

is quite irreconcilable with the supposition of the scattered blocks having been dispersed by floating ice when Switzerland was submerged.

As opposed to the latter hypothesis, I may also state that nowhere as yet have any marine shells or other fossils than those of a terrestrial character, such as the bones of the mammoth, and a few other mammalia, and some coniferous wood, been detected in those drifts, though they are often many hundreds of feet in thickness.

A glance at M. Morlot's map, above mentioned,* will show that the two largest areas, indicated by a single colour, are those over which the Rhone and the Rhine are supposed to have spread out in ancient times their enormous moraines. One of these only, that of the Rhone, has been exhibited in our diagram, fig. 42, p. 299. The distinct character of the drift in the two cases is such as it would be if two colossal glaciers should now come down from the higher Alps through the valleys traversed by those rivers, leaving their moraines in the low country. The space occupied by the glacial drift of the Rhine is equal in dimensions, or rather exceeds, that of the Rhone, and its course is not interfered with in the least degree by the Lake of Constance, forty-five miles long, any more than is the dispersion of the erratics of the Rhone, by the Lake of Geneva, about fifty miles in length. The angular and other blocks have in both instances travelled on precisely as if those lakes had no existence, or as if, which was no doubt the case, they had been filled with solid ice.

During my last visit to Switzerland in 1857, I made excursions, in company with several distinguished geologists, for the sake of testing the relative merits of the two rival theories above referred to, and examined parts of the Jura above

* See map, Geological Quarterly Journal, vol. xviii. pl. 18, p. 185.