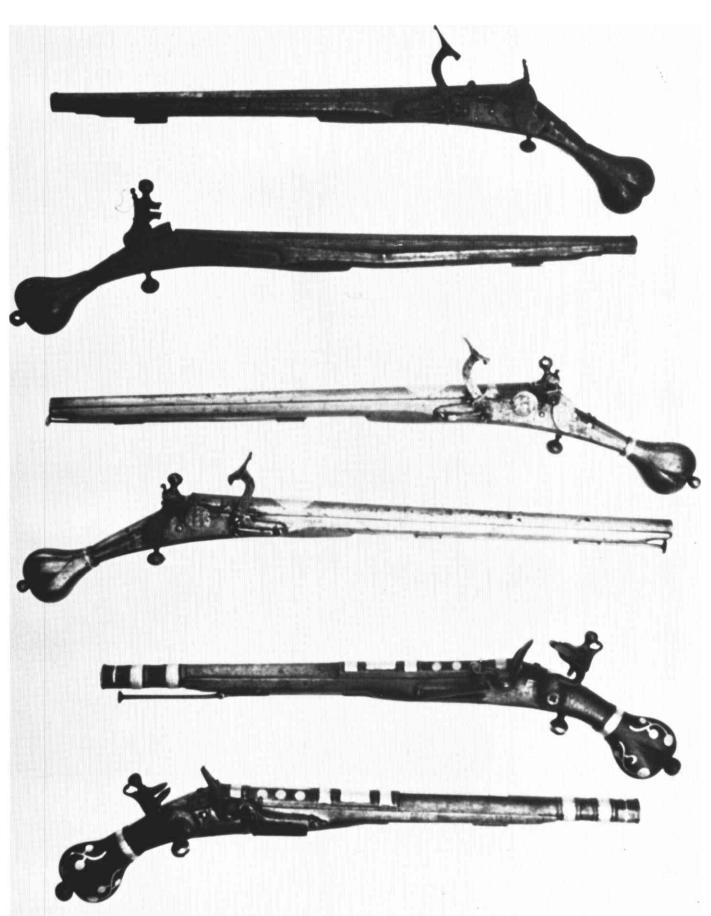


Figure 32: Group of late 17th century heart butt pistols in the armoury of the Earls of Seafield, Cullen House, Banffshire.

second is a simplified version with a gunmetal stock on which the butt-scrolls have been modified (figure 46), presumably for ease of manufacture, so that the butt resembles the inverted head of a crutch: examples usually bear the mark of John Waters<sup>47</sup>.

By the end of the 18th century, despite the repeal of the Proscription Act in 1782 and a revival of interest in Highland dress, the old Scottish gunmaking industry was almost finished. The author of the account of Doune published in 1798 in the Statistical Account of Scotland, after saying that the gunmaking trade there was carried on by John Murdoch, concludes with the following:

"There is now very little demand for Scottish pistols, owing to the low price of the pistols made in England; but the chief cause of the decline is the disuse of the dirk and pistol as part of the Caledonian dress; and when Mr. Murdoch gives over business, the trade, in all probability, will become extinct."

This prophecy was all too true, and with Murdoch's death in the early 19th century the traditional craft of gunmaking in Scotland came to an end. Even Murdoch in his later years was producing presentation-pistols, from London-made parts, decorated with enamel plaques and engraving in Neo-Classical style, that were no more than costume-pieces<sup>49</sup>. Henceforth, the history of the Highland pistol is bound up with the romantic revival of Highland dress brought about by Scott's writings, and reinforced by King George IV's state visit to Edinburgh in 1822, wearing a kilt over flesh-coloured tights so that the royal knees should not be exposed naked to the gaze of the vulgar (figure 47). Made chiefly in London and Birmingham and, from the 1820s onwards (figures 48, 49, 50), often fitted with a percussion lock, it was a thoroughly debased affair, the most elaborate examples being grossly over decorated with cairngorms, thistles, stags, and all the worst features of what can only be described as Victorian Scottish rococo. Such pistols are not without interest in the context of the history of taste and the applied arts in the 19th century, but they have about as much relevance to the history of traditional Scottish gunmaking as a modern replica of a Frontier revolver has to the history of Colt firearms. They do not, therefore, merit any further discussion here.

