

reflections of blue, green, and red, and retaining an admirable lustre. At Glos, near Liseaux, in the Coral Rag, not only the *Ammonites*, but the *Trigonia* and *Avicula* have preserved all their brilliant nacre. Sometimes these remains are much changed, the organic matter having entirely disappeared; it sometimes happens also, though rarely, that they become petrified, that is to say, the external form is preserved, but the original organic elements have wholly disappeared, and have been replaced by foreign mineral substances—generally by silica or by carbonate of lime.

Geology also enables us to draw very important conclusions from

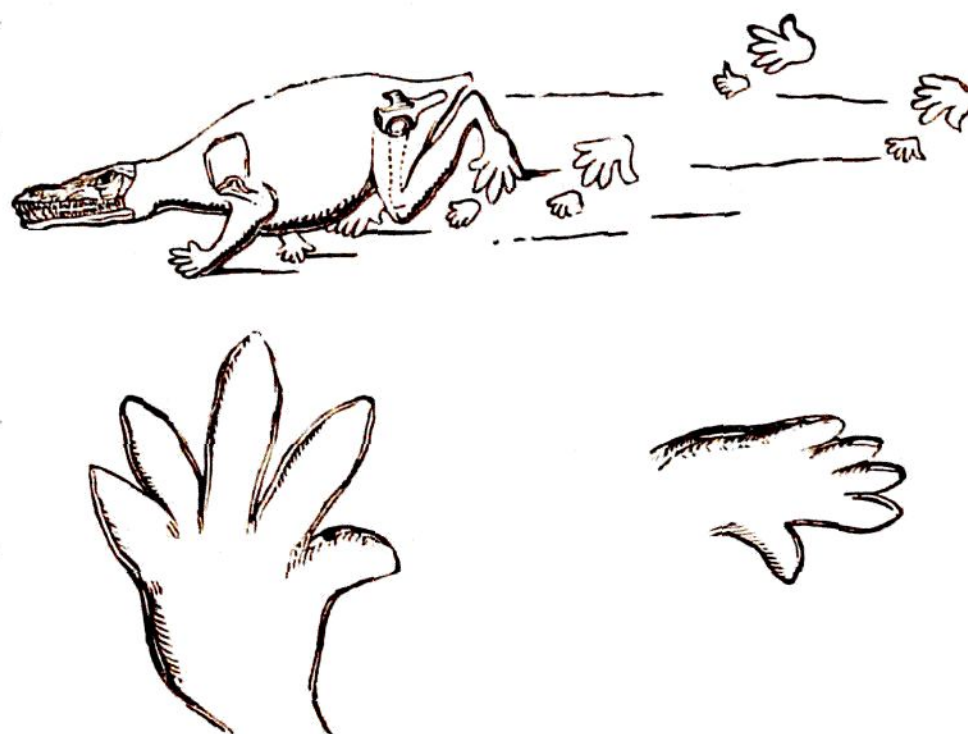


Fig. 1.—*Labyrinthodon pachygnathus* and footmarks.

certain fossil remains whose true nature was long misunderstood, and which, under the name of *coprolites*, had given rise to much controversial discussion. Coprolites are the petrified excrements of extinct fossil animals. The study of these singular remains has thrown unexpected light on the habits and physiological organisation of some of the great antediluvian animals. Their examination has revealed the scales and teeth of fishes, thus enabling us to determine the kind of food in which the animals of the ancient world indulged: for example, the coprolites of the great marine reptile which bears the name of *Ichthyosaurus* contain the bones of other animals, together with the remains of the vertebræ, or of the phalanges (paddle-bones)