

What renders this curious case of *elective molecular attraction* the more decisive, is the fact that, in the same deposit, sulphuret of iron was found, but only *on the outside* of wood ; and, from the whole we learn that, just as in the chambers of ancient ammonites, and cells of the bones of saurians, the carbonate of lime has passed through shell, membrane, and bone, and penetrated precisely to those spots where it might seem most difficult for it to arrive, so, in the comparatively modern nuts and woods, the same substance has been similarly transferred to the interior parts, through solid matter ; while sulphuret of iron in both cases remains on the outside.

In this particular case, no reasonable doubt can exist (we conceive) that the peaty deposit, full of land mosses, hazel-bushes, and freshwater shells, was water-moved, and covered up by fine sediments from the river and the tide. In some of the old *lakes* of Holderness, the same mechanical explanation appears applicable : an example has been furnished (Waghen in Holderness), which shows on the same spot, first, the accumulation of violently agitated water (“*diluvium*”) ; then a deposit of fine clay, and several layers of peat and trees of different kinds ; and over all, the stumps of pines (Scotch fir), which seem to be in their place and attitude of growth.

On Chat Moss, near Manchester, and in other situations, the stumps of oak trees appear in the attitude of growth, though the *proof* of the trees having grown there is seldom completed by the actual tracing of the roots *laterally*, or, what is still more important, *downwards* in the clay. Dr. W. Smith has observed, in the deposits of trees in East Norfolk, differences according to the soil ; birches and alders on sand, and oak trees on an argillaceous bed.

In England, Wales, and Scotland, deposits of this nature, full of trees and vegetable reliquiæ of different kinds, abound much more on the sea coast, and in alluvial land which has been deposited within the ancient sea boundary, than elsewhere. Occasionally, it is true,