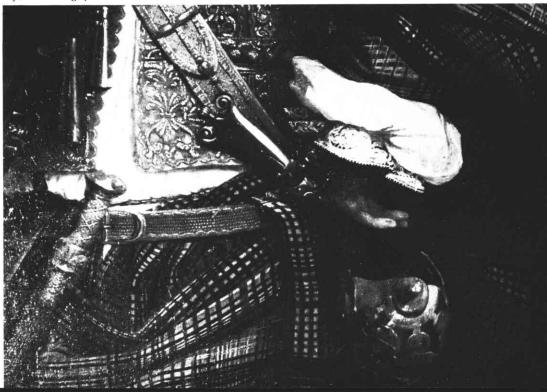
In conclusion, I must mention briefly that early Scottish firearms have not escaped the attention of the faker. Robert Glenn (1835-1911), a bagpipe maker of Edinburgh, who was also an antiquary and a skilled mechanic, produced a number of fake Scottish antiquities, including firearms. He appears to have specialised in the reproduction of early-17th century brass pistols, some of which

Figure 33: Wood stocked pistol by John Stuart. (Antiquities Museum, Edinburgh).





gures 34 and 35: Highland Chieftain by J. M. Wright, ca 1660.(Scottish National Portrait Gallery, Edinburgh).



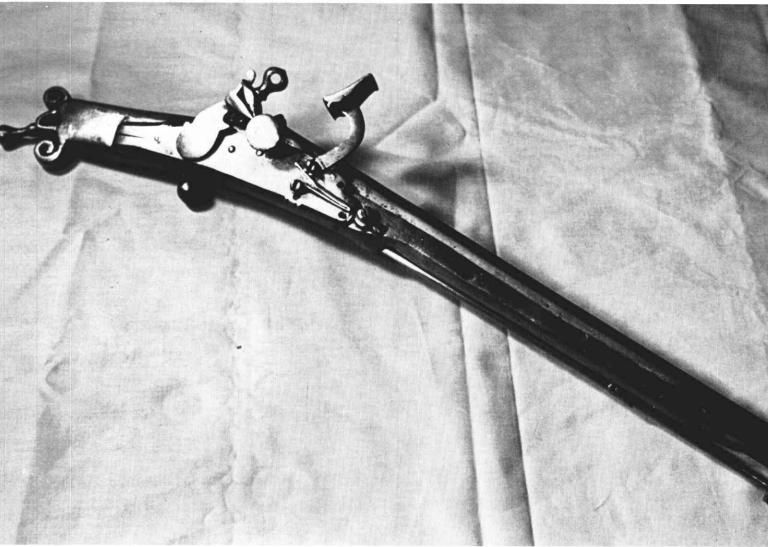


Figure 36: Early Scroll or Ramshorn butt pistol, dated 166- (?168-). (Tower of London Armouries).



Figure 37: Major James Fraser of Castle Leather, circa 1723. (Town Hall, Inverness)

