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## EXCURSION TO THE EAST LONDON WATERWORKS, TOTTENHAM.

SATURDAY, APRIL 20TH, 1901.

*Director*: THE PRESIDENT (W. WHITAKER, B.A., F.R.S., F.G.S.).

*Excursion Secretary*: H. W. MONCKTON, F.G.S.

(*Report by* H. W. MONCKTON.)

THE party left Liverpool Street Station by the 2.47 p.m. train, arriving at Tottenham Hale at 3.1. They at once made their way to the entrance to the works in the Woodford Road, where, through the kindness of Mr. W. B. Bryan, the engineer, and Messrs. S. Pearson and Son, a special engine and carriages had been provided. Before starting, the President described the extent of the works. A break was made in the journey, in order to enable the members to see the relics found during the course of the excavations. These were not very numerous, offering a marked contrast to what had been found in former excavations; but this without doubt arises from the use of the "steam digger, or navvy," which the members had an opportunity of seeing at work; in fact, practically everything found has been found during hand digging. The most important find is a fine example of a "dug out," made from the trunk of a large oak. This was found near a stream, which was diverted during the work. Though usually considered to be of pre-Roman age, yet it is worthy of note that at the same level, and only a few feet away, the neck and upper part of a Roman Amphora was also discovered. The other relics comprised a Saxon spear head, two wooden implements, probably pile-drivers or mallets, two human skulls, an antler of red deer, bones of *Bos longifrons*, horse and sheep, fragments of a Viking ship (the bulk of which had been taken away piecemeal by the inhabitants of the neighbourhood), with other objects of Roman, mediæval and modern age. An article in iron, which had puzzled the experts, was clearly shown to be a scraper. The party then partook of tea and light refreshment, which had been most kindly provided by Mr. C. W. Sharrock.

On entraining the party were conveyed to Chingford Mills, the intake of the works, and thence to the most interesting sections, where the members alighted. The sections seen varied greatly, a characteristic of all alluvial deposits, but the sequence was, broadly speaking, about 10 feet of peaty alluvium resting on gravel. In places the alluvium was seen to contain lenticular

patches of shell marl, whilst in one place the gravel itself contained similar shells, thus clearly proving its Holocene age. Underlying the blackish-grey gravel is another bed of red gravel, seen in a few trial holes, and probably of Pleistocene age. Many of the members availed themselves of the opportunity to collect from the shell marl, whilst the bones of horse, sheep, red deer, pig, *Bos longifrons*, and dog or wolf, were also obtained. In former excavations the remains of elk, bison, *Bos primigenius*, fox, goat, beaver, roedeer, fallow deer, reindeer, and great Irish deer, have also been found, besides a single bone of the sea eagle (*Haliaetus albicellus*). No less than fifty-two species of mollusca have been described from these beds, of which the most interesting is *Acanthinula* (*Helix*) *lamellata*, a species not known living south of Staffordshire. The fish and the smaller vertebrates are practically unknown. Numerous photographs were taken of the sections, and the party then walked to the Ferryboat Inn, where an excellent tea was provided.

After tea the President moved that a cordial vote of thanks be given to Mr. W. B. Bryan and Mr. Ashley, of the East London Waterworks, and to Mr. C. W. Sharrock and Mr. Traill, for their great kindness during the excursion; this was carried by acclamation, and the party then returned to town.

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#### EXCURSION TO GROVE PARK AND CHISELHURST.

SATURDAY, APRIL 27TH, 1901.

*Director*: T. V. HOLMES, F.G.S.

*Excursion Secretary*: H. W. MONCKTON, F.G.S.

(*Report by THE DIRECTOR.*)

THE object of this excursion, as in the case of that on July 28th, 1900, was to see the sections displayed during the widening of the S.E.R. main line.

The sections in the cutting north of the tunnel were, on the whole, in as good a condition as they had been when last year's excursion took place, and the description of them then given will suffice for the more recent visit. But this year we were fortunate enough to have with us Mr. C. W. Osman, who, in addition to