

and occupied by crowds of organic beings in the enjoyment of life.*

With regard to their adaptation to human uses, it may be stated generally, that the greater number of the most populous and highly civilized assemblages of mankind inhabit those portions of the earth which are composed of secondary and tertiary formations. Viewed, therefore, in their relations to that agricultural stage of human society in which man becomes established in a settled habitation, and applies his industry to till the earth, we find in these formations which have been accumulated, in apparently accidental succession, an arrangement highly advantageous to the cultivation of their surface. The movements of the waters, by which the materials of strata have been transported to their present place, have caused them to be intermixed in

* The secondary strata are composed of extensive beds of sand and sandstone, mixed occasionally with pebbles, and alternating with deposits of clay, and marl, and limestone. The materials of most of these strata appear to have been derived from the detritus of primary and transition rocks; and the larger fragments, which are preserved in the form of pebbles, often indicate the sources from which these rounded fragments were supplied.

The transport of these materials from the site of older formations to their place in the secondary series, and their disposition in strata widely extended over the bottom of the early seas, seem to have resulted from forces, producing the destruction of more ancient lands, on a scale of magnitude unexampled among the actual phenomena of moving waters.