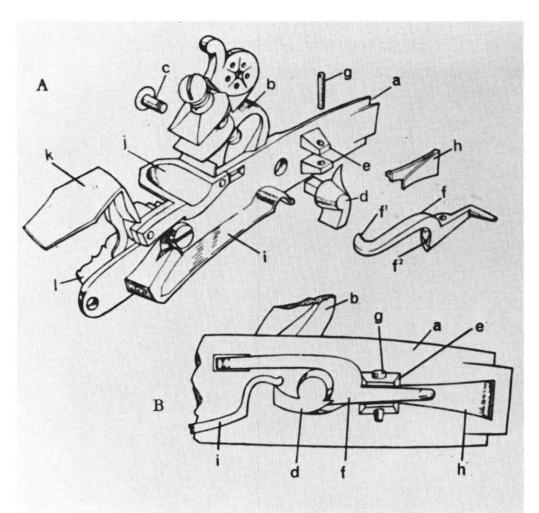


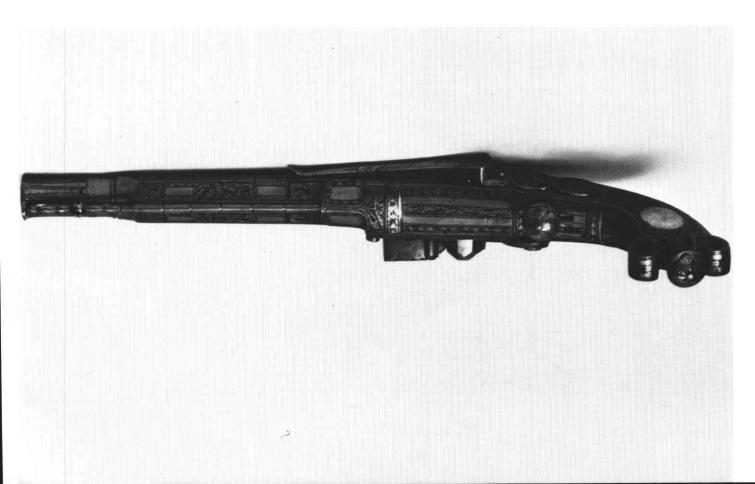
Figure 38: The "Highland" lock.

- B illustrates the position of the mechanism at full-cock
- a Lockplate
- b Cock
- c Cock-screw
- d Tumbler with bent which, at full-cock, engages with the full-cock sear  $f^2$ . See fig. B
- e Bracket to which sear-lever f is pivoted on pin g
- f Combined sear- and trigger-lever with full-cock sear at  $f^2$ and half-cock sear at  $f^1$ . The latter works through the lockplate to engage with the breast of the cock
- g Sear-lever pin
- h Sear- or trigger-spring
- i Mainspring
- j Pan
- k Combined steel and pan-cover
- 1 Feather-spring for the steel and pan-cover

Based on the lock of an eighteenth-century Scottish pistol in the Victoria and Albert Museum (No. 1425A-1874)



Figures 39 and 40: Details of a fine ramshorn pistol in the Victoria and Albert Museum by Alexander Campbell. Full pistol in figure 43.



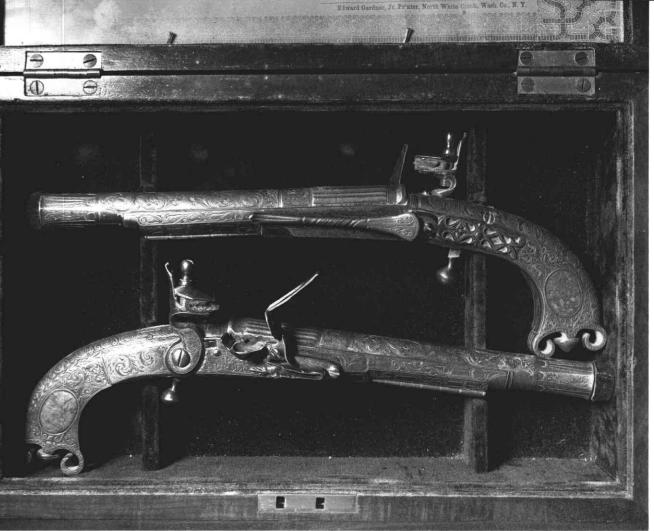
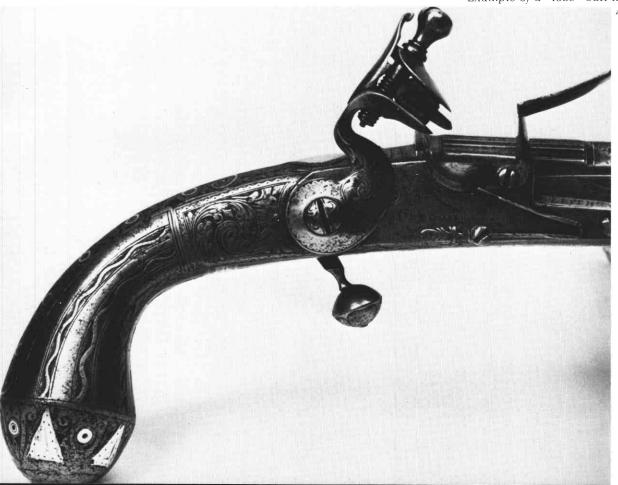


