

“wolds” or “downs” are covered with a sweet short herbage, generally bare of trees, and singularly dry, even in the valleys, which for miles wind and receive complicated branches, all descending in a regular slope, yet are frequently entirely dry, and, what is most singular, contain no channel, and but little other circumstantial proof of the action of water, by which certainly they were excavated. Both the dry valleys and the bare hills have characteristically smooth and flowing outlines (represented with excellent taste by Fielding), very different from the tabular hills of oolite, and the rugged chains of older rocks. The same characters accompany the chalk in France. The green sand ranges are less characteristic, though in Leith Hill and Hazlemere Forest they rise to nearly 1000 feet in height, and thus rival the chalk, which generally swells to 800 feet, but no where, except at Inkpen Beacon, equals 1011. Copious springs flow from the chalk, over the subjacent golt; or issue on the dip side at low levels: wells sunk in the chalk to some hundred feet yield water, *at different levels according to the impediments in the subterranean currents*. Where tertiary clays cover the chalk, as in the basin of London, the boring rod no sooner pierces them than strong streams arise, with a temperature much superior to that of the surface, over which they sometimes flow in a constant stream.

*Igneous Rocks.* — In no part of England is there the smallest trace of igneous rocks associated with the chalk. In Ireland, a very large tract of basaltic rocks occupies the greater part of the drainage of Lough Neagh, and the river which issues from it to Coleraine. If a line be drawn from the mouth of Lough Foyle to Lurgan on Lough Neagh, nearly all the country to the east of it is trap, here and there in the interior, and generally on the coast, exposing chalk, and more locally mulatto, lias, new red sandstone or coal measures. The thickness is in places (Knockhead) supposed to be little short of 1000 feet, and the superficial area 800 miles! What a