

by rain and then reconsolidated. The beds immediately below the bones contained some pebbles, and still lower down was gravel with rounded stones of Bunter sandstone and gneiss from the Black Forest. In the inferior beds of loess, on a level with the bones, shells of the genera *Lymnea*, *Pupa*, *Physa*, *Clausilia*, *Helix*, and more rarely *Cyclostoma*, occurred. But as to the *Lymnea*, mentioned by M. Boué in his paper, he thinks it may possibly have been the prevailing *Succinea oblonga* of the loess.

M. Boué conceives that, before the loess was denuded in this valley by the Schutter, a thickness of at least eighty feet of it must have been superimposed on the human bones. He considers the loamy deposit at Lahr to be continuous with the loess of the Rhine, and to have come from the same source, and not to belong properly to the alluvium of the Schutter. He ascribes great antiquity to the bones partly because of their position so low down in the loess, and partly, because in loess of the same age in the vicinity, the remains of extinct mammalia had been detected.

When M. Boué, accompanied by M. Cordier, first showed the bones in Paris to Cuvier, that naturalist at once pronounced them to be human; but to the surprise of the two geologists, declared his belief that they came from a burial ground. The same notion was afterwards adopted by M. Alexandre Brongniart, who supposed them to have been interred in modern river-mud of the Schutter.* Even after M. Boué had revisited the locality in 1829, and confirmed his first observations, the judgement of so experienced a geologist went for nothing against the preconceived ideas then generally entertained as to the geological date of Man's origin.†

The precious collection of Lahr-bones filling a box, was left by M. Boué in M. Cuvier's care, and having been neglected, is now lost. As to their age, I see no reason for supposing that they were more ancient than those found by Schmerling in the Liége caverns, or than the flint implements of the gravel of St. Acheul. But if the views which I have set forth in the sixteenth chapter are sound, some extensive continental movements of elevation and depression, which happened immediately after the retreat of the great Alpine glaciers, were of date posterior to the embedding of these bones in the ancient mud of the Rhine.

* Annales des Sciences Naturelles, 1829, vol. xviii. Revue Bibliogr. p. 150.

† Akademie der Wissenschaften Sitzungsberichte, Band 8, p. 89, 1852.

Dr. A. Boué, Erläuterungen über die von mir im Loess des Rheinthaales im Jahre 1823 aufgefundenen Menschenknochen.