

## VI.

NOTICE OF THE DISCOVERY OF FIVE BRONZE CELTS AND A BRONZE RING AT THE "MAIDENS," NEAR CULZEAN CASTLE, AYRSHIRE.  
By ROBERT MONRO, M.A., M.D., F.S.A. Scot., KILMARNOCK.

The pretty little bay, known as the "Maidens," on account of a few fantastic and weather-beaten rocks that rear their heads above its surgy waves, is bounded on the south by a plateau or ridge of whinstone which terminates somewhat abruptly on the sea-shore in a series of grassy knolls, with the bare rock here and there protruding. Between this ridge and the low shelving rocks away to the south, on which stand the ruins of Turnberry Castle, there stretches a flat and bleak-looking plain, which the merest tyro in geology could hardly avoid recognising as having a marine and recent origin. From a further inspection of the locality, it also becomes apparent that the base of the plateau was at some former period washed by the sea, from which, however, it is now separated by a narrow strip of rocky shoreland, the hollows of which have got gradually filled up with gravel, washed-down soil, and blown sand. Immediately beyond the first projecting spur of whinstone, as we approach it along the shore from Culzean Castle, the higher escarpment recedes a little, and forms, in miniature, a semicircular bay, traditionally known as port "Morough" or "Murray." Here the low lying shoreland has acquired a breadth of about 100 yards, and, owing probably to its sheltered situation and maritime conveniences, has been selected by the Marquis of Ailsa as the site of a new shipbuilding yard, the construction of which is now being vigorously prosecuted.

The preliminary ground clearances and levelling requisite for the foundation of such extensive buildings necessitated a considerable amount of excavations, especially at the back part, which had been carried as far inland as the elevated ground would admit of. In order to keep the posterior margin of this excavation straight, it became necessary to slice off a section (about 5 or 6 feet thick) of one of the whin-

stone bosses, which, on the superficial soil being removed, was found to project within the area of the proposed building, and upon dislodging its very lowest portion, the workmen came upon five bronze celts and a bronze ring lying together, as if concealed in a lateral crevice. Lord Ailsa, who fortunately happened to be at hand when the discovery was made, at once recognised the archæological importance of these articles, and took possession of them; otherwise they might have met with a similar fate to that which befell the great hoard—no less than a pot-full of bronze implements or weapons—dug up, now many years ago, on the neighbouring estate of Kilkerran, and secretly disposed of by the workmen among the surrounding villagers for a mere trifle, and of course now irretrievably lost.

In consequence of a communication from Captain Boyle of Shewalton, I had an opportunity, on the 3rd of May 1883, only a few days after the discovery of the celts, of inspecting the locality, and of ascertaining all the circumstances in connection with this most interesting find. My visit was made in the company of Lord Ailsa, and his factor Mr Smith, who had already made themselves conversant with the facts of the discovery, and it is therefore chiefly to them I am indebted for my information. I had, moreover, a long chat with the workman who actually first saw and picked up the celts, and from him also I had their relative position pointed out, together with a minute and graphic account of the manner in which he had come upon them.

The depth of the face of the cutting, which here consisted of solid whinstone, immediately behind the spot where the celts lay, was exactly 4 feet, and the accumulated débris on both sides of this rock, as clearly seen on the fresh section, consisted of a layer of talus, apparently washed-down loam, and underneath this a bed of coarse sea-gravel or shingle. The line of demarcation between this gravel and the overlying talus was exceedingly well-defined. The north-east end of the section terminated at the foot of the large projecting spur which bounded that end of the quondam port Morough, and here the gravel increased in thickness; but on the other side, *i.e.*, looking towards the sea in the direction of the centre of the port, the gravel shelved downwards, so that while on the

