mer condition; and in many cases it does come to be dissolved and held in solution by the floods from which it had been abstracted.* There are enough, however, of these exuviæ preserved for economical necessities. The cast-off shells accumulate; by the action of the elements they are kneaded into limestone, and in the

* Much of our limestone was once dissolved in the waters, and subsequently separated by numerous aquatic animals, and converted into the solid supporting or protecting parts of their frame. In this respect there is a close analogy between the formation of carbonaceous and calcareous substances. They exist in solution in the air or water, and their accumulation in stratified masses is not, as is the case with other strata, merely an inorganic process, but vital action is as essential to the result as gravitation, chemistry, or the transporting power of water. It is, in this point of view, interesting to trace the history of a piece of crystalline limestone. In the vicinity, it may be, of some trap or granite vein, we find a bit of marble, containing, it may be, crystals of granite, and we find that this marble is a continuous portion of a stratum which, in other places, abounds in shells and corals. With these data, we may look back to a period when the calcareous matter which existed in the ocean was afterwards separated by shell-fish and zoophytes, and converted into shells and corals. After this accumulation of calcareous matter was formed, it was acted on by heat from some igneous rocks; the mechanical aggregation of the calcareous particles disappeared, the organic forms became obliterated, and now we find a mass of crystalline limestone, containing simple minerals instead of extinct shells. S.