

The "Green Mountain Giant" at Whitingham, Vt., weighs about 3000 tons. W. O. Crosby has described a boulder on the eastern border of New Hampshire having diameters of 30, 40, and 75 feet, and weighing 6000 tons. In Ohio there is one 16 feet thick, which covers three fourths of an acre.

From southwestern Vermont, the granite of a high hill, between Stamford and Pownal, which is almost as high as the Green and Hoosac Mountains lying to the east and south-east, was carried southeastwardly over the western sides of these mountains, nearly across the state of Massachusetts.

Iron Hill of Cumberland, R.I., furnished boulders of iron ore for the country south of Providence, to the Newport region, thirty-five miles distant, and thence south of east, as shown by Shaler, to Gay Head on Martha's Vineyard.

Large boulders are scattered widely over eastern Long Island, which are the crystalline rocks, trap, and sandstone of New England; and others, over western Long Island, which are from the Palisades and heights along the Hudson River. South of Lake Superior, there are boulders which have come from the north shore of the lake.

In this movement of the glacier the transported stones and earth, at first intraglacial, have sometimes become superglacial, about any emerged or nearly emerged mountain peak, as in Greenland about the "Nunataks" (page 249). And after serving as a superglacial moraine for awhile, the whole may have sunk away through crevices or crevasses to intraglacial positions again. The ice, as it moves up a long slope of a hill or mountain-side, slips over the rising surface, and carries its load with it; and on many slopes such stones are found at a level 1000 to 3000 feet or more above their source. Mount Katahdin in Maine has many boulders on its northern face derived from the Devonian rocks of the low country to the north, 3000 feet below it in level, which were thus carried up the mountain. Stones from a low level in the ice may thus, if not stranded on the slopes, use the high level for further travel or continue on at their original level.

3. *Deposition.* — The *deposition* of the transported material took place (1) through crevasses and crevices, aided by descending waters from the superficial lakes or streams; (2) from the melting bottom of the glacier; (3) from the melting always in progress along the front of the glacier, which was augmented during retreats. Moreover, the material pushed along by the glacier was an important addition to the moraine-making debris set free by the melting ice. Great boulders would be the first landed from the decaying ice-mass; yet large and small stones, earth and clay, are so mingled in the till that the term *boulder-clay* is well applied to the larger part. The stones of the till show their glacier origin usually by marks of abrasion. But flowing glacial waters carrying sand have often worn smooth the glacier-dropped stones and boulders. The subglacial waters, wherever in gentle flow along their valleys, may have made part of the local deposits of clay and sand, while others were made by the waters flowing away from the front.

4. *The terminal moraine or southernmost Ice-limit.* — The terminal moraine marks the limit of the ice-sheet when it was of maximum extension, and therefore when of maximum power for work, whether at abrasion, corrasion,