EXCURSION TO MAIDSTONE.

JULY 11TH, 1880.

Director :—PROF. J. MORRIS, M.A., F.G.S.*(Report by THE DIRECTOR.)*

On arriving at Maidstone, the party, accompanied by Mr. Bensted and Mr. Adams, of Maidstone, and by the Curator, visited the Museum, and inspected the series of interesting fossils and antiquities, illustrative of the palæontology and archæology of the country, which give a special value to the Maidstone Museum. Many of the specimens had been collected by the late Mr. Bensted, F.G.S., an old Member and good friend of the Geologist's Association, from the immediate neighbourhood of the county town.

The Museum also contains a collection of Mammalian remains from the well-known Post-Pliocene Gravel pits of Aylesford, subsequently visited by the party. After having been liberally regaled with refreshments, the visitors left the Museum, and made their way to the "Iguanodon quarry," so-called from the circumstance of a considerable part of the remains of that reptile having been found here in 1834. These remains now form a prominent feature in the Mamtellian collection of fossils at the British Museum. The Director especially pointed out the fissures filled with sandy loam at this high level above the Medway, from which remains of *Elephas* and other vertebrate animals had formerly been obtained, and which had been described by him in the "Magazine of Natural History" for 1836, p. 593. Associated with these are three species of shells, which are also found in the Loess of the Rhine, viz., *Succinea oblonga*, *Pupa muscorum*, and *Helix plebeia*.

The Preston Hill quarries, about two miles to the north, were next visited. Here Prof. Morris, under adverse meteorological conditions, gave a general sketch of the stratigraphical position of the beds displayed. Some of the common fossils of this portion of the Lower Greensand were seen, and specimens obtained by members of the party. Leaving these fine quarries of the Kentish Rag, the Members proceeded to the Aylesford pits. An interesting explanation was given by the Director of the relation of these beds to the other Post-Pliocene deposits of the Maidstone Valley. The gravel consists of pebbles, derived from rocks which occur in the drainage area of the Medway, and although no shells have been

obtained, remains of the Elephant and Rhinoceros had been frequently found. Some specimens of these were seen in the quarry, and many are now deposited in the Museum. Although the weather was not all that could be desired, the party had been highly interested, and, after a repast at Aylesford, returned from that station to London.

EXCURSION TO LEITH HILL AND DORKING.

SATURDAY, JULY 24TH, 1880.

Directors :—REV. A. IRVING, B.A., B.Sc., F.G.S., and A. C. MAYBURY, D.Sc., M.R.C.S., F.G.S.

(*Report by DR. MAYBURY*).

The Members of the Association left Victoria Station, by the 1 p.m. train, for the last short excursion of the season, the object being to traverse the district from Ockley to Dorking. Prof. Rupert Jones, F.R.S., President of the Association, a pleasing and valuable accession, joined the ranks at Dorking.

The Members of the Geologists' Association have often visited districts similar, stratigraphically and physically, to the one in question, so that the following memoranda must be taken as indicating the *chief* points which were brought out by the Directors. On leaving the train at Ockley—where Mr. H. Hawkings, F.G.S., of the Geological Survey, who has recently been engaged in mapping the superficial deposits of the district joined the party—the brickyards near the station were inspected. The Weald Clay, here exposed, had its usual characters—stiff, blue, and weathering red from the peroxidation of its iron. In it were intercalated Weald Sands, forming a local lenticular mass; they are very finely laminated, and are interstratified here and there with thin bands of clay. The existence of the clay beneath the Weald Sands was indicated by the occurrence of water at the base of the section. The strike of the rocks is here E. and W., and the dip is to the N., at an angle of 2° or 3°. In passing, from this the first pit, in an easterly direction, to the second, Weald Clay of older date was passed over, so that one stood here on the clay which underlies the sandstone in the first section. No fossils, with the exception of some carbonized wood, have been found here, though in the