the earth. Every mile thick is such a greatcoat, and at 20 miles depth, according to this rate, the ground must be fully red-hot; and at no such very great depth beyond, either the whole must be melted, or only the most infusible and intractable kinds of material, such as our fire-clays and flints, would present some degree of solidity.

(16.) In short, what the icefloes and icebergs are to the polar seas, so we shall come to regard our continents and mountain-ranges in relation to the ocean of melted matter beneath. I do not mean to say there is no solid central mass; there may be one, or there may not, and, upon the whole, I think it likely enough that there is—kept solid, in spite of the heat, by the enormous pressure; but that has nothing to do with my present argument. All that I contend for is this,—Grant me a sea of liquid fire, on which we are all floating,—land and sea; for the bottom of the sea, anyhow, will not come nearly down to the lava level. The sea is probably nowhere more than five or six miles deep, which is far enough above that level to keep its bed from becoming red-hot.

(17.) Well, now, the land is perpetually wearing down, and the materials being carried out to sea. The coat of heavier matter is thinning off towards the land, and thickening over all the bed of the sea. What must happen? If a ship float even on her keel, transfer weight from the starboard to the larboard side, will she continue to float even? No, certainly. She will heel over to larboard. Many a good ship has gone to the bottom in this way. If the continents be lightened,