

The entire consolidation would necessarily be a much slower process—one which, according to the received hypothesis, is very far from being completed at the present time; for it is estimated that the actual thickness of the earth's crust does not exceed thirty miles, while the mean radius or distance from the centre of the terrestrial sphere, approaches 4,000 miles, the mean diameter being 7,912.409 miles; so that the portion of our planet, supposed to be solidified, represents only a very small fraction of its total mass.

We say thirtymiles, for such is the ordinary estimated thickness of the earth's crust, usually admitted by savants; and the following is the process by which this result has been obtained.

We know that the temperature of the earth increases one degree Centigrade for every hundred feet of descent. This result

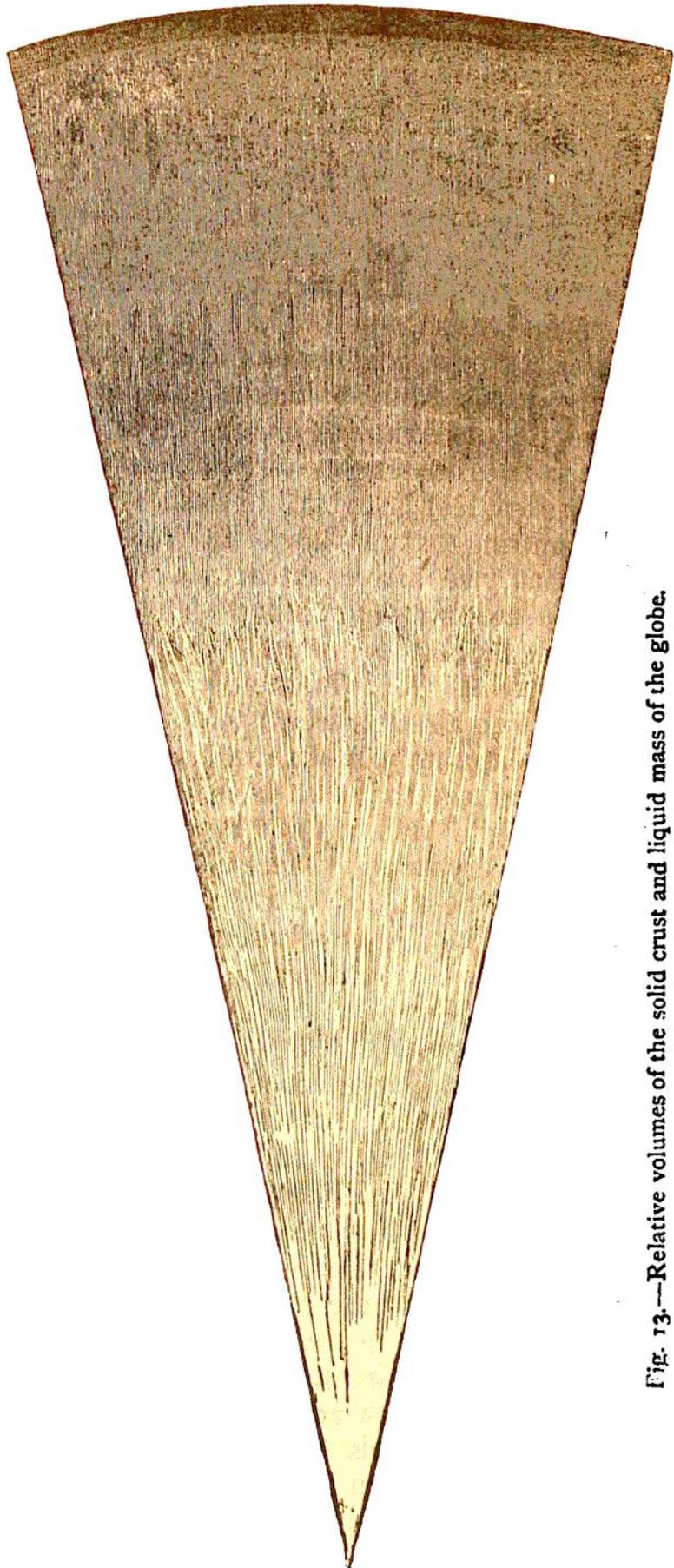


Fig. 13.—Relative volumes of the solid crust and liquid mass of the globe.