

except where here and there, near the Chalk escarpments, they are strewn with flints, the relics of the subaërial waste of the Chalk, or where *they are covered by fresh-water sands, gravels, and loams of the ancient rivers of the country.*

I believe, therefore, that the form of the ground in the Wealden area, which was once attributed to marine action, has been mainly brought about by atmospheric causes, and the operation of rain and running waters. One great effect of the action of the sea, combined with atmospheric waste, when prolonged over great periods of time, is to produce extensive *plains of marine denudation* like the line *b b*, fig. 97, p. 497; for this combined result is to *plane off*, as it were, the asperities of the land, and reduce it to an average tidal level.

Suppose the curvature of the various formations across the Wealden area to be restored by dotted lines, as in figure, No. 73, which is very nearly on a true scale. Let the upper part of the curve be planed across, as shown in fig. 73, and let the newly-planed surface, slightly inclined from the interior, be represented by the line *p p*. Against this line, the various masses of the Hastings Sand *h h*, Weald Clay *w*, the Lower Greensand *s*, the Gault *g*, and the Chalk and Upper Greensand *c*, would crop up. Then I believe that, by aid of rain and running water, large parts of these strata would be cut away by degrees, so as to produce in time the present configuration of the ground. *If it were not so, we might expect that the rivers of the Wealden area should all flow out at its eastern end, through long east and west hollows, previously scooped out by the assumed wasting power of the sea, where the ground is now low, and looks out upon the sea,*