

Kersmains bell

by R W M Clouston

An important late 12th-century bell was found in 1973 by Mr Alexander Paxton at Kersmains Farm (Roxburghshire), 4 miles from Kelso, and 1 mile SW of Roxburgh Castle – the medieval town of Roxburgh lay just NE of the castle. The bell when struck by the plough lay 5 inches below the surface in lightly textured ground just above the 200 ft contour, 200 yards NE of the farm buildings and 20 yards E of the road from which the Forebank field slopes gently down to the Teviot (NGR NR 703320; correcting *DES* (1974)). A search by Mr Colin Martin with a metal detector did not locate anything further, although the bell's suspension canons are missing. No trace or tradition of structures has been noted for the spot. Mr D G O Hogg has however pointed out that the hillock, 150 yards away NE, is called Harlaw, and so has the same name as a medieval chapel not mentioned in the RCAMS *Inventory* (Chalmers 1810, 188; Kelso Liber 229). There seems no reason why the bell should not have been brought from further away even if we disregard the local tradition that a bell from Melrose was lost in the Tweed at a place called Maxwheel at Kelso by a retreating English army in 1322 (Bower 1827, 20n); both Melrose and Jedburgh are only 10 miles away. A scrap-collecting expedition in the area is recorded for 1541, when the royal treasurer paid expenses for collecting a broken bell and three pots from Kelso Abbey to be used for gun-casting in Edinburgh Castle (TA 1907, 498), but lack of wear suggests that the Kersmains bell went out of use much earlier.

The bell was brought to the National Museum by Mr D G O Hogg of Kersmains, to whom and to Mr Paxton we are indebted for all the information about the finding. When the early date of the bell was appreciated, it was reported to the Queen's and Lord Treasurer's Remembrancer who claimed it for the Crown in April 1975, entrusted it to the National Museum for safe-keeping, and sent a reward to Mr Paxton.

The technical particulars and dimensions of the bell are: diameter at lip $17\frac{3}{8}$ and $17\frac{5}{16}$ in, inside lip $13\frac{3}{4}$ in, at head mould $4\frac{1}{4}$ in, thickness of sound bow $1\frac{3}{4}$ in, wall minimum thickness $\frac{1}{4}$ in, internal height 15 in, section of canons approx. round $\frac{3}{4}$ in, section of argent oblong with indented ends, weight 50.5 kg (111 lb 6 oz).

It will be seen from the half section (fig 1a) that inside the mouth the soundbow section is unusual; it shows that a core mould was mounted on a lathe with a horizontal axis and a false wax bell made up on it. The slightly concave surface was tilted as shown to prevent the wax dropping away from the core as the latter was turned. This is the earliest soundbow section used for tower bells, as opposed to hand bells, and in England it was used in the 11th and 12th centuries. The next stage was to make the slightly concave surface horizontal, later to make it slope the other way, and finally form part of the normal curve to the lip which was used from the 13th century onwards (Elphick 1973, 307–8). It will be noted that the metal thickness tapers from the soundbow to the crown. We think that the earliest bells had a constant metal thickness from the top of the soundbow to the crown and that variety in thickness was a secondary development.

The crown has unfortunately lost the canons and argent, the loops on the crown, and only the stumps remain. These show that the six canons were approximately round and were arranged round the argent, which was of normal section for this early period. The head mould does appear to have been intended to be almost flat, another early feature, but the surface is irregular. The trapezoid (fig 1b) shows that, compared with other 12th-century bells in England, the crown

