

EXCURSION TO THE CRYSTAL PALACE.

APRIL 6TH, 1878.

Director.—Professor J. MORRIS, F.G.S., &c.

This excursion was intended to afford Members an opportunity of inspecting those objects of geological interest which have been placed in the Palace and grounds for educational purposes.

Commencing with the interior of the building, the Director pointed out the specimens of fuel, such as peat, lignite, and various kinds of coal—the bitumenous, cannel, and anthracite—and explained the origin and special uses of each. Many of the products of carbonaceous substances and of the distillation of carbon compounds were also brought under notice. Collections of flint implements, both of pre-historic and of recent age, next claimed the attention of Members, and subsequently sections showing the geological structure of the London Tertiary Basin.

Passing out into the grounds, the party proceeded to the large and very accurate model of a coal-field, near the lake, showing the position of the coal seams and the dip of the various strata of sandstones, limestones, grits, clays, and shales—the rocks themselves having been brought from Carboniferous formations in Yorkshire and Derbyshire. In the Carboniferous Limestone there are fissures filled with spar and mineral veins, and one of the fissures opens into a cavern, so characteristic of this formation. The Devonian is also seen underlying the Carboniferous Series, and above them are beds of the Permian horizontal, and, therefore, unconformable to those below, which all incline to the north. Illustrations of faults are also given.

The lake was next visited, where illustrations are given of cliffs, shores, and islands; and inhabiting these are life-size models of various forms of extinct animals, beginning with the Labyrinthodon and Dicynodon of the Permian and Trias; the Ichthyosaurus, Plesiosaurus, and Teleosaurus of the Lias; the Megalosaurus of the Oolite; the Iguanodons and Hyalosaurus of the Wealden; and the Mososaurus and Pterodactyles of the Cretaceous period. There are also to be seen models of some of the extinct Mammalia of the Tertiary period—*Palæotherium*, *Anoplotherium commune*, and *A. gracile*—and of the Post-Tertiary, *Megatherium*, *Cervus* and *Megaceros Hibernicus*.

These restorations, which are well executed, were done under the superintendence of Professor Owen and Mr. Waterhouse Hawkins.