

ART. XXXVIII.—*The Roman Fort on Hardknott known as Hardknott Castle.*

By the Rev. W. S. CALVERLEY, F.S.A.

THE work done at Hardknott in 1893-1894 revealed some features of considerable interest, but ultimately we were driven from the camp by storms of so prolonged a character that I, who remained in the district a few days longer for the purpose of taking levels and measurements with a view to making accurate drawings, was obliged to return home, wishing for "better luck next time." Not being able to choose one's time agreeably with the arrangements of the elements the "better luck" has been deferred, for on three occasions we have expended much labour in clearing interesting features for exposure to the photographic lens and each time have been unable to secure photographs. Mr. Fletcher and myself have several times stayed behind after the men have been sent home, to try another day's luck with the camera, but to no purpose. A fortnight ago I made for Hardknott, staying the night at Seascale to be in readiness for a good day's work on the morrow. An unexpected snowstorm made it quite useless to proceed.

It is desirable that certain exposed portions of the excavations should be protected by being covered over again, and this can be done by the same labour which will assist in discovering the details of the adjoining structures. This is especially the case outside the camp on the south side where the round building, the bath, and the stoke-hole are in danger of being entirely destroyed. These buildings owe their preservation greatly to the fact of their having been built in a hollow place on the mountain

tain side, which made it necessary to cut a channel some three feet deep through the solid rock to let away the water—the channel was cemented on the bottom and at the sides, a leaden pipe laid along the bottom and towards the west side carried away the water—but when ruin came upon the place the channel got choked up, and water and the rubbish of the ruins filled the hollow and buried the lower parts of the structure which remain even now, though successive generations of mountain dwellers have pilfered the ruins, taking away the window glass of different colours, the sheet lead and lead piping (all save a battered piece, less than a foot long, which we found in the deepest part of the rock-cutting,) the bricks and the tiles, and the freestone jambs and coigns, even to the sandstone blocks of the pilæ of the hypocaust. Had these buildings been erected on an open space (and so near the road) as were more extensive buildings further eastward—remains of the foundations of whose flues we found upon the flat ground formed by the tipplings from the deep fosse on the east side of the camp—no doubt every stone and every brick would have been removed ages ago. A dalesman, Robert Dixon, aged 64 years, employed with our gang, had, many years ago, helped to take down one of the ancient homesteads with its out-buildings at Spothow, no great distance down the dale, and finding many red bricks in the walling it had been a matter of speculation with him and his companions as to whence they came. When Dixon unexpectedly saw the like bricks upon Hardknott whilst working for us, his riddle was satisfactorily solved much to his surprise, as he explained to us, who were equally surprised to receive this unlooked for evidence of the use made of the ruins by the old inhabitants.

The camp was originally laid out in such a manner as to take advantage of certain knotts and rocky knolls which have been made to flank the gateways and otherwise

wise to aid in the defences. One such piece of rock appears to the south of the western gate, within the camp, and between it and the tower at the south-west corner, and at some distance from the outer wall a foundation of great cobbles has been built up leaving a gangway between it and the wall at a much lower level than that of the camp area within. We cleared a space between the wall and the cobble bank, or foundation, and found earthenware and iron fragments on the old floor level, but whether there has been a platform for ballistæ or other purposes above or not we could not prove. Foundations apparently continued at some little distance from the inner corner of the south-western tower in a parallel line with the outer wall to within a few feet of the south gate, at which place the rock again appeared. We cleared away debris and found that the roadway from the central camp buildings had been lowered sufficiently to pass under the archway of the south gate and so that the men could pass round the battlements and above the gateway upon the same level as that of the adjacent parapet. The same seemed to apply to the western gateway. A doorway was opened out in the central buildings. The great double building near the east gate was with great labour nearly half cleared, a vast mass of hammered stone having to be lifted out and wheeled away. The western half when empty shewed a good specimen of walling. A doorway had led into it at the south end. The walls had been plastered with light-coloured plaster. One or two pieces of red sandstone had been built into the walls. There were no traces of timbers having rested on the dwarf wall which appeared to have run down the centre. The eastern half of the building had a doorway—most distinctly seen—at the north end and a paved causeway appeared outside. To the north of this, building foundations, terribly ruined, of some sort of heating apparatus were discovered, and we were in hopes that we had come upon that which would  
reveal

reveal the whole secret to us. There were flues running parallel to one another, with a larger cross flue like the bars of a gridiron, and at a higher level something like a ruined hearth. On the lower ground the ashes and refuse of the fires filled the hollow for a great space. We did not find any connection between these flues and the space between the inner walls of the double building, though such connection may yet be found. On the north side of all these buildings, and right through the camp we cut a trench to carry away the water, for the natural course for the water of this part lay here before the camp was planned. When the builders dug the fosse and built the wall they dammed up the shallow watercourse and turned it into the fosse—the site of their little bridge over it for the road to the parade ground may yet be seen. Somebody has potted about the foundations of the wall until the water has found out its old way, and we were obliged to dig a trench to carry it off. In digging this trench we cut through several foundations, some patches of concrete, the red ashes of a furnace and the lower parts of its foundations. The flues were built of small stones, levelled as though to receive some cover or weight; they were full of charcoal and ashes, and crossed each other at right angles. The great amount of ash debris lying in the hollow close by could never have been produced by these flues alone. There seems to be little doubt that we have found the site of the camp kitchen, but it is in such a ruined condition that it presents only a puzzle at the present moment. Amongst the ash refuse we found a part of a hone with a hole drilled through the end of it, and a rib bone which had been cut (by the knife sharpened on the hone) a bead, a piece of fine glass, and a few pieces of iron and pottery, but we were not searching for these things so much as for structural details. I hope to make another attack as soon as fine weather comes, and if we cannot procure photographs, we must have reliable drawings.