Figure 41: A pair of pistols by John Murdoch. (Lexington Historical Society).

Figures 42 and 43 (top pistol on opposite page): Example of a "lobe" butt in the Victoria and Albert Museum by T. Murdoch.



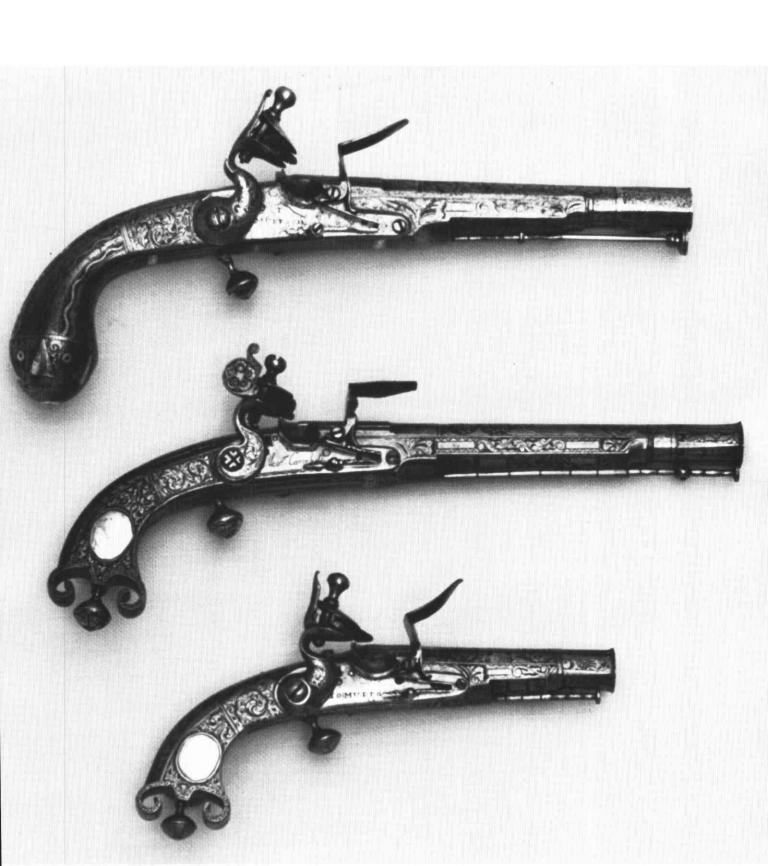


Figure 43: Lower ramshorn pistols by Alexander Campbell and John Murdoch (Victoria and Albert Museum).

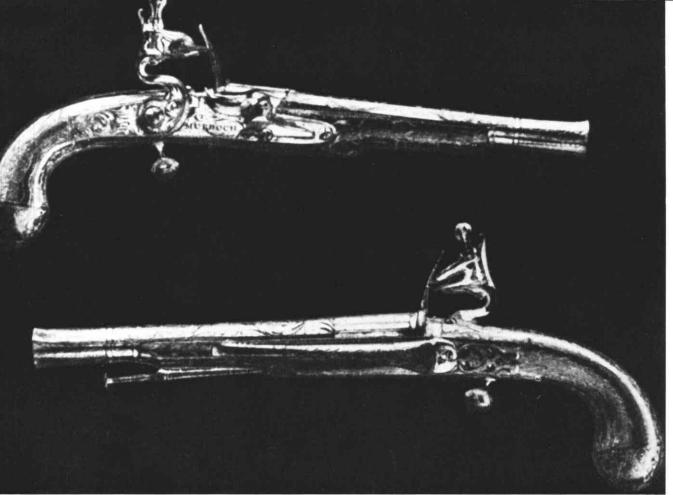


Figure 44: Lafayette pistols by Thomas Murdoch. (Château de Lafayette).



