

among mountains of the second and third classes, as if they were not sufficiently lofty to have contributed their quota of ice to fill the minor valleys. But on the map that accompanies Professor Rüttimeyer's memoir on the Pliocene and Glacial epoch, that distinguished author has boldly drawn a continuous line of moraine-matter, extending from Lyons along the south-east flank of the Jura, and from thence to Steyer, in Austria, about 20 miles from Linz on the Danube.

I do not doubt the general fidelity of this bold generalisation, and if it be true, it seems to me that, during the most intense part of the Glacial epoch, the whole of Switzerland between the Alps and the Jura must have been covered with glacier-ice. If so, to the eye (had human eyes been there to see it) it must have been impossible to specialise individual glaciers such as those of the Rhone, the Rhine, the Linth, the Reuss, and the Aar. Nevertheless when we consider the great antiquity of the post-Miocene disturbance of the Alps, I do not doubt that in some form those valleys existed, in which case the great glacier, maintaining an average uniformity of surface, must still have been thickest in the lines of the pre-existing valleys, and the erosive power of the moving ice must have been proportionally increased thereby. The effects produced on the country over which the under-current of the Rhone glacier flowed were commensurate to its great size and thickness.

The Lake of Geneva where deepest, towards its eastern end, is a little more than 1,000 feet in depth, and it gradually shallows to its outflow. By examining the sides of the mountains on either side of the valley of the Rhone, through which the glacier flowed, we are able to ascertain what was the thickness of the ice in