

A still more remarkable fact is, that fermentation is, in most cases, the result of the growth of a fungus called the *yeast plant*, the *vinegar plant*, &c., or *torula cerevisiæ*. The cells of this plant multiply rapidly by the decomposition of the substances in a state of fermentation, and hence the evolution of carbonic acid. The cells of this yeast plant are from one twenty-four hundredth to one three thousandth of an inch in diameter. Whether the process of digestion in the animal stomach consists of the same process, does not yet seem to be determined; but there is certainly great similarity in the processes. Should digestion come into the same category, it would be indeed a marvellous development.

Crystallography and mineralogy might furnish abundant materials for my subject; but want of time compels me to pass them by; and I can only add a few things from geology — a science so abounding in marvels that a late popular writer denominates his work on that subject the *Wonders of Geology*.

A careful examination of all the rocks in the earth's crust, accessible to man, results in the conclusion, that the whole crust of the globe — at least several miles thick, and probably to its centre — has undergone an entire change, and most of the rocks several changes, since their creation. The unstratified rocks, which probably form the whole of the interior of the globe, have been melted, as all admit. The stratified class, lying above the unstratified, have been worn from the latter, and then deposited in water. Afterwards, they have been solidified by heat, and some of them so nearly melted as to become crystallized, constituting the metamorphic rocks. The loose materials now covering the surface have also been subsequently worn off by atmospheric and aqueous agencies, from whatever rocks were exposed. So that probably no particle in the earth has now the form in which it was origi-