

not all of one age, having been deposited during a prolonged period and at many different altitudes. The older portions may not impossibly belong to the later part of the Glacial Period. Though on the whole not rich in fossils, the loess has yielded a peculiar fauna, which singularly confirms Richthofen's view that the deposit was a subaerial one. In the first place, the shells found in it are almost without exception of terrestrial species. Out of 211,968 specimens from the loess of the Rhine, Braun found only one brackish and three fresh-water forms, *Limnæa* and *Planorbis*, of which there were only 32 specimens in all. Of the rest, there were 98,502 examples of two species of *Succinea*, an amphibious genus, and 113,434 specimens belonging to 25 species of *Helix*, *Pupa*, *Clausilia*, *Bulimus*, *Limax* and *Vitrina*—unquestionable terrestrial forms.<sup>68</sup> It is worthy of note that *Helices* and *Succineas* abound at present in the steppe-regions of central Asia, and that many of the species of loess mollusks are now living in east Russia, southwest Siberia, and on the prairies of the Little Missouri in North America.<sup>69</sup>

From various parts of the European loess, Dr. Nehring has described a remarkable assemblage of animals, which included a jerboa (*Alactaga jaculus*), marmots (*Spermophilus*, several species), *Arctomys bobac*, tailless hare (*Lagomys pusillus*), numerous species of *Arvicola*, *Cricetus frumentarius*, *C. phœus*, porcupine (*Hystrix hirsutirostris*), wild horses and antelopes (*Antilope saiga*). This fauna, excepting some extinct or extirpated species, is identical with that which now lives in the southeast European and

---

<sup>68</sup> Zeitsch. für die gesamt. Naturwiss. xl. p. 45, as quoted by H. H. Howorth, *Geol. Mag.* 1882, p. 14.

<sup>69</sup> A. Nehring, *Geol. Mag.* 1883, p. 57; *Neues Jahrb.* 1889, p. 66.