

CHAPTER III.

DENUDATION, SYNCLINAL AND ANTICLINAL CURVES, UNCONFORMABLE STRATIFICATION, AND WASTE PRODUCED BY CHEMICAL ACTION.

I MUST now more precisely explain the meaning of a few terms which I have already employed, and shall have occasion to use very frequently.

Denudation, in the geological sense of the word, means the stripping away of rocks from the surface, so as to expose other rocks that lay concealed beneath them.

Running water wears away the ground over which it passes, and carries away detrital matter, such as pebbles, sand, and mud; and if this goes on long enough over large areas, there is no reason why any amount of matter should not in time be removed. For instance, we have a notable case in North America of a considerable result from denudation, now being effected by the river Niagara, where, below the Falls, the river has cut a deep channel through the rocks, about seven miles in length. The proofs are perfect that the Falls originally began at the great escarpment at the lower end of what is now this gorge; that the river, falling over this ancient cliff, by degrees wore for itself a channel backwards, from two hundred to a hundred and sixty feet deep, through strata that on either side of the gorge once formed a continuous plateau.