derived from the disintegration of the crystalline rock, which must have decomposed in the atmosphere before the mud had reached this height. Entire shells of *Helix*, *Pupa*, and *Succinea*, of the usual living species, are embedded in the granitic mixture. We may therefore be sure that the valley bounded by steep hills of granite existed before the tranquil accumulation of this vast body of loess.

During the re-excavation of the basin of the Rhine successive deposits of loess of newer origin were formed at various heights; and it is often difficult to distinguish their relative ages, especially as fossils are often entirely wanting, and the mineral composition of the formation is so uniform.

The loess in Belgium is variable in thickness, usually ranging from ten to thirty feet. It caps some of the highest hills or table-land around Brussels at the height of 300 feet above the sea. In such places it usually rests on gravel, and rarely contains shells, but when they occur, they are of recent species. I found the *Succinea oblonga*, before mentioned, p. 327, and *Helix hispida* in the Belgian loess at Neerepen, between Tongres and Hasselt, where M. Bosquet had previously obtained remains of an elephant referred to *E. primigenius*. This pachyderm and *Rhinoceros tichorhinus* are cited as characterising the loess in various parts of the valley of the Rhine. Several perfect skeletons of the marmot have been disinterred from the loess of Aix-la-Chapelle. But much remains to be done in determining the species of mammalia of this formation, and the relative altitudes above the valley-plain at which they occur.

If we ascend the basin of the Neckar, we find that it is filled with loess of great thickness, far above its junction with the Rhine. At Canstadt near Stuttgart, loess resembling that of the Rhine contains many fossil bones, especially those of *Elephas primigenius*, together with some of *Rhinoceros tichorhinus*, the species having been lately determined by