PEN CAER HELEN, CARNARVONSHIRE.

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On the left bank of the river Conway, about seven miles above the town of the same name and in the parish of Llanbedr, is a remarkable hill fort which has already attracted some notice, and has been described by Mr. Blight in the Archæologia Cambrensis for July, 1867. As, however, the plan which he there gives does not very nearly correspond with my own recollections and with the plan which I possess, it may still be worth while to give a brief description of certainly one of the most remarkable relics of Ancient Wales.

The fort Pen Caer Helen occupies the summit of a rocky ridge, running approximately east and west, which is connected by a col or depression with the loftier and more pointed summit of Pen-y-Gader. The north-eastern face of this ridge—called Pen-y-Gaer on the Ordnance map—is very broken and precipitous; the south-eastern, though not quite so steep, is also practically inaccessible. The slope of the south-western face is variable, but is on the whole much less steep than on the north, while on the west it is comparatively gentle, becoming more abrupt as it trends northward.

The situation of the fort is admirably chosen. From the narrow slaty ridge which rises some thirty feet above the principal wall of circumvallation, one now looks northward over an undulating district of arable land, over the rich valley of the Conway, and the parallel depressions occupied by the streams of Ro and Gyffin, to the estuary and the open sea. In the distance the Great Ormeshead rises beyond the ridges of Diganwy and of the Little Orme. Turning eastward we glance along the level floor of the Conway valley towards Llanrwst, into the hills beyond the Clwyd, rising over the

PLAN OF PEN-CAER-HELEN, CARNARVONSHIRE.
FROM SURVEYS BY MR W. A. BONNEY, C.E.
further bank of that river. To the south and south-west is a
dark mass of mountains, chief of which is Carnedd Llewelyn,
towering above a gloomy combe; to the west and north-west
lie the bare slopes of Y-Foel-Fras and the bleak valley
leading to Bwlch-y-Ddenfaen.

The defences of this strong and commanding natural posi-
tion also show remarkable skill. They consist of a single
wall of circumvallation, running along the edge of the preci-
pices on the eastern half of the hill, with elaborate outworks
to protect the more accessible parts. These outworks vary
according to the nature of the ground. The slope of the
north-western side being, as has been said, still steep, a
slight outer wall, running along some distance below the
main *enceinte*, has been judged a sufficient defence. This
outwork gradually approaches the latter as it proceeds east-
ward, but the exact point of junction has been obscured by a
modern wall (see plan), which, however, may very probably
follow the ancient line. The outwork on the west abuts on a
mass of buildings (*a*) to be hereafter described. Passing these
we find ourselves opposite to the main entrance (which looks
west, in the direction of the least slope). This is very elabo-
rately defended. Approaching from the west, we find a low,
natural ridge or scarp of rock, forming a slight step on the
hillside. This leads to a gently sloping plateau, perhaps
fifty feet across, which is bounded on the right by the end
of a steep rocky projection, in the line of the main ridge.
The plateau narrows towards the north-west until the bound-
ing scarp is lost in the steep hillside. This plateau is thickly
studded with upright stones, varying in height from about
2½ feet to a few inches, the smaller being very sharp and
pointed. I suspect that this form of the stockade is inten-
tional. An assailant would be impeded by the larger stones,
which are not quite broad enough to give any real cover,
and while avoiding these would be tripped up, and in fall-
ing "staked" by the unnoticed stone "calthrops" so thickly
set around them. The material is a splinterly slate which
appears *in situ* in the ridge. The only part of the plateau
which is not thus "staked" is a narrow belt just above the
scarp, so that assailants, who did not choose to charge
through the stockade, were obliged to pass round it.² From

² Mr. Blight gives a view of one these approaches, Archæol. Camb., vol. xiii.,
remarkable stockades, which serve, as he observes, as outworks to the two
Third Series, p. 278.
the rocky spur just named a bank runs along, above the stockaded plateau, as far as the scarp. The path, after rounding this plateau, turns sharply back and runs below this bank towards the spur for some distance, until it reaches an entrance, by which it gains a second somewhat level space. To the right and left of the path are low walls, the former connected with the spur, the latter with a projection from the buildings already mentioned. This space terminates by rising into a bank or scarp about ten feet high, up which the path ascends diagonally. Another step is now reached, on the lower part of which are the buildings, and then the ground rises rapidly towards the main wall; the path turns to the right and mounts diagonally towards the principal entrance of the fort. On each side of this the wall, which is throughout of dry masonry, now much ruined, widens out so as to form two rudimentary bastions or gateway towers, which rise to a height of about a dozen feet, and appears to be provided with banquets part way up the outer slope, on which probably defenders would be posted, under the protection of a stockade or breastwork, some traces of which may still be discerned. As usual, the passage between the walls does not look along the approach, but makes a considerable angle with it; so that the rush of an attacking party would necessarily be checked at the gate. The southern bastion rests upon the above-named rocky spur, which is naturally rather difficult of access, and probably was further protected by stockades or by other defences, of which the wall, mentioned above as on the right of the path, formed a part. Within the main wall, on each side of the principal gateway, are two ruined groups of small chambers, the northern (b) consisting of three, the southern (c) of two. The walls of the former—which are the more perfect—are still about three feet high, and the inmost chamber is so small that perhaps it may have been only a fireplace. It opens northward into the second chamber.