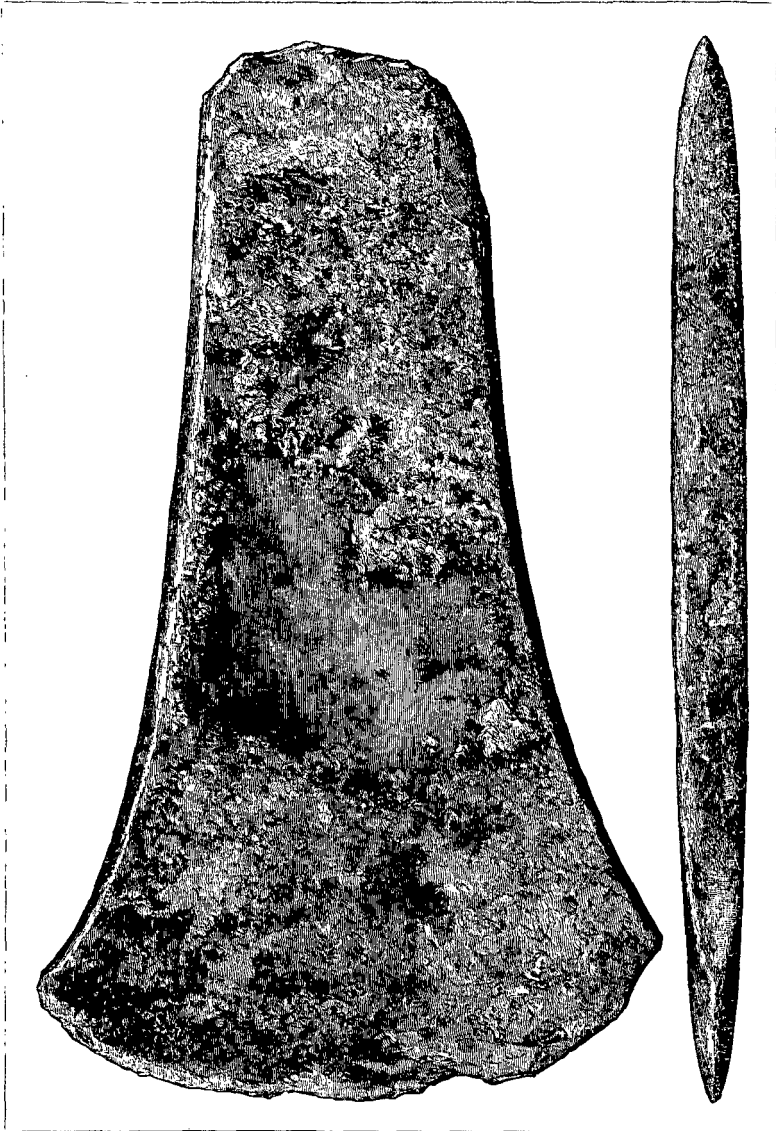


Fig. 1. The largest of the Bronze Celts found at Culzean (actual size).

former side the talus and gravel close to the rock under which the celts were found had each a thickness of about 2 feet, on the latter the talus would be a few inches thicker than the gravel. To what extent the gravel was met with immediately in front of the removed section of the

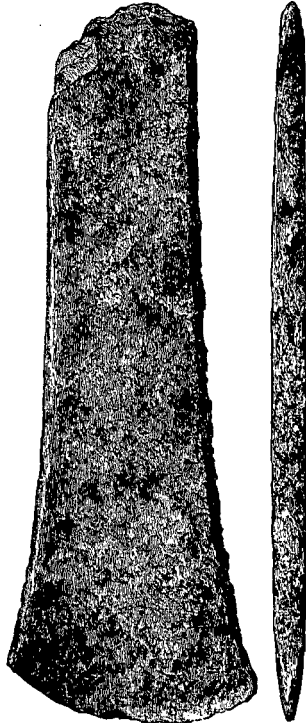


Fig. 2. The smallest of the Bronze Celts found at Culzean (actual size).

