

and tending to a slaty texture, and is then called *clunch*. It encloses beds of *clay-ironstone* in the form of compressed balls, some vegetable impressions, and a few shells. The beds of iron ore are five or six in number; they all lie in the indurated clays, and all consist of balls or broad flat masses.

The *slaty clay*, called by the miners *basses*, is of a bluish black colour and slaty texture; it usually contains pyrites, and is always either mixed with coal, or combined with petroleum; in the former case it passes insensibly into slaty coal, and in the latter into cannel coal.

The first bed of *coal* occurs at the depth of 102 feet from the surface, is not more than four inches thick, and is very sulphureous; nine other beds of a similar nature, but somewhat thicker, lie between this and the depth of 396 feet. They are termed *stinking coal*, and are employed only in the burning of lime. The first bed of coal that is worked is five feet thick, and occurs in this colliery at the depth of 496 feet; between this bed and the big-flint sandstone, are two beds of coal, one ten inches, the other three feet thick. Between the big and little flints, which are about 100 feet apart, lie nine beds of coal of the aggregate thickness of about 16 feet. Beneath this, and the lowest bed of the whole formation, is a sulphureous eight-inch coal. The best coal of the above beds, usually presents a mixture of slate-coal and pitch-coal, rarely of cannel-coal; none of it possesses the quality of caking.

Of the numerous beds visible in this colliery, some are wanting in the neighbouring ones, and there exists also a considerable difference in the thicknesses of their respective beds.

### (c) COAL-FIELDS OF CLEE HILLS AND BILLINGSLEY.

#### (1) *Coal-fields of the Clee Hills.*

A few miles south from the preceding coal-field, rise the Brown Clee Hill and the Titterstone Clee Hill, the former lying three or four miles to the north of the latter. Both of these, which rank among the most considerable mountains of Shropshire, exhibit coal-measures towards their central regions, the highest summits being formed of overlying masses of basalt. It is to be regretted that we are not yet in possession of any precise account of the relation of these rocks and the adjacent country. The following notices are chiefly extracted from *Tracts in Natural History*, by Robert Townson, LL.D.

These mountains belong to the flat topped hills, but are very irregular in their forms. They are about five or six miles in