Much more interesting and satisfactory is Lamarck's fresh demonstration, from authentic and irrefragable evidence, of the long accepted truth that the sea has once covered many parts of the surface of the globe from which it has long disappeared. This evidence rests on the occurrence of organic remains, and in dealing with it he evidently feels himself at home with his subject, and launches warmly into its discussion. The term "fossil," as we have seen (p. 215), had been indiscriminately applied to any mineral substance dug out of the earth, but Lamarck now for the first time definitely restricts it to the "still recognisable remains of organised bodies."[1] After citing a number of examples of the occurrence of such remains in the heart of mountains, at great heights above the sea and in different widely separated parts of the globe, he proceeds to dwell on the importance of fossils as monuments that furnish one of the chief means of ascertaining the revolutions which our globe has undergone. He urges naturalists to study fossil shells, to compare them with their analogues in our present seas, to investigate carefully where each species is found, the banks formed of them, the different layers which these banks may display, and other associated features. He points out, as Lavoisier had done before him (p. 344), that among fossil shells some are pelagic and some littoral, and that they even occasionally include terrestrial and fluviatile forms. These last would, in his opinion, be much more numerous had not their greater fragility led to their being generally broken and destroyed before they could be washed into the sea.

[1] *Hydrogéologie*, p. 55.