The group of buildings (a), already mentioned, on the outside, has walls of dry masonry four or five feet in height. As some of the smaller chambers are entered by doors only half that height, they must have served as sheepfolds, and may very likely be much more modern than the fort itself. Within the enceinte are several cyttiau or hut-circles, as shown in the plan, sheltered between it and the rocky
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crest. The other entrance is in the south-western face. This, although not very far from the main one, being on the southern side of the rocky prolongation of the main ridge, practically gives approach from the southern slopes, as the other does from the northern and western. Here also we find an elaborate system of defences, consisting of another stone stockade, bounded on the upper side by a slight wall or mound. This is merely the outer lip of a ditch, which is cut in the shelving hillside; consequently, the opposite or inner side, above which is a low wall, forms a formidable barrier. Passing through this, we cross diagonally a sort of banquette, and then reach the entrance in the main wall. Mr. Blight's plan has a ditch bounding the outside of the stone stockade, which does not appear in the annexed plan. As our time was running short when we were at this part of our work, it is very probable that I omitted to mark it; indeed, I seem to remember that a slight scarp bounded the stockade, resembling that which I have described at the other group, to which, however, I should not apply the term ditch. He does not prolong the second stockade so far to the west as in our plan. Here also, for the above reasons, it is possible that we may have gone wrong. The principal difference between our plans is in the form of the main enceinte, and here I think he must be in error. The one which I give corresponds much more nearly with my recollections. I am indebted for it to my brother, Mr. W. A. Bonney, C.E., who carefully surveyed and plotted the principal enclosure, while I made sketches, notes, and sketch-plans of various details. I cannot vouch for the perfect accuracy of every minute point in the approaches to the western gate, though I think that I may for the general; their very complex nature, which I have already endeavoured to describe, rendering it most difficult for me to make a sketch-plan of them, and want of time preventing me from placing them in my brother's more skilful hands. Our difficulties were increased by the wind, which at times blew a violent gale. Still, although this description possibly leaves much to be desired, and may perhaps be corrected by future observers, it may be worth publication, as being more elaborate than Mr. Blight's plan. This, however, shews two circles near together, about seventy yards from, and almost due north of, the main entrance: these I did not observe.
One is naturally led to compare Pen Caer Helen with the Firbolg fortress of Dun Ængus in the Isle of Aran, in Ireland, described by Professor C. C. Babington in the Archæologia Cambrensis for January, 1858; that, however, is in all respects on a much more gigantic scale. Still those who carefully examine the remains of Pen Caer Helen will feel no little respect for the ability of its builders. Probably it was not so much intended for a permanent abode as for an occasional camp of refuge, and commonly would be only tenanted by a small band of sentinels. Such was, I believe, the use of many of the more commanding hill fortresses in Wales, Herefordshire, Wiltshire, and indeed in most parts of England; in not a few cases, as at Martinsell, near Marlborough, the camp near Everley, Wils, Pen-y-Dinas, near Barmouth, &c., distinct traces of the adjacent village may be seen on lower and less exposed sites. Such was the use of the Refugia of the ancient Helvetii, which remarkably resemble some of our slighter British earthworks and have been lately described by Dr. Keller. The abundance of cairns, meini-hirion, and other remains over all the district of Carnarvonshire, between the Carnedd Llewelyn chain and the sea, would lead us to suppose that Pen Caer Helen may have been one of a system of defences, among which were the forts on Penmaen Mawr and on the Conway mountain, perhaps also those on Diganwy and the Great Ormeshead. The age of this fortress is mere guesswork, but the presence of a Roman camp at Caerhun in the valley below would lead us to suspect that, as for instance at Caer Sws, the site of the station was determined by the neighbourhood of the fort; and consequently that the latter was the older. Mr. Blight is also inclined to assign a very early date to Pen Caer Helen, suggesting that perhaps it should be attributed to the Gael rather than to the Cymry. This question I must leave for decision to judges more competent than myself.

6 Mittheilungen der Antiq. Gesells. in Zurich, xvi. 2, 3.
8 An examination of the Ordnance map of Wales will, I think, also show that these and the numerous other forts in the country commonly guard either the accesses to the hills or extensive upland pastures.