rock could not be accurately ascertained, as the whole area had already been cleared away, but, from an examination of the material wheeled to a lower level, and the end sections, it must have extended for several yards. There can be no doubt, therefore, that the spot where the celts were deposited was at a considerably lower level than the gravel which surrounded it on all exposed sides. Moreover, according to Mr Smith's measurements and levelling, this spot was over 100 yards distant from the shore and 25 feet above the level of the present high-water mark. Unless, therefore, there was a vertical slit in the rock, of which there was no indication whatever, it is difficult to form any other opinion than that the ledge of rock under which the celts were concealed was, at the time of their deposition, open towards the shore; and that the waves subsequently dashed against it with sufficient violence to cover up the opening of the crevice with a portion of this coarse gravel. Since then, however,

the tide has gradually receded, either in consequence of the accumulation of detritus, and of a general rising of the sea-beach. Curiously enough, the position of this find coincides with the latest and best defined of the ancient sea margins or raised beaches, the remains of which are so conspicuous in the south-western districts of Scotland.

In looking carefully at these celts, it will be seen that they are plain, wedge-shaped implements, made of yellow bronze, after one uniform pattern, graduated in size, from the largest (fig. 1) to the smallest (fig. 2), and presenting a curved cutting edge.

The following are their respective dimensions :—

Number.	Length.	Greatest Breadth.	Thickness.
	Inches.	Inches.	Inch.
I.	$5\frac{1}{2}$	$4\frac{1}{8}$	$\frac{2}{5}$
II.	$4\frac{3}{4}$	$2\frac{5}{8}$	$\frac{2}{5}$
III.	$4\frac{3}{8}$	$2\frac{3}{4}$	$\frac{3}{10}$
IV.	4	$1\frac{3}{4}$	$\frac{1}{4}$
V.	$3\frac{3}{4}$	$1\frac{1}{2}$	$\frac{1}{5}$

The ring was broken into two portions, but upon replacing the fragments it was found to be penannular, and measured  $2\frac{7}{8}$  inches in diameter (external), with a thickness of  $\frac{1}{4}$  inch.

The gradation of sizes is so striking, especially when looked at from the respective extent of cutting edge presented by each implement, that Lord Ailsa, when first notifying their discovery to Captain Boyle, very happily described them as a "kit of tools." Subsequently, his Lordship justified this inference, by pointing out that while they all bore evidence of considerable usage, the extremes were not so much the worse of the wear as the medium sizes, which, being the most serviceable, were more frequently in demand—a most practical observation, and as applicable to the present as to the prehistoric Bronze age.

Though similar bronze celts have been abundantly found as stray objects in fields, and occasionally in graves, and are largely exhibited in our museums, the information hitherto elicited from them as to their use in ancient times is so meagre and indefinite, that antiquaries are not yet agreed upon the point. Hence the great value of the present find, which seems unique of its kind in Scotland, inasmuch as it points to the fact that these axes were used as industrial implements.

Two speculative questions are here suggested to us, which if even approximately determined, would serve as important landmarks in the prehistoric age—(1) Can the antiquary, by a stringent application of the principles of his science, tell us when bronze was first used, or ceased to be used by our forefathers in the manufacture of such implements as are here described? and (2) can the geologist define, in years, the interval that has elapsed since the 25 to 30 feet raised beach was formed and left high and dry along the indentations of our shores? The discovery in the Firths of Tay, Forth, and Clyde of the skeletons of whales and seals, and of marine shells similar to those now found around our shores, as well as of canoes with stone and bone implements, and other remains of human industry, in raised beaches which could only have been formed when the sea stood some 25 or 30 feet higher than the present mean tide-mark, is held by some to be sufficient proof that this alteration has taken place since neolithic man found his way to North Britain. Indeed, Dr Archibald Geikie advocates, or at one time did advocate, that the coast in the parts of Britain here referred to, has been elevated to the above extent since the invasion of the Romans. I should suppose, however, that there are few antiquaries who would assign the manufacture of these bronze celts, or the date of their final deposition under the sea-worn cliff at the "Maidens," to any post-Roman period.