

Notes.

THE BOWSEY HILL GRAVELS.

The Parkwood Estate near Henley-on-Thames, offered for sale recently included a spot of considerable scientific interest as being the site of a deposit almost unique among the geological formations of Berkshire or of the Thames Valley. At the top of Bowsey Hill, at a level of nearly 460 feet above ordnance datum, close to the footpath leading down through the woods to Warren Row, may be seen the over-grown workings where gravel has been dug for ages past to provide material for the roads and footpaths on the higher parts of the hill. Whenever a section is exposed the gravel is seen to consist mainly of small pebbles, and long ago in his pre-geological days while enjoying picnics in the woods the present writer remembers that he imagined it to be the relic of an ancient sea beach, as it was so different from the gravels down in the valley and had more the appearance of the shingle on the shores of the present seas. Since then it has attracted the attention of several eminent geologists, who have described the beds and speculated on their age and manner of formation.

The late Sir Joseph Prestwich thought it might have been part of the bed of a sea which opened out to the north-east over Suffolk at some period between the close of the Bagshot beds and the beginning of the excavation of the Thames Valley. Others, notably Mr. Osborne White, who has devoted a great deal of attention to the subject, consider that it was a river deposit belonging to a very early stage in that process. Mr. White has remarked that at the time the gravel was laid down this part of the Thames Valley was, as it always has been, a centre of deposition of drift brought down by the Thames, the Kennet and the Loddon, all of which rivers had contributed to its accumulation. He goes on to say that the gravel consists essentially of pebbles of flint and of white vein-quartz, with which are associated a variable proportion of subangular flints, together with pebbles of lydian stone, quartzite and other rocks foreign to the district, all of small size.

In the year 1919 the locality was visited by a party of members of the Geologists Association of London, and the following is an extract from the report of the excursion :—" By permission of Sir Charles Henry, M.P., the ascent of Bowsey was made through the grounds of Park Wood. Unfortunately the gravel on the summit was found to be not very well exposed. However, some small excavations had kindly been left for our benefit by Mr. Doe, the Steward of the estate, and these showed the deposit to vary considerably within the distances. In the coarser parts the draining was obscure and the material mainly flint pebbles while in the finer sections it was distinctly bedded and composed of small quartz pebbles and clean sand. Other varieties of rock observed were pieces of fossiliferous chert, probably of carboniferous age, and pebbles of brown quartzite up to four inches in diameter, some of which were of the dreikanter type. The gravel appears to rest on some thickness of sand which intervenes between it and the London clay and hold up a supply of water sufficient for the needs of several cottages, and is in winter capable of starting several small streams down the hillside."

As one stands here on a clear day and looks westward up the Thames Valley with the town of Reading in the middle distance it is difficult to realise that since these beds were deposited the whole of the vast expanse of country in front has been lowered from 200 to 300 feet by means of river action, while the Bowsey Hill gravel has remained unworked. Although the beds are largely worked out there are some patches still remaining undisturbed, and it is to be hoped that the property will fall into the hands of a purchaser with scientific sympathies who will continue to give geological facilities for studying this remarkable deposit.

L.I.T.