

held together, represent the clay and rubbish that fill the Faults, and form the partition walls that insulate these adjacent portions of strata, which were originally formed, like the sheet of Ice, in one continuous plane. Thus, each sheet or inclined table of Coal measures, is inclosed by a system of more or less vertical walls of broken clay, derived from its argillaceous shale beds, at the moment in which the Fracture and Dislocation took place; and hence have resulted those joints and separations, which, though they occasionally interrupt at inconvenient positions, and cut off suddenly the progress of the collier, and often shatter those portions of the strata that are in immediate contact with them, yet are in the main his greatest safeguard, and are indeed essential to his operations.*

These same Faults also, whilst they prevent the Water from flowing in excessive quantities in

* “ If a field of coal (says Mr. Buddle) abounding in water, was not intersected with slip Dykes, the working of it might be impracticable, as the whole body of water which it might contain would flow uninterruptedly into any opening which might be made into it; these Faults operate as Cofferdams, and separate the field of coal into districts.”—*Letter from Mr. John Buddle, an eminent Engineer and experienced Coal Viewer at Newcastle, to Prof. Buckland, Nov. 30, 1831.*

In working a Coal Pit, the Miner studiously avoids coming near a Fault, knowing that if he should penetrate this natural barrier, the Water from the other side will often burst in, and inundate the works he is conducting on the dry side of it.

A shaft was begun about the year 1825 at Gosforth, near New-