	Species.
Brought forward	1262
Wealden,	61
Green Sand and Chalk,	122
Eocene,	414
Miocene,	496
Pliocene,	35
Pleistocene,	31
Fossil Species,	2421

SECTION III.

LAWS BY WHICH ORGANIC REMAINS HAVE BEEN DISTRIBUTED.

We have seen in the last Section that the animals and plants have experienced great changes, as we have briefly reviewed them in their several formations. We now proceed to point out the laws by which these changes have been regulated. For, however irregular and capricious the operations of nature may seem to superficial observation, we find that wise and harmonious laws are always concerned.

First Law.—Species of animals and plants have had a limited duration, rarely extending from one formation into another.

We apply the word species in fossils just as we do in living animals and plants. A number of species closely related constitute a genus; a number of genera, having certain common characters, form an Order: several orders a Class, and several classes a Province, or Sub-kingdom, or Kingdom.

Now it is of the species only that we speak under this law. The larger divisions, genera, orders and classes, do extend through more or less of the formations; but in nearly all cases the species become extinct at the close of the great periods pointed out in previous pages of this work. Some distinguished naturalists, if we understand them, as Agassiz and D'Orbigny, are of opinion that there are no exceptions. Even the tertiary species they regard as extinct; but how far they would extend this view into the post-tertiary, we do not know. "The number of species still considered identical in several successive periods," says Agassiz, "is growing smaller and smaller, in proportion as they are more closely compared." Hence he reasonably infers that probably all will be found unlike. Professor Bronn thinks that species sometimes pass not only into a second but into a third formation, and others state, as we have mentioned, that some living species of foraminifera began their existence as low down as the oolite. According to Bronn, out of 2,055 species of plants, 12 pass into other formations; and of 24,366 animals, 3,322 pass out of the rocks where they are most abundant. So that each species had an average duration of 1.12 of a formation. In respect to the rocks below the tertiary, all would agree that the law has scarcely an exception,