

whole of the top of the arch been worn away, but the work of erosion has gone on until the upward curve of the rocks has been actually hollowed out into the present wide valley. The volcanic ridges which along the edge of the Carse of Gowrie mount up in successive terraces, dipping away to the north-west, once rose high above what is now the Firth of Tay, and arched over till they came down into the Fife Hills. The connecting portion has been removed, but we see the truncated ends of the beds rising up to the south-east from the sides of the Sidlaws on the one hand, and up

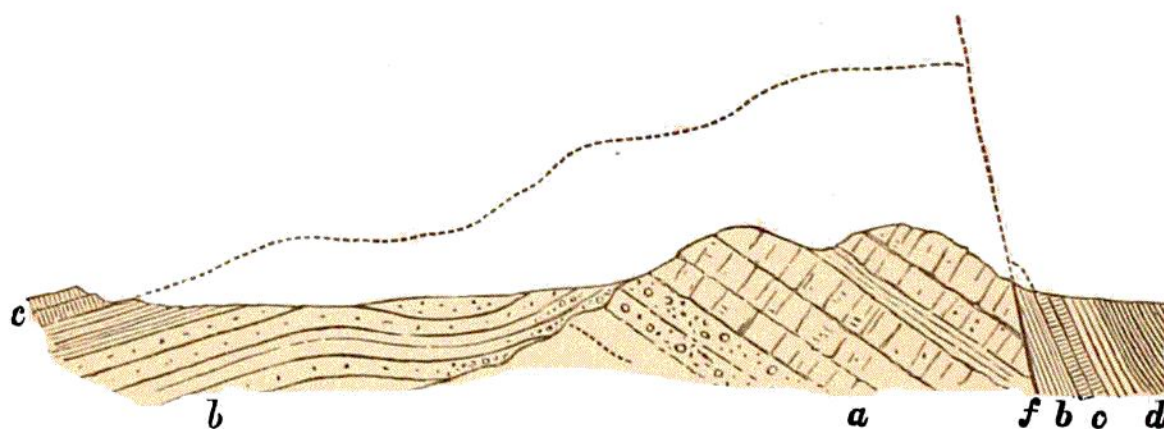


FIG. 76.—Section to illustrate the denudation of the Pentland Hills. *a*, Lower Old Red Sandstone. *b*, Lower Carboniferous rocks. *c*, Carboniferous Limestone series. *d*, Coal-measures. *f*, Fault.

to the north-west from the Fife slopes on the other. The accompanying woodcut (Fig. 77) is from a sketch taken on the top of Moncrieffe Hill, looking eastward towards the mouth of the Firth. It will be observed that the hills on either side have their long dip-slopes in opposite directions away from the centre of the arch, and present their abrupt escarpments towards each other. The sudden truncation of the beds indicates most impressively that the amount of solid rock which has been removed from this great hollow, if it could be set down upon the plain, would make a range of hills at least as bulky and lofty as the present Ochils.