

self rests upon the various rock formations of the district. Now this drift, as I have ascertained, formerly extended many miles beyond our present shores, and is still slowly washed away by the action of tides, winds, and currents. Until you know with precision the mineralogical composition of the drift of the immediate vicinity, so accurately indeed as to be able to recognize it in any new combination into which it may be brought when carried off by the sea, all your examination of soundings may be of little use. Should it, however, be ascertained that the larger amount of loose material spreading over the harbor is derived from some one or other of the drift islands in the bay, the building of sea-walls to stop the denudation may be of greater and more immediate use than any other operation. Again, it is geologically certain that all the drift islands of the harbor have been formed by the encroachment of the sea upon a sheet of drift, which once extended in unbroken continuity from Cape Ann to Cape Cod and farther south. This sheet of drift is constantly diminishing, and in centuries to come, which, notwithstanding the immeasurable duration of geological periods, may be reached, I trust, while the United States still remains a flour-