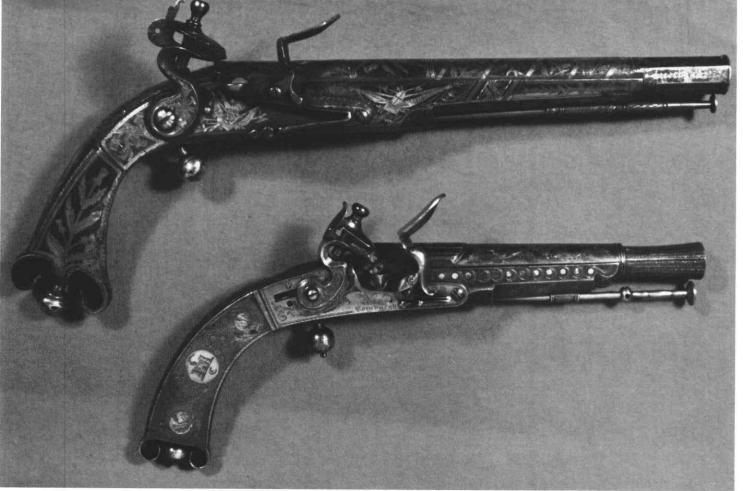
Figure 45: Issac Bissel Royal Highland Regiment pistol. (Tower of London Armouries).



Figure 46: Highland regimental issue pistol by Waters of Birmingham. (Tower of London Armouries).



Figure 47: The Highland Revival in the Nineteenth Century. "The Cock of the North," George, Fifth Duke of Richmond and Lennox by George Sanders, circa 1830. (Collection of the Duke of Richmond).



Figures 48 and 49: Scottish Revival pistols. Costume pistols in the Antiquities Museum, Edinburgh. The center signed by Ross of Edinburgh and the lower one with the arms of Clanranald and signed by W. Watson, The Strand, London.





Figure 50: Costume pistols signed by Ross of Edinburgh (Tower of London Armouries).

bear his name or initials, and, if the few that I have seen are characteristic, which were made with great skill. In the period round about World War II, a London dealer produced some rather poor imitations of both Scottish and English snaphance pistols with wooden, bone-inlaid stocks, some of which were fitted with genuine North African locks. During the last few years some well-made copies of lemon- and scroll-butted pistols have been coming on to the English market, the latter bearing crowned cross-sceptres proof-marks with the components made from separate stamps instead of a single one. I have also been informed that fake Scottish arms are being produced in Australia, though I do not know if these include firearms. Like all collectors of works of art, therefore, the collector of Scottish firearms must beware!

## NOTES

1 A scroll-butted pistol, dated 1730 and signed by Hector McNeill of Mull is in the Scottish National Museum of Antiquities, Edinburgh (Maxwell, "A Highland Pistol"). Firearms were also made in Inverness, which is often called the capital of the Highlands, though it is on their extreme edge.

2 Dickinson, p. 137.

3 Claude Gaier, "The Origins of Mons Meg", Journal of the Arms and Armour Society, Vol. V (1965-7), pp. 425-31.

4 Dickinson, p. 135.

5 Dickinson, pp. 139 and 135.

6 That is "founded", or cast

7 For this and the following information about James IV and his guns see Accounts of the Lord High Treasurer of Scotland, Edited by Sir J. B. Paul, Vols. II-IV, H. M. General Register House, Edinburgh, 1900-02, passim, and especially Vol. IV, pp. lxvii-lxxi. See also Dickinson, p. 135.