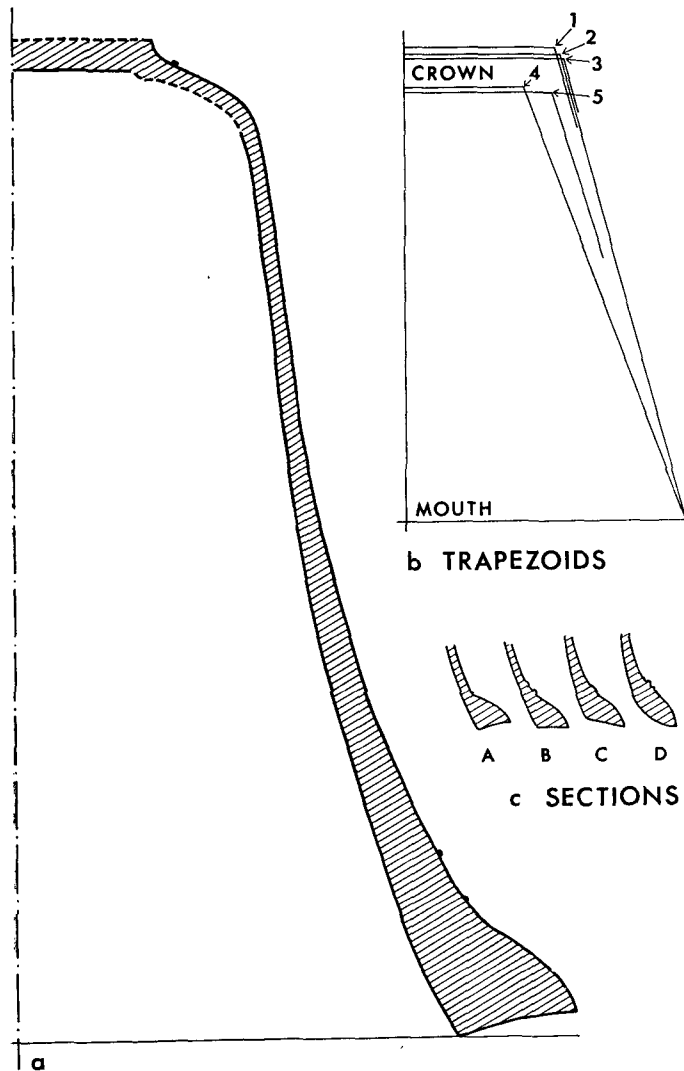


FIG 1 a, Section of Kersmains bell (scale 1 : 3).
 b, Trapezoids (geometrical figures within which a half section of a bell, from lip to shoulder, will fit): 1, Leighton Buzzard, Priest's, Beds (mid 12th century); 2, Whitfield by Dover, Kent (late 12th century); 3, Shephall, Herts (12th century); 4, Kersmains, Roxburgh (c 1190); 5, Lydden, Kent (c 1280).
 c, Sections of early bell soundbows (after Elphick 1973): A, 11-12th century; B, 12-13th century; C, 13-14th century; D, 13th century onwards

diameter is appreciably smaller for the mouth diameter; this in turn gave a smaller head-mould diameter and led to a weaker arrangement of canons and argent, which might have accounted for their complete failure. Normally English bells of this period had oversized canons and argents compared with later bells, and the Kersmains bell is an exception to this rule. However, Mr G P Elphick of Lewes, Sussex, who has studied these early bells, has pointed out to the writer that the disused 12th-century bell at Mitford, Northumberland, also has a narrow crown, so this may have been a North British variant. We feel that the casting date of the Kersmains bell is about AD 1190, based on our knowledge of S English bells.

The outside surface has a rough area by the lip and four almost vertical veins from the lip to mid-waist. There are also four 'buttons' in mid-waist, where the metal is slightly raised above the surroundings; these could well be where the wax was let out from the mould before casting, if the latter were baked on its side. None appear by the lip but the rough area may have masked them. The veins are where the cope, or outer mould, has cracked, perhaps owing to the pressure of the molten metal or to the baking process. In only one case does a vein pass through a button, which suggests that they are not directly connected, although the hole to remove the wax mould would tend to weaken the cope at that point.

Internally the mould surface is lined parallel with the mouth, showing a turning operation or the use of a strickle. The stump of the iron cast-in crown staple is located normally with regard to the six canons, and this would suggest that the clapper would strike in line with the single canons. However, allowing for corrosion and the fact that the thickness of the soundbow is not uniform all round, there is virtually no sign of wear at the two points where the clapper could have struck, nor any sign outside of an external hammer striking, or of a false crown staple ever having been fitted. This suggests that the bell was not in use for very long, perhaps 100 years maximum.

The bell has clearly been buried for many centuries and the surface has become corroded, but it is possible that, before burial, the bell hung in a building which was burnt down. This could account for the damage to the canons and argent and explain how the bell became buried in the first place; investigation of the site might throw some light on this. On the evidence of lack of wear on the bell caused by the clapper, it does not seem likely that the bell was in use from the late 12th century to the Reformation and was then buried to prevent it falling into unworthy hands. Bell metal is approximately 23% tin and 77% copper and has been expensive at all times, so some unusual circumstances must account for this 1 cwt of metal not being scrapped long ago.

