

ridges and hills. The line of the southern margin of the ice can still be followed by tracing the limits to which the drift deposits extend southward. From this evidence we learn that the ice-sheet ended off in a sinuous line, protruding in great tongues or promontories and retiring into deep and wide bays. In the Eastern States, the southern limit of the glaciated region is marked by one of the most extraordinary glacial accumulations yet known, and to which in Europe there is no rival. It consists of a broad irregular band of confused heaps of drift, or more strictly of two such bands, which sometimes unite into one broad belt and sometimes separate wide enough to allow an interval of twenty or thirty miles between them, each being from one to six miles in breadth and rising several hundred feet above the surrounding country. The surface of these ridges presents a characteristic hummocky aspect, rising into cones, domes, and confluent ridges, and sinking into basin-shaped or other irregularly-formed depressions, like the kames or oesar of Europe. The upper part of the material composing the ridges generally consists of assorted and stratified gravel and sand, the stratification being irregular and discordant, but inclined on the whole toward the south. Below these rearranged materials is a boulder-drift—a mixture of clay, sand, and gravel, with boulders of all sizes, up to blocks many tons in weight and often striated. Though sometimes indistinguishable from ordinary till, it presents as a rule a greater preponderance of stones than in typical till, but contains also fine stratified intercalations. A large proportion of the material of the ridges has been derived from rocks lying immediately to the north, and the nature of the ingredients constantly varies with the changing geological structure of the ground. There is also always present a greater or less amount of detritus representing rocks that lie along the line of drift-movement for 500 miles or more to the north. The band of drift-hills lies sometimes on an ascending, sometimes on a descending slope, crosses narrow mountain ridges and forms embankments across valleys, showing such a disregard of the topography as to prove that it cannot have been a shore-line, and has not been laid down with reference to the present drainage system of the land.⁴⁴

To this remarkable belt of prominent hummocky ground the name of "terminal moraine" has been given by the

⁴⁴ H. C. Lewis, "Report on the Terminal Moraine," Second Geol. Surv. Pennsylvania, Z, 1884, p. 45, with Preface by J. P. Lesley.