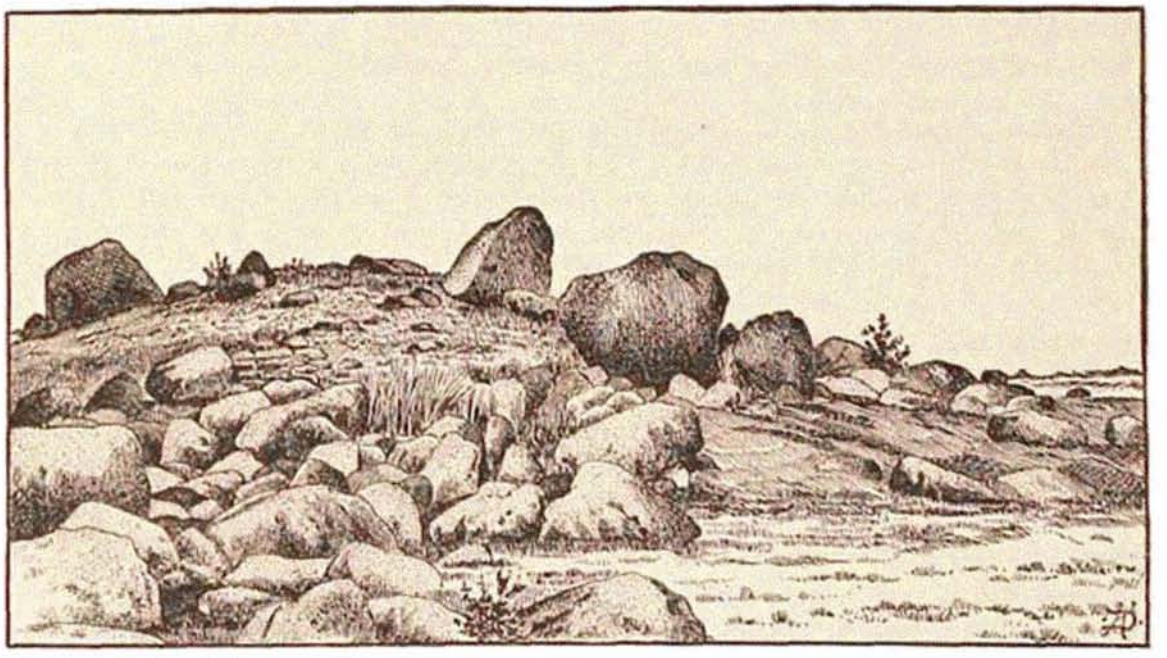
The nearness of the moraine-line A, or the southern ice-limit, to that of moraine-line B in Pennsylvania may be owing to the fact that the course of each was not dependent on the isotherms, but on the leeward position of the region with reference to the icy heights to the northeastward (page 956).

2. *Deposition and distribution of drift.* — With the melting and retreat of the ice-sheet, deposition of the transported material went forward making a covering of till of varying thickness, deposits in some parts of clay and rock-flour over and within the till, and intercalated deposits also of soil, sometimes with remains of forests, as has been already described. Besides, the escaping waters carried away material, fine and coarse, for stratified beds of clay, sand, and gravel. The older till over Illinois and Indiana has usually a depth of about 20 feet. In southeastern Indiana and southwestern Ohio, according to Leverett, it was followed by a covering of soil and then a deposit of clay to a depth of several feet; and as the clay contains, according to an analysis, 2·32 per cent of potash and soda, 16 per cent of it or more is feldspar in grains. The beds of soil and the forest-beds in glacial deposits are mostly contained in those that were made during this retreat.

1550.



Upper part of Moraine, Dogtown Commons, Cape Ann. Shaler, 1889.

The moraine ridge, which marks the limit of the retreat, consisting chiefly of gravel, stones, and bowlders, was made by the deposition, along the front, of material brought down by the ice-sheet during a long halt. It indicates the transporting power of the ice; and as the moraine in Illinois and Iowa is over 150 miles north of the southern ice-limit, the surface of the ice-sheet may have had a steeper pitch than during the period of maximum ice, so that transportation went on more rapidly, while corrasion and deposition were less effective agencies of rock-wear. The halt had, as usual, its advances and