the mass, while it might be comparatively rapid if a liquid layer existed beneath a thin crust — a *flotation crust*, as it has been called. Darwin has remarked that through molecular movements the earth's spheroidal form might change with change of rotation. But what is the minimum limit in a solid globe, to rate of adjustment — that is, to the rate at which resistances from cohesion and other causes can be overcome — no known facts have even approximately indicated. Effects should, in any case, lag behind the cause of change, whether they are those from the deposition or removal of a load.

There are, however, facts that seem to imply a somewhat easy adjustment. Many low coasts over which sediments are borne to the sea border are known to be slowly sinking; as, for example, the coast of New Jersey, where the rate, according to G. H. Cook, is two feet a century. This sinking, and that of other parts of the Atlantic border, is attributed by Cook to gravitation in the sediments. W. J. McGee, in a paper of 1892, has brought together many facts from various coasts, mostly adjoining the mouths of rivers, bearing in the same direction. On the Netherland coast, the rate of sinking, according to Girard, is 0·09 to 0·75 meter per century, and 0·26 meter since 1732. But actual sinking is not a legitimate isostatic effect. The subsidence on such coasts corresponding to the amount of contributed sediments (not exceeding it) is not indicated by the amount of sinking, for the sinking is in excess of it. Other facts are more decisive. A boring on the southeast coast at Atlantic City, 1398 feet deep, extended through beds, as stated by J. C. Smock, which were proved by the fossils to be Miocene; *Turritella plebia* occurring, according to Heilprin, at 450 feet, and *Perna maxillata* at 760 feet, of which depth 265 feet are surface gravels and 265 beyond are of doubtful reference. But at Asbury Park and Ocean Grove, farther north, wells afforded the Upper Greensand with *Terebratula Harlani* and other Upper Cretaceous fossils at a depth severally of only 270 and 280 feet below tide level, and the Lower Greensand at 365 and 382 feet. The facts indicate a very slow rate of subsidence at Asbury Park since the Cretaceous period, and much less slow at Atlantic City, which is 80 miles south of Asbury Park and only 40 from the north cape of Delaware Bay. A boring on the coast of Texas passed through 3070 feet of shore deposits, without reaching, according to the investigations of G. D. Harris, beyond the Miocene. The deposits down to a depth of 458 feet are pronounced Quaternary. Beyond, to the 1511-foot level no Tertiary fossils were found and all of them may still be Quaternary. Between 1511 and 2153 feet, the deposits were Upper Tertiary as shown by fossils; and between 2153 and 2920 feet, Upper Miocene. In the lower 150 feet, clays and sands were found without fossils. Similar facts are reported from the delta of the Ganges and other regions.

These proofs of rather rapid subsidence along coasts are regarded by many as not inconsistent with the idea of a solid earth. Others have used them as strong evidence of a thin flotation crust over liquid rock.

But a "flotation crust" has its difficulties. The fact that there are high mountains anywhere is one of them. Against this objection it is urged that