

while no other representatives of the same class have yet been found in any other of the inferior or superior secondary strata, is a striking fact, and should serve as a warning to us against hasty generalizations, founded solely on negative evidence. So important an exception to a general rule may be perfectly consistent with the conclusion, that a small number only of mammalia inhabited European latitudes when our secondary rocks were formed; but it seems fatal to the theory of progressive development, or to the notion that the order of precedence in the creation of animals, considered chronologically, has precisely coincided with the order in which they would be ranked according to perfection or complexity of structure.

It has, however, been suggested that the marsupial order, to which we have referred the fossil animals of Stonesfield, constitutes the lowest grade in the class Mammalia, and that this order, of which the brain is of more simple form, evinces an inferior degree of intelligence. If, therefore, in the oolitic period the marsupial tribes were the only warm-blooded quadrupeds which had as yet appeared upon our planet, the fact, it is said, confirms the theory which teaches that the creation of the more simple forms in each division of the animal kingdom preceded that of the more complex. But on how slender a support does this important conclusion hang! The Australian continent, so far as it has been hitherto explored, contains no indigenous quadrupeds save those of the marsupial order, with the exception of a few small rodents, while some neighbouring islands to the north and even southern Africa, in the same latitude as Australia, abound in mammalia of every tribe except the marsupial.

We are entirely unable to explain on what physiological or other laws this singular diversity in the habitations of living mammalia depends. If Europe at the period of the Stonesfield oolite was inhabited by marsupial quadrupeds only, it is still possible that higher orders of mammalia flourished contemporaneously in other lands; and, secondly, if no other tribes did then exist, we have no right to ascribe such a state of the animal creation to the immature age of the planet or of the animate world. There may be causes with which we are wholly unacquainted, which have stamped so peculiar a character on the recent fauna of Australia, and the general prevalence of an analogous state of things, might give rise every where to a like predominance of the marsupial tribes.

The strata of the Wealden, although of a later date than the oolite of Stonesfield, and although filled with the remains of large reptiles, both terrestrial and aquatic, have not yielded as yet a single marsupial bone. Were we to assume on such scanty data that no warm-blooded quadrupeds were then to be found throughout the northern hemisphere, there would still remain a curious subject of speculation, whether the entire suppression of one important class of vertebrata, such as the mammiferous, and the great development of another, such as the reptilian, implies a departure from fixed and uniform rules governing the fluctuations of the animal world; such rules, for example, as appear from one century to another to determine the growth