

The next point to which public attention has been specially directed is the discovery of mammals lower than they had formerly appeared. Considerable misconception has arisen on this head. The Middle Purbeck beds, recently explored by Mr. Beckles, in which various small mammals were found, occur considerably farther up than the Stonesfield slates, in which the first quadruped was detected so far back as 1818. But this discovery involves no theoretical change, inasmuch as all the mammalian remains of the Middle Purbecks consist of small marsupials and insectivora, varying in size from a rat to a hedgehog, with one or two doubtful species, not yet proved to be otherwise. The living analogue of one very interesting genus is the kangaroo rat, which inhabits the prairies and scrub-jungles of Australia, feeding on plants and scratched-up roots. Between the English Stonesfield or Great Oolite, in which many years ago *four* species of these small mammals were known to exist, and the Middle Purbeck, quarried by Mr. Beckles, in which *fourteen* species are now found, there intervene the Oxford Clay, Coral Rag, Kimmeridge Clay, Portland Oolite, and Lower Purbeck Oolite; and then, after the Middle Purbeck, there occurs a great hiatus throughout the Weald, Green Sand, Gault, and Chalk, wherein no quadrupedal remains have been found; until at length we are introduced, in the Tertiary, to the dawn of the grand mammalian period; so that nothing has occurred in this department to occasion any revolution in the ideas of those who, with my husband, consider a succession and development of type to be the one great fixed law of geological science. The reader will see that in the end of Lecture Third such remains as have been found lower than the Tertiary are