

close of the floods the flood-grounds of the river Meuse, near Dinant in Belgium, were diminished in breadth from seven and a half miles to a fourth of a mile; and this is an example of the general change over Europe. Europe also had rivers dammed up by gravel and sand from the unlading glacier. It has been shown that the Rhine owes its present channel at the Falls at Schaffhausen to its having been forced out of an older one; and it is probable that the Champlain period was the time of the change.

There is evidence in the remains of Mammals of Malta and Sicily that these islands, and probably Europe, were connected at this time with Africa; and Britain, as the ice departed, retained for awhile its connection with France, and gave passage across for the warm-climate Mammals. While the cold waters of the North Sea were thus shut off from the British Channel, warm water species, from the coast to the south, were living in the channel.

The valley of the Rhine and those of its tributaries contain extensive deposits of Pleistocene time. The material of the alluvium is mostly the loess, a fine yellowish-gray loam, much of it unstratified, — generally a little calcareous from pulverized shells; and in some parts it contains glacially marked stones. It rests in some places on stratified gravel or sand. Between Bâle and Bingen, this alluvium near Bâle has a height of 600 feet above the river; and through much of it there are land and freshwater shells. Similar facts are reported from most of the river valleys of Europe. The deposits on the Danube are as extensive as those of the Rhine; and Suess states that stones occur in it that were probably dropped by floating ice.

In Belgium, according to Dupont, along the valley of the Lesse, and others, the limestone caverns situated at the greatest elevations — 80 to 100 feet above the present river — are those which contain the *older* remains of Mammals; and those below are successively more recent as their height is less. Moreover, the river alluvium shows that, when the upper caves were inhabited, the valley was filled with water and river-border deposits, nearly to the level of the cave. Thus change is strikingly exhibited.

As Nikitin states, "the time corresponding to the 'interglacial epoch' and the second glaciation of the Swedes was probably, for the greater part of Russia, the epoch of the formation of the ancient lake deposits, the loess, and the upper terraces of the rivers, which constitute the principal repository for the bones of the Mammoth and other extinct Mammals, which abounded here while Scandinavia and Finland were still covered by the glacier."

In Europe, a reëlevation of the land at the close of the Pleistocene was also a general fact; but the rise was great enough to make a partial return of glaciated conditions in northern Europe and about the Alps, before a settling down to modern levels and more genial climatal conditions.

The absence in North America of distinct evidence of unusual cold, as a consequence of the elevation closing the Champlain period, is not proof that some extension of glaciers did not mark the close of this period in Europe. For Europe has had glaciers ever since over the Scandinavian mountains and the Alps, while in the glaciated part of eastern America, Mount Washington