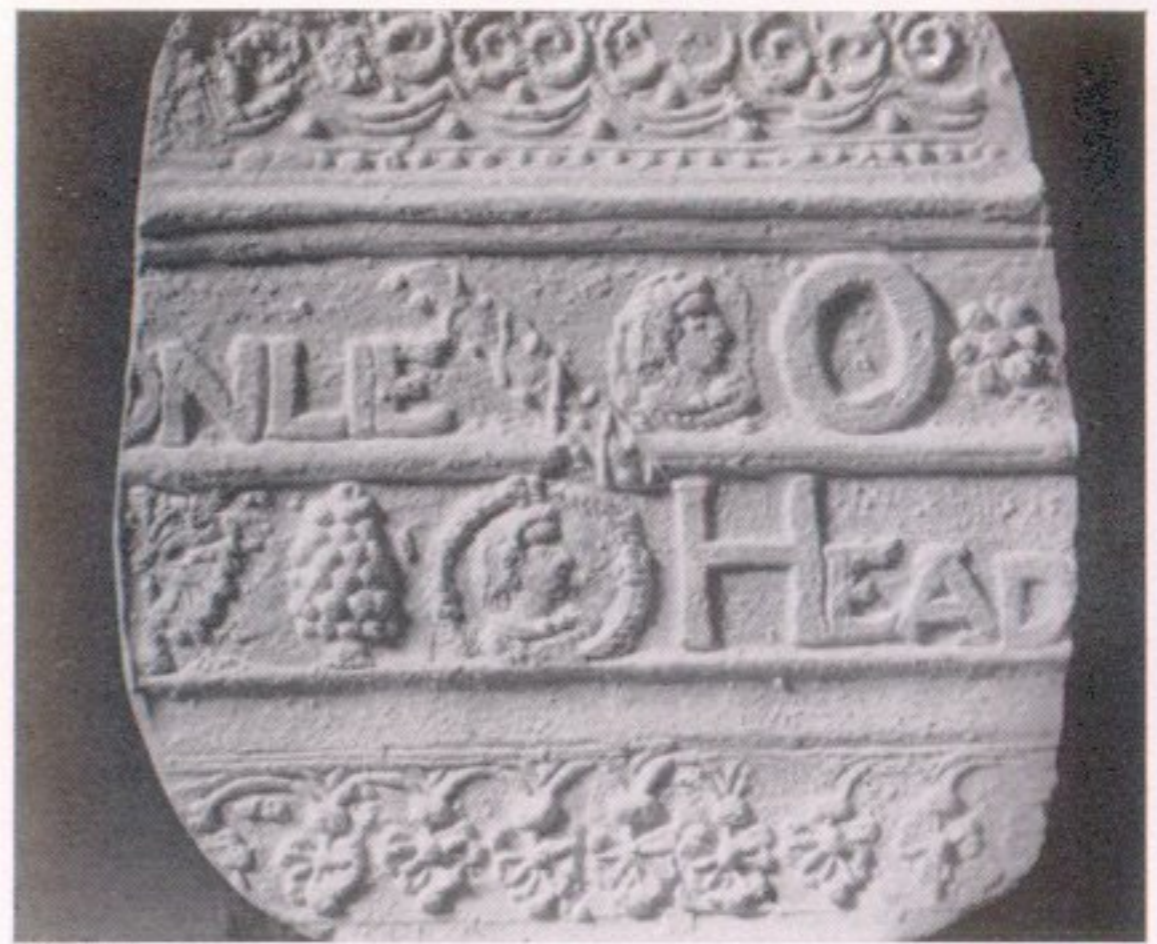
The importance of this bell is that there are none of 12th-century date so far discovered anywhere else in Scotland. A number of early hand-bells exist, but nothing in the way of tower bells before the Lochmaben treble of *c* 1300. Other 14th-century bells are the Lochmaben tenor of *c* 1350, Kirkwall Cathedral skellat bell, Perth St John's Ave Maria bell of *c* 1350, Elvanfoot, Crawford, disused bell, and the Anwoth disused bell of *c* 1400. The Kersmains bell fills a gap in Scottish bell development and is of very considerable importance. In England we are making a systematic inspection of all uninscribed bells recorded in the literature, and we have been fortunate in locating a number of these early bells still in use after 800 years and more. England has been comparatively lucky to have avoided major invasions and pillaging in this period, and this must partly account for the presence of these early bells. Unfortunately Scotland has not been so lucky, especially in the Borders, and the Kersmains bell must be looked upon as a survivor against enormous odds. We cannot be sure that the founder was a Scot (certainly his technique would have come from elsewhere, probably England), but it does seem likely that the bell was cast not far from its intended home and was not brought from a distance.