8 This was clearly a hand culverin, though the term was often used to denote a piece of light artillery.
9 The Register of the Privy Council of Scotland, Edited by J. H. Burton, Vol. I, H. M. General Register House, Edinburgh, 1877, p. 95.

10 1561. "Thay . . . schot furth at the said servandis ane dag". Diurnal of remarkable occurrents that have passed within the country of Scotland since the death of king James the fourth till the year 1575, A. 15 . . . , Reprinted Bannatyne Club, Edinburgh, 1833, p. 66. For this and other early references to dags see s.n. in The Oxford English Dictionary and The Dictionary of the Older Scottish Tongue; also H. Kendra Baker, "'Dag' and 'Dagger'", Notes and Queries, February 1, 1930, pp. 77-8, and ibid., February 15, 1930, pp. 119-20.

11 Register of Privy Council, op. cit., pp. 593-4.

12 I am grateful to Mr. A. R. Dufty for this reference

which comes from the Whitelaw manuscript. The Breadalbane inventory of 1600 includes "ane 13 brasin pistol with rowet werk'' (C. Innes, The Black Book of Taymouth, Edinburgh, 1855, p. 336). "Rowet" is a Scottish corruption of the French "rouet" (wheel). A pair of lemon-butted wheellock pistols are also shown on the engraving of a portrait, alleged to date from about 1630 and to represent George, 2nd Earl of Seaforth. reproduced as Plate III in the Sobieski Stuarts' Costume of the Clans. Unfortunately, the original has never been traced and the engraving, like a number of others in that famous work, must be regarded with great suspicion. 14 Henry Ellis, Original Letters Illustrative of English History, 2nd Edition, Vol. II, London, 1825, p. 213. 15 James Cranstoun, Satirical Poems of the Time of the Reformation, I, Scottish Text Society, Edinburgh, 1891, No. XLVII: "Heir followis the defence of Crissell Sandelandis for using hirself contrair the Ten Comandis', which comes from George Bannatyne's manuscript collection of poems of 1568 in the Library of the Faculty of Advocates, Edinburgh. The passage with which we are concerned here is printed on p. 396 and is as follows:

"Now ze ar lamit fra labour, I lamet it,

16

Zour pistolis twmit, and bak sprent lyk a wand: Snapwark, adew, fra dagmen dow not stand, And worss than that, ze want zor morsing powder:" Eaves, p. 325.

17 The Burgh Records of Glasgow, Maitland Club, 1832, pp. 96 and 122

18 The most recent discussion of the subject is by Eaves who, among other things, draws attention (p. 300) to a German work of 1608 in which the snaphance is described as the "Schottische Schloss".

19 The locations of these barrels are as follows: 1583, Banff Museum (at present on loan to the National Museum of Antiquities, Edinburgh); 1585, State Historical Museum, Moscow (I am indebted to Dr. Leonid Tarassuk for drawing my attention to this); 1589, American private collection; 1595, National Museum of Antiquities, Edinburgh. The 1589 barrel is mounted in an 18th-century Neapolitan gun.

20 Black Book of Taymouth, p. 337. It has been remounted in a cater stock with a cock dated 1640. "Treatice", p. 61. It has been remounted in a Cater stock like a Cock dated 1640.

21 It may be significant that the arms of most of the Scottish branches of the Kennedy family include cross crosslets among the charges.

A few 16th-century Continental snaphance locks are known on which the jaws work on an ordinary bolt, with a head instead of a cross-pin, and a wing-nut above. See, for example, C. Blair, European and American Arms, London, 1962, Pls. 297-8.
Reid, "Lady Seafield's Scottish Guns".

