

or retreated in its old age to its northern home. There is, of course, much in all this that we do not understand, but the general fact seems certain.

The early Mesozoic is altogether peculiar. It shows a vast predominance of Cycads, Pines and Ferns, to the exclusion both of the gigantic Cryptogams of the Palæozoic and of the ordinary exogenous trees of the modern time. It has a strange, weird aspect, and more resembles that of some warm islands of the southern hemisphere at present, than anything else known to us. It is as if the flora of some southern island had migrated and invaded all parts of the world. The geographical and climated conditions which permitted this must have been of a character different from those both of earlier and later times.

As we approach to the termination of the Mesozoic, which, in regard to animal life, is the age of reptiles, a new and strange development meets us. We find beds filled with leaves of broad-leaved plants similar to those of our modern woods, and in most cases apparently belonging to the same genera with plants now living, and this new type of vegetation persists to the present, though with marked differences of species in successive eras, as in the Middle and Upper Cretaceous, and the Lower, Middle and Upper Kainozoic, or Tertiary. It is noteworthy that while this new vegetation not only altogether supersedes the great Cryptogamous forests of the Palæozoic, but replaces the Cycads of the immediately preceding eras, the Pines retain all their prominence and grandeur, and even seem to excel in number of species, in breadth of dispersion, and in magnitude of growth their successors in the present world.

While in the latter Cretaceous and Early Tertiary, the northern hemisphere at least seems to have enjoyed an exceptionally warm climate, the later Tertiary introduces that period of cold known as the Glacial age. While there is no doubt that the intensity of this glaciation has been greatly