

mode of formation of such slopes, the more gentle inclines being in the direction of the dip, and the steep scarp sloping at right angles to the average inclination of the strata. (See fig. 55, p. 287).

Let anyone who wishes to see this effect, walk to the summit of the Ochil Hills, and there, from the edge of the scarp, he will see in the main a gentle slope to the south-east, while below, on the north-west, the delighted eye ranges across the fertile plains and undulations of the Teith, Strath Allan, and Strath Earn, while, far beyond, this almost unrivalled view is bounded by the lofty chain of the Grampian Mountains. Let the reader also understand that the whole of the Lower Old Red Sandstone as far as the Grampians was once buried deep under this upper series, and he will then begin to realise the prodigious amount of denudation that the region has suffered before it assumed its present aspect.

Above and merging into the Old Red Sandstone come the Carboniferous rocks No. 3, fig. 55, lying in a wide faulted and denuded synclinal curve,¹ but with many a high boss of basalt standing out in bold relief in the midst. Such are the Lomonds of Fife, Dunker Law, and Bishop Hill, north of the Forth, while south of that estuary Arthur's Seat forms a well-known example, and the pastoral tract of the Pentland Hills, formed of Upper Old Red Sandstone, mingled with contemporaneous igneous rocks, stand in high relief above the fertile plains of Midlothian and Dalkeith.

I have already stated that the southern continuation of the Upper Old Red and Carboniferous strata once spread over the Lammermuir Hills in a kind of anticlinal curve, in the manner shown by the dotted lines No. 3', on the diagram fig. 56.

¹ The diagram is, however, too small to show these breaks.