

extended hills of this formation, in which the different rocks alternate with each other in such a manner as shews that the whole series of rocks has been frequently repeated. The hill of Weiffenstein in the Habichtswald in Heflia, affords a striking example, not only of the usual arrangement of the rocks of this formation, but also of its repetition. On the road from Caffel to Weiffenstein, we observe limestone and other older flætz rocks. The Weiffenstein itself is horizontally stratified, and its first or lowest formation consists of brown-coal, sand, clay, wacke, and basalt; above which the second rests, which is also composed of sand, clay, wacke, and basalt: the third, which rests immediately on the second, begins also with sand; but this sand contains numerous marine shells, bodies not observed in either of the two first arenaceous depositions; it is covered by clay, wacke, and basalt. It is probable that the formation is repeated a fourth time.

The trap-hills in the Electorate of Saxony, present many instructive and interesting examples of single depositions. These generally rest on gneifs. The lowest bed is a coarse iron-shot sand, which is dug out in many places, and used for the roads and other purposes: it is immediately covered by a bed of clay, which is sandy beneath, but which approaches to wacke, in the upper part: this clay is covered by wacke, and the wacke passes into and is covered by basalt. Similar appearances