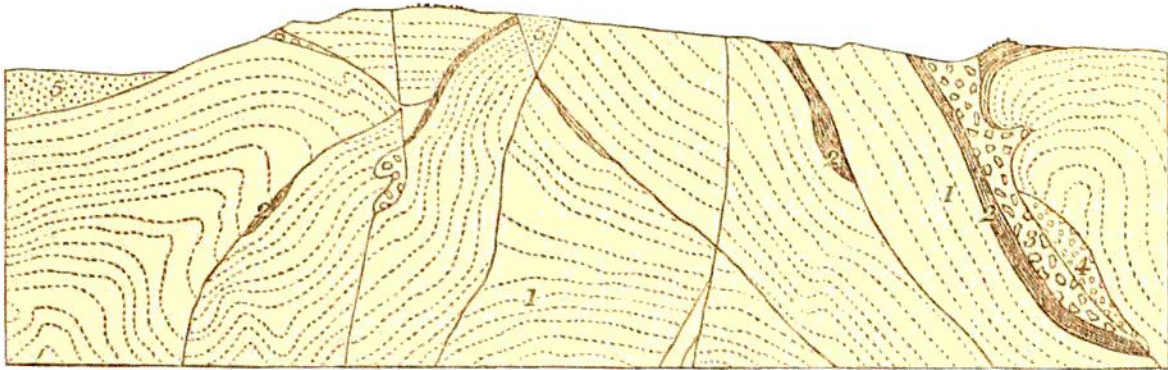


great denudation which accompanied the disturbances, portions of the bent strata having been removed, probably while they were emerging from beneath the sea.

Fig. 49



Post-glacial disturbances of vertical, folded, and shifted strata of chalk and drift, in the Dronningestol Møen, height 400 feet (Puggaard).

- 1 Chalk, with flints.
- 2 Marine stratified loam, lowest member of glacial formation.
- 3 Blue clay or till, with erratic blocks unstratified.
- 4 Yellow sandy till, with pebbles and glacial boulders.
- 5 Stratified sand and gravel with erratics.

M. Puggaard has deduced the following conclusions from his study of these cliffs.

1st. The white chalk, when it was still in horizontal stratification, but after it had suffered considerable denudation, subsided gradually, so that the lower beds of drift No. 2, with their littoral shells, were superimposed on the chalk in a shallow sea.

2nd. The overlying unstratified boulder clays 3 and 4 were thrown down in deeper water by the aid of floating ice coming from the north.

3rd. Irregular subsidences then began, and occasionally partial failures of support, causing the bending and sometimes the engulfment of overlying masses both of the chalk and drift, and causing the various dislocations above described and depicted. The downward movement continued till it exceeded 400 feet, for upon the surface even of No 5, in some parts of the island, lie huge erratics twenty feet or more in diameter, which imply that they were carried by ice in a sea