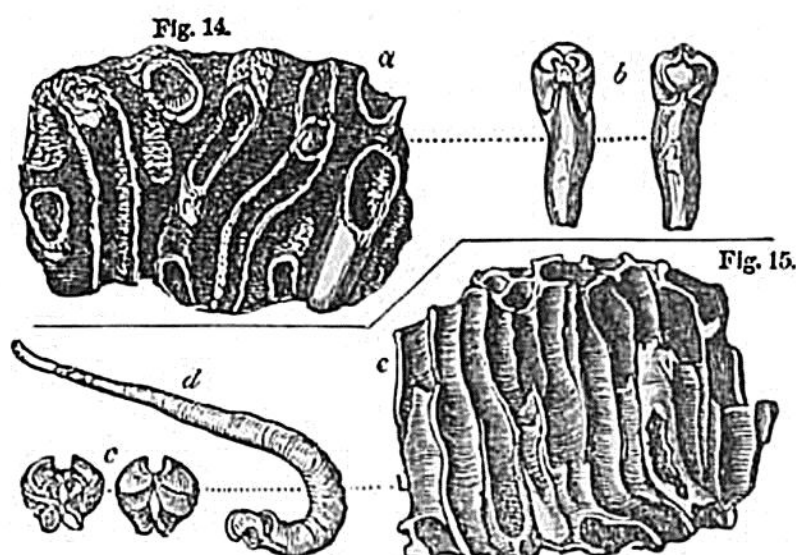


manner, a piece of fossil wood (*a*, fig. 14) has been perforated by an animal of a kindred but extinct genus, called *Teredina* by Lamarck. The calcareous tube of this mollusk was united and as it were soldered



Fossil and recent wood drilled by perforating Mollusca.

Fig. 14. *a*. Fossil wood from London clay, bored by *Teredina*.

*b*. Shell and tube of *Teredina personata*, the right-hand figure the ventral, the left the dorsal view.

Fig. 15. *c*. Recent wood bored by *Teredo*.

*d*. Shell and tube of *Teredo navalis*, from the same.

*e*. Anterior and posterior view of the valves of same detached from the tube.

on to the valves of the shell (*b*), which therefore cannot be detached from the tube, like the valves of the recent *Teredo*. The wood in this fossil specimen is now converted into a stony mass, a mixture of clay and lime; but it must once have been buoyant and floating in the sea, when the *Teredinæ* lived upon it, perforating it in all directions. Again, before the infant colony settled upon the drift-wood, the branch of a tree must have been floated down to the sea by a river, uprooted, perhaps, by a flood, or torn off and cast into the waves by the wind: and thus our thoughts are carried back to a prior period, when the tree grew for years on dry land, enjoying a fit soil and climate.

It has been already remarked that there are rocks in the interior of continents, at various depths in the earth, and at great heights above the sea, almost entirely made up of the remains of zoophytes and testacea. Such masses may be compared to modern oyster-beds and coral reefs; and, like them, the rate of increase must have been extremely gradual. But there are a variety of stony deposits in the earth's crust, now proved to have been derived from plants and animals, of which the organic origin was not suspected until of late years, even by naturalists. Great surprise was therefore created by the recent discovery of Professor Ehrenberg of Berlin, that a certain kind of siliceous stone, called tripoli, was entirely composed of millions of the remains of organic beings, which the Prussian naturalist refers to microscopic Infusoria, but which most others now believe to be plants. They abound in freshwater lakes and ponds in England and other countries, and are termed Diatomaceæ by those naturalists who believe in their vegetable origin. The substance