rials, a single bed of peat (*p*), composed of the disintegrated portions of plants swept down from the land, or produced by vegetable growth on the spot. Above such a peat-layer it is usual to find in the middle parts of old lakes very fine marls, with or without shells, wholly unmixed with coarser sediments. This circumstance is commonly observed in many of the ancient lakes of Holderness, where, usually, the middle part of the lake-bed contains little or no coarse sand or gravel.

In these fine marls tubular passages, left by the roots of aquatic plants, frequently appear; and shells of fresh-water (or land) species commonly occur. Heads and horns, and sometimes entire skeletons of the red deer, the Irish elk, beaver, &c., are buried in the marls or peat, under circumstances which indicate in some cases the drifting of their dead bodies by water, and in others require the supposition that the animals had entered the lake through choice or fear, and been drowned and covered by sediments.

Certain fine layers, in freshwater lakes of Denmark, have been found by Dr. Forchhammer to be composed of the siliceous matter arising from the disintegration of the epidermis of some fresh water plants. Seeds of Chara occur in others; and it is probable that the calcareous substance of this plant has contributed not a little to the mass of *friable marls which lie in many lakes*.

On the coasts of Yorkshire and Lincolnshire, lacustrine deposits occur at many points, and present a considerable variety of circumstances as to level above or below the sea, sandy, marly, or peaty composition; but are always governed by the general condition, that they occupy small hollows on the surface of the diluvial accumulations. "All the lacustrine deposits containing peat, which I have inspected in Holderness, agree in this general fact, that the peat does not rest immediately upon the diluvial formation beneath, but is separated from it by at least one layer of sediment, which is