

Mr. Darwin remarks, 'We can, perhaps, understand the apparently quicker rate of change in terrestrial, and in more highly organised productions, compared with marine and lower productions, by the more complex relations of the higher beings to their organic and inorganic conditions of life.*

If we suppose the mammalia to be more sensitive than are the inferior classes of the vertebrata, to every fluctuation in the surrounding conditions, whether of the animate or inanimate world, it would follow that they would oftener be called upon to adapt themselves, by variation, to new conditions, or if unable to do so, to give place to other types. This would give rise to more frequent extinction of varieties, species, and genera, whereby the surviving types would be better limited, and the average duration of the same unaltered specific types would be lessened.

Absence of Mammalia in Islands considered in reference to Transmutation.

But if mammalia vary, upon the whole, at a more rapid rate than animals lower in the scale of being, it must not be supposed that they can alter their habits and structures readily, or that they are convertible in short periods into new species. The extreme slowness with which such changes of habits and organisation take place, when new conditions arise, appears to be well exemplified by the absence even of small warm-blooded quadrupeds in islands far from continents, however well such islands may be fitted by their dimensions to support them.

Mr. Darwin has pointed to this absence of mammalia as favouring his views, observing that bats, which are the only

* Origin of Species, 3rd ed. p. 340.