earth, this will be on the scale of 1 foot to 200 miles, or 1 inch to $16\frac{2}{3}$ miles or 88,000 feet.* Thus, on such a globe, the highest mountain and the deepest sea would be on true proportional scale represented severally by an elevation or depression of one-third of an inch. Were the land surfaces and sea beds sculptured in due proportion on the face of this globe, the surface would at a little distance hardly appear roughened, so insignificant is the altitude of the highest mountains and the depth of even the deepest seas in proportion to the dimensions of the earth itself. The oceans in relation to their superficial area are as shallow as a sheet of water one hundred yards in diameter, and only an inch in depth.†

We are apt to form an erroneous impression as to the actual shapes and distributions of the elevations and depressions on the earth's surface, because only the very tops of the elevations stand above water. The outlines of the various continents and islands with which we are familiar on maps, are merely lines marking the height to which the water reaches up. A very small proportion of the elevated masses projects above water, hence from an ordinary map we gain no truer impression of the form of the sculpturing of the surface of the earth itself than we should of the shape of a range of mountains if we viewed it when all but its summits were hidden by a flood.

So small a proportion does the mass of dry land elevated above sea-level bear to the hollows on the earth's surface beneath this level, that the cavities now occupied by the sea would contain three times the volume of the earth existing above the sea surface. If the surface of the land and the sea bottom were brought to one uniform level, the waters of the sea covering its even face would still have a depth of about 1,700 fathoms, being reduced in depth by the process only about 800 fathoms.‡

We should obtain a more correct idea of what are the real elevations and what the depressions on the earth's surface, if we drew on the map or globe a contour line marking the level at which the mass of the earth raised above this line is just equal to the excavations beneath it, and would just fill up these hollows if the surface of the earth were rendered even and smooth.

Although the depth of the ocean is so small in proportion to

* Lieut.-Gen. R. Strachey, R.E., F.R.S., "Lecture on Scientific Geography." Proc. Geogr. Soc., 1877, p. 191.

† James Croll, "Climate and Time," p. 135. London, Daldy & Co., 1875.

‡ O. Peschel, "Neue Probleme der vergleichenden Erdkunde." Leipzig, 1876, s. 82.