by an invading vegetation; that where originally no plants could exist a dense covering may be established in a relatively short space of time. Nor is this all. The presence of a vegetation, by retarding the rate of flow of water, will at the same time automatically cause the current to drop its burden of silt which will accumulate about the plants. Thus a covering of plants promotes not only protection of surface (by stabilization) but also accretion, i.e. deposition of silt and rise of level. Here in brief compass is illustrated the mechanical importance of a vegetation on intractable ground, applicable equally to mud, sand, and shingle overrun by the sea, and to the surface of a sand dune unstable in the wind.

Returning to the point from which this section started (p. 49), the actual incidence of mobility has been analysed, and the reason why it may prevent establishment made plain. It is further evident that mobility of soils is intermittent, i.e. endures only for the period during which the mobilizing agency (water, wind) operates. It is clear, therefore, that there are two obvious lines along which the problem of plant establishment may be promoted artificially:—

(1) By lengthening the periods of soil dormancy;
(2) By the selection of plants which establish with unusual celerity.

The problem will be further considered from the practical point of view in later chapters.

3. *Toxic Factors.*—The presence of anything in a soil which acts as a poison, that is to say, which operates in so fundamental a way as to destroy the intimate mechanism of a plant, will prevent plant establishment. In the case of maritime plants the salt of the sea water is the principal agent of this kind. To the great majority of plants existence is not possible in a saline environment. Perhaps 30 species alone (1.5 per cent) of the 2000 flowering plants of the British flora are able to endure immersion in salt water with immunity. The plants of this very select band are drawn from a considerable number of families; they are known as halophytes or salt plants, and constitute the elements of the vegetation of our salt marshes. (See Appendix