REFERENCES

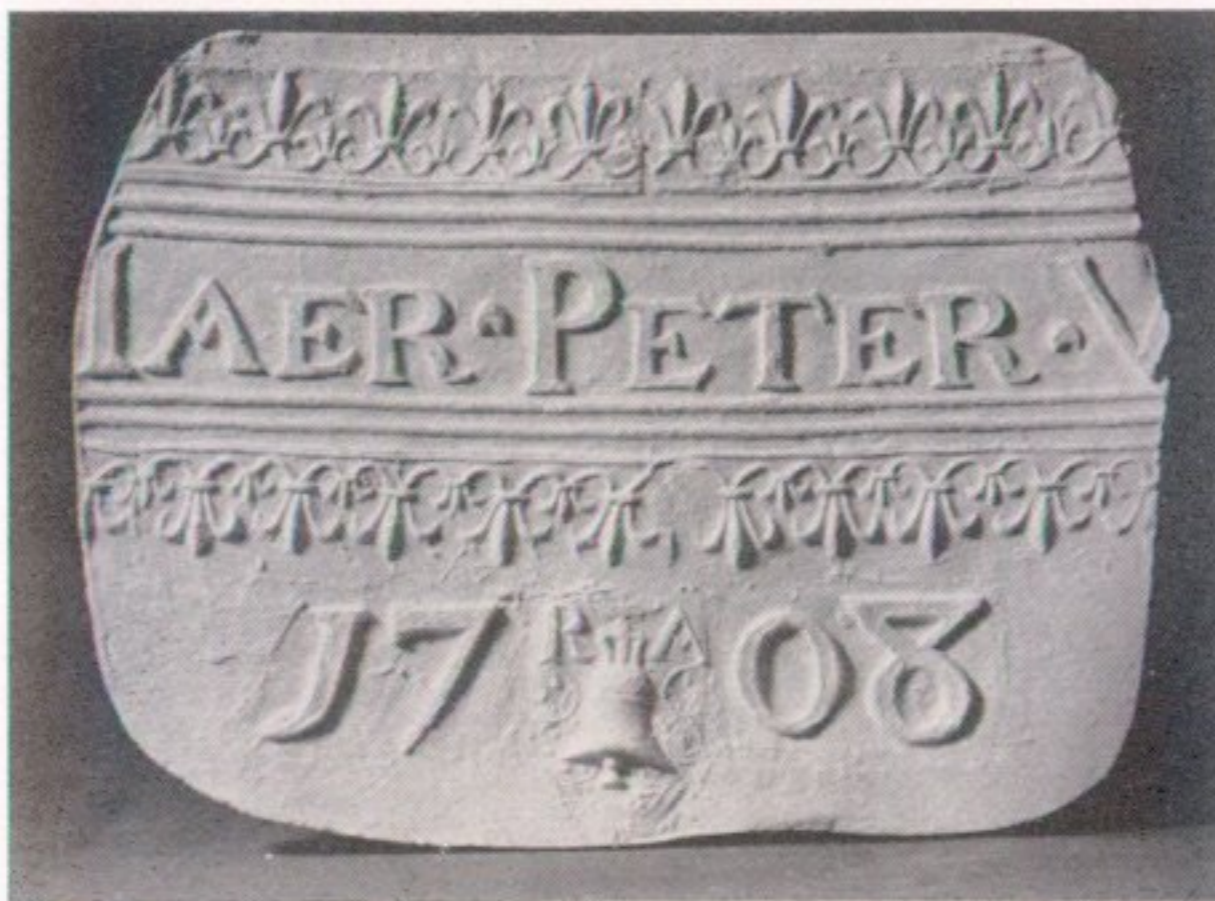
- Bower, J 1827 *Description of the Abbeys of Melrose and Old Melrose*. 3rd edition. Edinburgh.
Chalmers, C 1810 *Caledonia*, vol II. Paisley.
Elphick, G P 1973 'The dating of uninscribed bells', *The Ringing World*, 69 (1973), 307-8.
Kelso Liber Liber S. Marie de Calchou, Bannatyne Club, Edinburgh 1846.
TA 1907 Accounts of the Lord High Treasurer of Scotland, vol 7. Edinburgh.



a Glasserton



b Wigtown



c Whithorn



d Kersmains