

CHAPTER VII.

Strata of the Transition Series.

THUS far we have been occupied with rocks, in which we trace chiefly the results of chemical and mechanical forces; but, as soon as we enter on the examination of strata of the Transition Series, the history of organic life becomes associated with that of mineral phenomena.*

The mineral character of the transition formations presents alternations of slate and shale, with slaty sandstone, limestone, and conglomerate rocks; the latter bearing evidence of the action of water in violent motion; the former showing, by their composition and structure, and by the organic remains which they frequently contain, that they were for the most part deposited in the form of mud and sand, at the bottom of the sea.

Here, therefore, we enter on a new and no less curious than important field of enquiry,

* It is most convenient to include within the Transition series, all kinds of stratified rocks, from the earliest slates, in which we find the first traces of animal or vegetable remains, to the termination of the great coal formation. The animal remains in the more ancient portion of this series, viz. the Grauwacke group, though nearly allied in genera, usually differ in species from those in its more recent portion, viz. the Carboniferous group.