

itself from the dead body, which floats on the water. Whilst the body is driven away and dissolved by the water, the lower jawbone falls down to the bottom of the water and is there enclosed in the mud. This explains the remarkable fact that in a stratum of limestone of the Jurassic system near Oxford, in the slates of Stonesfield, as yet only the lower jawbones of numerous pouched animals (Marsupials) have been found. They are the most ancient mammals known, and of the whole of the rest of their bodies not a single bone exists. The opponents of the theory of development, according to their usual logic, would from this fact be obliged to draw the conclusion that the lower jawbone was the only bone in the body of those animals.

Footprints are very instructive when we attempt to estimate the many accidents which so arbitrarily influence our knowledge of fossils; they are found in great numbers in different extensive layers of sandstone; for example, in the red sandstone of Connecticut, in North America. These footprints were evidently made by vertebrate animals, probably by reptiles, of whose bodies not the slightest trace has been preserved.\* The impressions which their feet have left on the mud alone betray the former existence of these otherwise unknown animals.

The accidents which, besides these, determine the limits of our palæontological knowledge, may be inferred from the fact that we know of only one or two specimens of very many important petrifications. It is not ten years since we became acquainted with the imperfect impression of a bird in the Jurassic or Oolitic system, the knowledge of which

\* With the exception of a single specimen of the bones of a foot, preserved in the cabinet of Amherst College.—E. R. L.