I.

NOTICE OF THE FURTHER EXCAVATION OF ST NINIAN'S CAVE, PARISH OF GLASSERTON, WIGTOWNSHIRE. BY SIR HERBERT EUSTACE MAXWELL, BART., M.P., F.S.A. SCOT.

After an interval of two years from the period of the operations described at p. 82, vol. vii. (New Series) of the Proceedings, work was renewed during March 1886. By referring to the plan of the cave, vol. vii. fig. 7, p. 88, it will be seen that the space outside the wall G G was occupied by an immense mass of fallen material, which presented the appearance of a grass-covered mound. Our former labours tended to show that the bulk of this débris had fallen before the occupation of the cave by early Christians; yet the position of some of the crosses in the walls (figs. 4 and 5, vol. vii. p. 85), which were buried to the depth of about a foot, showed that, if standing or kneeling room for the carver were allowed for, 3 feet at least of the soil had fallen subsequently to that occupation.

The removal of the entire mass of fallen earth and stones to the depth

1 Since these lines were written a senseless and wanton injury has been done to the cave and its contents. Some idle lads flung a quantity of stones through and over the grating which was erected to protect the cave. The stone with the incised Latin inscription was thrown down and broken in half, and some of the crosses were injured. Still the damage was not so great as it might have been, and a wire netting over the iron grating protects the interior from further injury, in addition to which it is satisfactory to record a strong feeling of indignation on the part of the local population against the perpetrators of the mischief.
of about 8 feet is what has now been accomplished after six days' labour, with results which are in the highest degree interesting.

Four successive layers of débris, bearing evidence of as many successive falls of earth and rocks and of intermediate human occupation, have been traced. Of these the uppermost or surface layer contained traces of recent visits by picnic parties, kelp burners, smugglers, and others.

Two feet below this appeared another line of deposit, and it was in this stratum that the most important relic was discovered, namely, a flag of exceedingly hard Silurian sandstone, 2½ feet long by 1 foot broad, richly carved over the entire surface of one face with an intricate interlaced design of Celtic character, forming the head and part of the shaft of a disc-headed cross (fig. 1). The lower extremity of the shaft, which had most unfortunately been broken by the fall of a large fragment of rock which lay above it, is occupied by a panel bearing an inscription in Runic characters. The greater part of the inscription is lost, only five letters remaining. A careful rubbing has been submitted to Professor George Stephens, who reads it as follows:—
PRFMT

wrote = wrought, worked, made.

"Thus," he says, "supposing only one line of runes, some such common formula, in stave-rime, as

(after Warinæ Wulfstan) wrote."

Of course the names he inserts are entirely hypothetical, supplied to show the position of the predicate of the verb which remains.

He pronounces his opinion that this grave-pillar may be not later than the sixth century (St Ninian preached in the latter part of the fourth and first thirty years of the fifth), and that the inscription is in Old North English or Northumbrian.

Near the cross lay a spindle-whorl of slaty stone, the perforation of which was not chipped, but drilled, presumably by a metal tool; while under the cross, and scattered through the soil in its vicinity, were the remains of at least three human skeletons. From the irregular manner in which they were found, it is not possible to say that they were all in the same layer of earth as the cross; some may have belonged to the lower areas of occupation.

The following is the report of Professor Cleland, of Glasgow University, to whom the bones were submitted for examination:

"Bones of Children.—There are several fragments of calvarium, among them two specimens of the same portion of the upper element of the occipital; greater part of a sphenoid with the great wing ossified to the body and obviously a year or more old; two ribs, a shaft of a left femur, and two shafts of tibiae, right and left, but the right nearly three quarters of an inch longer than the left. Obviously there are bones here belonging to two children, probably in their second year.

"Adult Human Bones.—These, like the tibia formerly found,\(^1\) have belonged to an elderly person. They are a left calcaneum, the metatarsals of the great toe of the left foot, and the second metatarsal of a right foot. The calcaneum is 3·25 inches long, the first metatarsal 2·6 inches long, and the second metatarsal 3·1 inches long. An articulated foot with first and second metatarsals of precisely corresponding length, and the calcaneum 3·45 inches long, measures in total length 9·25 inches, and would probably have measured about 10 inches

\(^1\) The Professor refers to a tibia (highly platycnemic) which was found in St Medan's Cave in 1885, on the opposite side of the Bay of Luce to St Ninian's Cave.
with the integuments on; and I should think these bones have belonged to a foot of that length.

"But the calcaneum of this articulated foot, like all the other calcanea which I have looked at, has very different proportions, as may be seen by comparing the breadth at different places.

<table>
<thead>
<tr>
<th></th>
<th>Ancient Calcaneum</th>
<th>Modern Calcaneum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greatest breadth of tuberosity,</td>
<td>1.1</td>
<td>1.5</td>
</tr>
<tr>
<td>Breadth at narrowest part of shaft,</td>
<td>0.8</td>
<td>1.1</td>
</tr>
<tr>
<td>Height of tuberosity,</td>
<td>1.45</td>
<td>1.85</td>
</tr>
</tbody>
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"It will be seen that the calcaneum from the cave is remarkably slender for its length; this strengthens my conviction that the platycnemic tibia formerly examined belonged to a race lightly made and swift of foot."

The next lower level of occupation, about 4 feet below the surface, was covered, over an area of about 18 feet by 10, with a layer, from 1 to 2 inches thick, of compressed wood ash and cinder, containing great quantities of limpet, whelk, and periwinkle shells, as well as numbers of broken bones, and some portions of red-deer's antlers.

Finally, 2 feet or more further down, at an average depth of 6 feet below the surface, lay another distinct stratum of ashes, shells, and bones, similar to the last. The bones were reported on by Professor Cleland, who detected those of the horse, the ox, the dog, the sheep, and what appears to be part of a fallow-deer's antler.

The excavation was not carried to a lower depth. The original cavern floor was not reached. It would probably be found to consist of water-worn pebbles of the old 25-foot beach.

In connection with the interesting discovery of a Runic inscription in this cave, another may be noticed found during 1885 on the side of a disc-headed cross in the churchyard of the Priory of Whithorn, distant about three miles from the cave. It is the first inscription in runes recorded from Galloway, that exhumed from the cave the second.

Unfortunately it also is mutilated, this time not by accident, but by design of a blundering stone-hewer, who is said to have tooled off the greater part of the inscription in shaping the cross to the decorous proportions of a modern headstone. Six letters only remain, judged by Professor Stephens to stand thus:---

\[ T \ldots \text{FERP} \ldots \]
"The formula," says the Professor, "would seem to have been somewhat like

The I after the T is gone, and the next stave has doubtless been T (L).
The not uncommon name (meaning Good-Peace) is found in the oldest documents, spelt variously Tilfríð, Tilfríðs, Tilfrith, Tilferd, Tilferð, Tilferð, &c.

"Sette, sete, &c. = set, set up, raised, is a common formula. Date not earlier than sixth century."