



the parallelism of the valleys), but could not have made so deep erosions without wearing down the intervening ridges.

It appears that in all cases the striæ, furrows and valleys, that have been described upon the surface of rocks, correspond in direction to the course taken by the drift, and thus the two classes of phenomena are proved to have resulted from the same general cause.

Transport of Drift from Lower to Higher Levels.—The embossed and striated rocks show that in some instances the drift has been transported from lower to higher levels. On the northern slopes of mountains the striæ run from the bottom to the top, the course being shown by the stoss side, without essentially changing their parallelism. The slope up which the force has carried materials may be as great as 60° , as illustrated upon Mt. Monadnoc. The boulders which have been carried up to the tops of these mountains will remain to attest this truth. We need only refer to the Green Mountain Giant and the Vermonter to confirm this statement.

Ledges Fractured by Glacial Action.—Sometimes the end or side of a ledge of a rock bears evidence of having been subjected to a crushing force, which has broken the strata into numberless fragments. Many quarries of building stones and roofing slate show this action, which, of course, has greatly injured their value. Fig. 103 represents one of these fractured ledges, where the crushing force must have come from the east, in Guilford, Vermont. The thickness of the crushed fragments is twenty feet.