tion of the underground currents! What a natural explanation does this offer of many facts which have embarrassed or deceived geologists! It may be well for the reader to refer to what was stated in Chap. XII. respecting the teeth and bones of small land quadrupeds found in the calcareous slate of Stonesfield. I there observed, that I thought it probable they had been brought into their present situation by subterranean currents, during the tertiary epoch,—and I am inclined to believe that the traces of such subterranean currents would be discovered, could the internal structure of the strata be fully laid open.

The subject of subterranean currents becomes interesting to the geologist when connected with caverns, for caverns themselves would scarcely deserve attention, were it not that they frequently contain skeletons or bones of large mammiferous animals, belonging to species that no longer exist in Europe, and are supposed to be extinct elsewhere. Many of these caverns were closed when first discovered, and some of them have been recently found to contain human skulls and bones, mixed with the bones of extinct species of quadrupeds: hence, we are led to enquire in what manner and at what epoch these bones were introduced into the caverns. The bone caverns in Germany will be first described, and then some notice will be given of the caverns recently discovered in France, containing human skulls and bones: and lastly, we shall notice some of the bone caverns in England.

It has been long known to naturalists and travellers, that there are numerous caverns in the calcareous mountains of Germany and Hungary, the floors of which are covered with clay, enveloping a prodigious quantity of bones and teeth of carnivorous animals. The bones in these caverns are nearly the same, over an extent of more than one hundred leagues. More than three fourths belong to species of bears that are now extinct;* two thirds of the remaining part belong to an unknown species of hyena; a smaller number belong to a species of lion or tiger, or of the wolf or dog; a very few belong to small carnivorous animals, allied to the fox and polecat. The bones are nearly in the same state in all these caverns: they are found scattered and detached, partly broken, but never rounded by attrition, and consequently not brought from a distance by water. They are rather lighter and more fragile than recent bones, but still preserve their true animal matter, containing much gelatine, and are not in the least petrified. The bones are all enveloped in earth which is penetrated with animal matter: except a few bones on the surface, of a different kind, which have been brought there at a later period, and are less decomposed.

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* The most common species of bear in these caverns, the Ursus Spelæus, was of the size of a horse. The fossil hyena was one third larger than any known living species.