

*Tilgate Forest* and *Handcross*, over a succession of elevated ridges of sandstone, and through clay valleys, produced by alternations in the strata, he descends from the sandstone ridge at *Bolney*, near *Cuckfield*, and again journeys along a district of weald clay with fresh-water limestone (4, *on the left*). *Shanklin sand*, like that of *Reigate*, reappears at *Hickstead* (3, *on the left*), and is succeeded by a tract of *galt* (2, *on the left*); and finally, entering a vale of chalk-marl, he reaches a defile in the *South Downs*, through which the road winds its way to *Brighton*; the traveller having in the course of his journey passed from one chalk range to the other, and traversed the ancient delta of the wealden.

33. THE WEALDEN.—The tertiary basin of London afforded an illustration of the process by which materials are accumulated and organic remains imbedded, in an inland sea,—that of Paris, of marine and fresh-water sediments, deposited in a gulf open to the sea on the one side, and fed by rivers and thermal springs on the other,—the lacustrine formations of *Auvergne*, of the gradual precipitation of strata in the tranquil waters of lakes,—the chalk, of the operations which have taken place in the profound abyss of an ocean,—while the series of deposits to which the term *wealden* is applied, presents the most striking example of an ancient fluvatile formation hitherto discovered. Yet strange as it may appear, although the wealden strata are spread over the whole area between the