

4th. A second retreat of the glaciers took place when they gradually shrank nearly into their present limits, accompanied by another accumulation of stratified gravels, which form in many places a series of terraces above the level of the alluvial plains of the existing rivers.

In the gorge of the Dranse, near Thonon, M. Morlot discovered no less than three of these glacial formations in direct superposition, namely, at the bottom of the section, a mass of compact till or boulder-clay (No. 1) twelve feet thick, including striated boulders of Alpine limestone, and covered by regularly stratified ancient alluvium (No. 2) 150 feet thick, made up of rounded pebbles in horizontal beds. This mass is in its turn overlaid by a second formation (No. 3) of unstratified boulder clay, with erratic blocks and striated pebbles, which constituted the left lateral moraine of the great glacier of the Rhone, when it advanced for the second time to the lake of Geneva. At a short distance from the above section, terraces (No. 4) composed of stratified alluvium are seen at the heights of 20, 50, 100, and 150 feet above the lake of Geneva, which, by their position, can be shown to be posterior in date to the upper boulder-clay, and therefore belong to the fourth period, or that of the last retreat of the great glaciers. In the deposits of this fourth period, the remains of the mammoth have been discovered, as at Morges, for example, on the lake of Geneva. The conical delta of the Tinière, mentioned at p. 27 as containing at different depths monuments of the Roman as well as of the antecedent bronze and stone ages, is the work of alluvial deposition going on when the terrace of 50 feet was in progress. This modern delta is supposed by M. Morlot to have required 10,000 years for its accumulation. At the height of 150 feet above the lake, following up the course of the same torrent, we came to a more ancient delta, about ten times as large, which is therefore supposed to be the monument of about ten times as