

formation, and is covered by gravel, sand, clay, wacke, &c. The kinds of coal are *pitch-coal*, *conchoidal glance-coal*, *columnar coal*, *common brown-coal*, *brown-coal including bituminous wood*, *earth-coal*, and *bituminous wood*.

2. Seldom more than one bed of coal occurs in this formation, but it is usually very thick, being from a few feet to an hundred feet thick. It occurs in great abundance in Iceland, and probably affords materials for the support of the volcanoes that exist in that country; it is found also at the foot of *Ætna*, and probably also supplies that volcano with its fuel. It occurs also in the island of Mull, and in other places in Scotland.

C.—Having described the different rocks that belong to this formation, we shall now consider its more general relations, or what respects its structure and relations on the great scale.

Kind of Precipitations in the Newest Flætz - Trap Formation.

A portion of the rocks of this formation are chemical productions, another mechanical, and a third intermediate between chemical and mechanical. The mechanical depositions are gravel, sand, bituminous wood, clay, and in part trap-tuff: the chemical are greenstone, greystone, porphyry-slate, pitchstone, compact felspar, obsidian, and pumice: those intermediate between chemical or mechanical, or
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