

fully confirmed, we must range the strata of Alpnach, not in the lower, but in the middle group of tertiary strata.

In a work like the present, it would not be possible or desirable to follow the French and German geologists, in their descriptions of the different basins that contain the upper tertiary or quaternary strata, supposed to be superior to any of the tertiary beds in the Paris basin, or in England; but the most remarkable of these formations may be noticed:—"The Faluns, or marls of Touraine and the Loire, constitute an extensive formation of marl beds, which are now admitted to be of later date than the most recent of the fresh-water beds in the Paris basin. From the soft quality of the marl, it might hence be inferred that the beds had been disturbed or changed by inundations, or might be classed with diluvial beds; but they are regular depositions, formed during an epoch of tranquillity, and subjected to laws of which the action is continued on the present shores. The great mass of fossil shells which these beds contain, differ from those of the Paris basin: in nearly four hundred species, there are only about twenty identical with the Paris fossils. The terrestrial and river shells are in the same state of mineralization as the marine shells. The bones of the mastodon, rhinoceros, and hippopotamus, are in the same state of preservation as those of whales, and other cetaceous animals, with which they are intermixed. They are coated with marine polypi and serpulæ, which proves that they were long covered by a tranquil and stationary sea. These Faluns are distinct from the tertiary beds of the Seine, and more recent than any of them; but they are themselves the lowest term of a new system, more important, more extensive, than the formations of the Paris or London basins, and which has been continued to the present epoch, during all the numerous up-heavings of the ground, the changes in the relative level of seas and continents, and the successive modifications of organic beings."—*Bulletin de la Société Géologique de France*, 1831-32, tome II.

It is stated that the lowest bed of the Faluns, rests upon a bed analogous to the upper part of the Paris basin, which is supposed to have extended so far. If this were clearly made out, we should have the evidence of position, as well as of organic remains, to determine the relative age of the Faluns of the Loire, which is supposed to be the age of mastodons. In opposition to this, I have part of the tooth of an elephant, which, in the hand writing of Faujas St. Fond, is said to have been found at Montmartre, and is evidently from the marl beds. Here, then, we have remains of an animal of the most recent tertiary age, occurring in a formation more ancient than the age of mastodons. Such instances should lead us to receive the evidence from animal remains alone with much caution. Indeed, there is good reason to believe, that in North America, the age of mastodons was continued to nearly the present epoch, if the animal be not still living in some of the unexplored recesses of that vast continent.