24 H. L. Blackmore, Guns and Rifle of the World, London, 1965, Pls. 46, 136, 350-51. Cf. also, Hans Schedelmann, Die Grossen Büchsenmacher, Brunswick, 1972, p. 17. 25 Whitelaw, "Treatise", p. 87, No. 3. The monogram on the barrel of the gun indicates that it was made after Graham became an Earl in 1626, but before he was created Marquis in 1644.

26 Reproduced in colour by Dunbar (Frontispiece).

27 Reid, "A Prince's Gun".

28 Blackmore, op. cit., Pl. 154.

29 Of somewhat similar appearance illustrated guns in Michael Wright's Portrait of a Highland Chief and Waitt's Lord Duffus, but it is not certain that these were of Scottish make (figures 22 & 23).

30 In the Tøjhusmuseum, Copenhagen. See Hoff, pp. 199-20 and Plate XXX

31 See J. F. Hayward, "English Firearms of the 16th Century", Journal of the Arms and Armour Society, Vol. III (1959-61), p. 120 and Plate XXXIII; Eaves, passim.

32 Boothroyd, p. 157; Eaves, p. 333.

33 Eaves, pp. 291-2, Plate LXX.

34 Hoff, p. 203, Plates XXXII-III.

35 For a discussion of these designs and their origins see Mayer.

36 See Note 1.

37 For a detailed discussion of these locks see Whitelaw, "Variations of the Dog Lock".

38 It has been suggested that the scrolls were designed to take a lanyard, but this suggestion is not supported by the evidence of portraits showing pistols of this type. A late-18th century pistol by Thomas Murdoch in the Hermitage Museum, Leningrad (No. Z.O.6312) is, however, equipped with a green tasseled lanyard threaded through its butt-scrolls.

39 Reproduced in colour by Dunbar (Plate 9). The portrait mentioned in Note 13 would, of course, be the earliest to show Scottish firearms if it could be shown to be authentic.

40 Made for Captain Alexander Malcolm of the 78th Foot between 1794 and 1795, they are basically a pair of English double-barreled, under and over belt-pistols, with scrolls added to the bottoms of the butts.

41 Reproduced in colour by Dunbar (Plate 12), together with a number of other portraits depicting pistols.

42 According to the Statistical Account of Scotland of 1798 he introduced the art of gunmaking to Doune "about the year 1646 . . . having been instructed in his craft at Muthill, a village in Strathearn in Perthshire". See Boothroyd, p. 173. The pair of pistols of 1678 are divided between a private Scottish collection and the Neufchâtel Museum, Switzerland.

43 In the possession of the Lexington Historical Society. They bear a crest and monogram that have not been identified, but which are not those used by Major Pitcairn.

44 See Blair.

45 Boothroyd, pp. 174-5.

46 In the Château de Lafayette, France. See Sterett.
47 See Scobie, Darling and H. L. Blackmore, British Military Firearms, London, 1961, p. 66. There seems to be no doubt that Waters worked in Birmingham and not London, as has been suggested by some writers. The proof-marks found on these pistols also are always, so far as I am aware, of Birmingham pre-1813 type.
48 See, for example, Finlay, "Pistol of Macdonnel of Glengarry".

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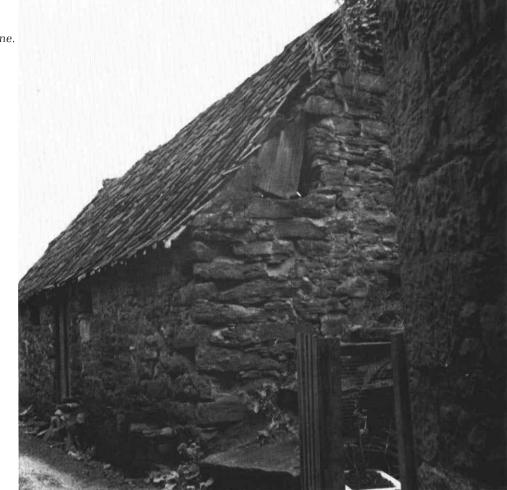
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re 51: Caddell Workshop, Doune.