

Medieval bronze sword-pommel with clay core

by Robert B K Stevenson

The medieval sword pommel found long ago at Mervinshaw, Roxburghshire, and generously given to the Museum by Mr W Mason (*Proc Soc Antiq Scot*, 105 (1972-4), 320, no. 24), deserves to be specially noted on several accounts. Mervinshaw lies close to the route traversing the Border from Jedburgh to Carter Bar and is just across the Jed Water from the Camps, Edgerston, from which there are other medieval finds.

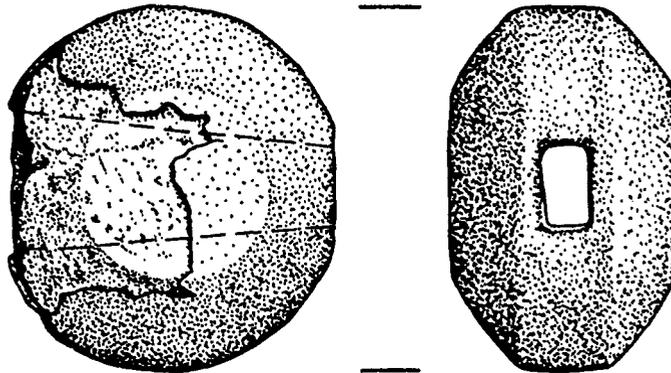


FIG 10 Medieval bronze sword-pommel with clay core (1:1)

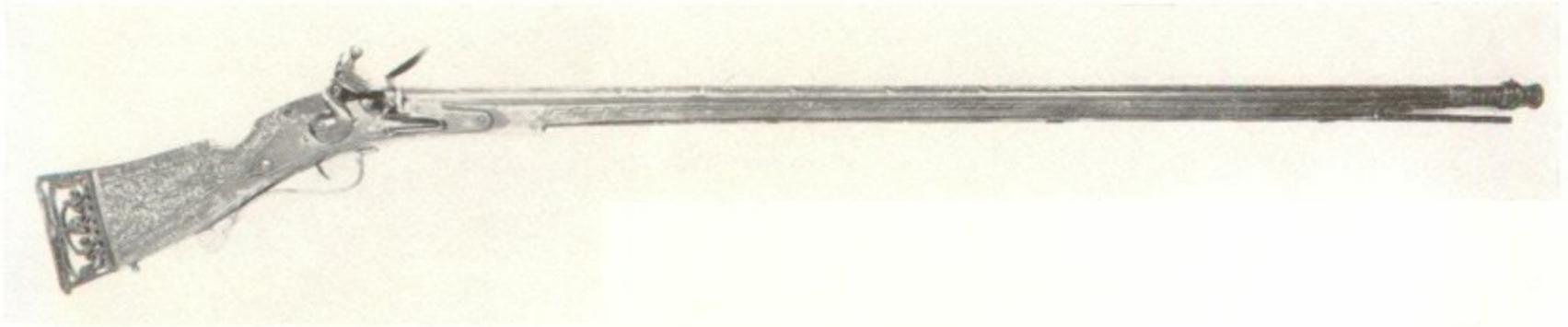
It is wheel-shaped or flattened biconical (fig 10), 49 mm in diameter and 32 mm thick, with running through it a rectangular perforation for the tang, tapering from 18 by 9 mm to 9 by 8 mm. A 12th-14th-century date may be hazarded. The wheel pommel was a very long-lasting type as well as the commonest, and other surviving Scottish examples are probably all later than 1400: indeed, there are hardly any post-Norse Scottish swords or parts of swords earlier than 1400. (Of those illustrated in Drummond (1881), pl 16, 3, is from the Isle of Man (NMA cat no. LB 4); while pl 14, 2, may be doubtful, and is not in the NMA despite Hoffmeyer 1954, 26, no. 14.)

Dr H McKerrell has made a scientific examination of the pommel. The metal is a very skilful seamless casting only 0.5 mm thick over a clay core which was left exposed throughout the perforation. By X-ray fluorescence analysis, and metallographically, it has been found to be a tin bronze with a high lead content; the lead allowed the molten metal to have the low surface tension necessary to flow into the narrow space between the core and the outer mould. The outer surface has scaled off, leaving only small portions of a polished finish, but no serious reworking or annealing had ever taken place, for an etched section showed the metal to be in the as-cast state. The metal has got broken and part is missing; a slightly gaping crack shows that the metal was under some tension, due perhaps to it contracting more than the core, in cooling from *c* 1000°C. As the core was clay a very small sample was examined for thermoluminescence, although only a very rough approximation of a date could be estimated in the circumstances, in the range AD 1200–1600.

Dr Hoffmeyer has kindly commented in a letter that she does not know of a clay core having been noted in other bronze pommels. Examples of more elaborate early cast pommels are hollow (London Museum *Medieval Catalogue* 1940, fig 2, 1–4), and cores may well survive unnoted when pommels are still attached to their tangs. To leave the core in would both help to prevent the metal being dented and add weight to the hilt's balance against the blade. The weight of the Mervinshaw wheel pommel is about 86 g (3 oz), only one-third what may be estimated for a solid iron example still on its hilt (Isle of Man, see above), and perhaps one-quarter of a 15th-century flat scent-stopper iron pommel found at Flodden (NMA cat no. LB 7, Drummond 1881, pl 16, 4, incorrectly drawn).

REFERENCES

- Drummond, J 1881 *Ancient Scottish Weapons*. Edinburgh.
Hoffmeyer, A B 1954 *Middelalderens Tveæggede Svaerd*. Copenhagen.



a Brass gun in Tower of London



b Tower of London gun: detail of trigger guard



c Early 17th-century silver medal, Arabella Stewart?

MAXWELL | Brass gun

STEVENSON | 'Arabella Stewart' medals