

and blue marl or oak-tree clay, to a depth of about thirty-six yards. The strata are disposed in the same order and thickness as in the quarries around Cuckfield; namely, fawn-coloured sand and sandstone, like those of Little Horsted, with beds of calciferous grit or Tilgate stone; and beneath, layers of the blue clay. The strata are very barren in organic remains; several hours' research only afforded imperfect vegetable relics, such as comminuted stems and leaves of the various species of ferns, which occur in Tilgate Forest (see *Wond.* p. 370.). Some of the grey laminated sandstones and shales at this place very closely resemble certain strata of the Coal measures.

Proceeding over the Weald clay with the Sussex marble of St. John's Common, the line encounters the Shanklin sand of Sussex, at Stone-pound gate. Here then we quit the fresh-water strata of the Wealden, and again enter upon the marine deposits of the Chalk formation. At the foot of the northern escarpment of the Southdowns, the Chalk is penetrated at the base of Clayton Hill, the tunnel running through the lower members of the Chalk—the Galt and Chalk-marl—and emerging at Piecombe through the White Chalk; from thence to Brighton, the sections and tunnels intersect or perforate the same cretaceous deposits.

By a reference to the section, *Wond.* Pl. IX., it will be seen that the various strata cut through, are repeated on the north and south of a line drawn