

rounded in water, while conglomerates leave no more doubt of the former action of agitated water, than the pebbles of a river bed, or the sea shore.

On the contrary, the unstratified rocks are mostly crystallised; that is to say, their constituent ingredients are symmetrically arranged and bounded by regular surfaces, meeting at definite angles: they are not such as in general to be separately soluble in water at any temperature; they never show any marks of arrangement such as might arise from suspension or drifting, nor any such proofs of mechanical action, as worn grains of sand, or pebbles of rock. But their composition is in the great mass, and in the nature of the constituent crystals, always analogous, and frequently identical with, the known effects of heat in the furnace of the chemist, or the subterranean laboratory of nature.

Finally, these two classes of rocks differ essentially in another most important respect, which, taken in conjunction with the preceding facts, is quite decisive of their difference of origin: the stratified rocks are generally stored with the reliquæ of plants and animals, even to a greater degree than modern marls, clays, and sands deposited from water; while the unstratified rocks contain none of these things, or if, by chance, a solitary shell has been found *amongst* such rocks, its inclusion is easily explained, just as by some accident volcanic scorix have been found to cover bones in Auvergne.

The animal remains found in the stratified rocks are chiefly marine, and nearly all aquatic; they occur, in many instances, under circumstances of position and relation which *prove* that they were often quietly buried or drifted by water from small distances, but sometimes worn to pebbles; just as from the deep and quiet sea we now dredge shells in complete preservation, their spines and ornaments perfect; while nearer the shore, worn shells, and under the cliffs, among the pebbles, are rolled and fragmented particles.

It is, therefore, impossible to doubt that the strati-