

The chalk even yet often contains a mixture of silex ; at the period of its formation, a considerable quantity appears to have been precipitated with it, in a state of such minute division as to allow the chemical attraction of its molecules to have effect ; these (from the same causes which produced the formation of layers of calcareous concretions in beds of clay (separating from the cretaceous pulp, and uniting together, particularly where the presence of any imbedded organic remains, (e. g. alcyonium, sponge, or shell) offered a nucleus for them to form upon, constituted the layers of nodular siliceous concretions in question.

Such appears the most probable origin of these appearances ; it may be noticed in confirmation, that the extraordinary figures so often assumed by these nodules, will on examination be found to arise from their having been formed on some variety of sponge or alcyonium as a nucleus : the manner in which the siliceous matter has penetrated the most minute pores of the organic substances enveloped in it, is truly admirable.

These flinty nodules occur in strata alternating conformably with those of the chalk.

Frequently also, but less commonly, the flinty strata consist of tabular masses of that substance.

Veins of flint, traversing the regular strata at various angles, though more rare, may still be observed almost wherever any extensive range of chalk cliffs is explored ; e. g. in the Isle of Thanet, the neighbourhood of Brighton, and the Isle of Wight ; the flint filling such veins is usually tabular.

It is unnecessary to give a formal description of the external characters of a substance in every one's hand. The specific gravity of flint is stated at 2.594 : it consists according to Klaproth of 98 parts of silex, 0.5 of lime, 0.25 alumine, 0.25 oxide of iron, and 1 of water. It is infusible, but whitens, and becomes opaque ; besides the water chemically combined, it appears to contain some, mechanically distributed through its pores, as its recent fracture, when freshly taken from its native bed, always exhibits an appearance of moisture.

The flints which have been washed out from the chalk at a remote period, occur in the various deposits of gravel ; and thus, from their superficial position, and the loose texture of the mass in which they occur, exposed through ages to the influence of atmospherical action, and the percolation of water, have often become much altered, and undergone changes somewhat analagous to those which may be produced in them by fire : the black colour is rendered less intense, or changed to brown, yellow, or red, probably by a change induced in the oxidation of the iron contained in it ; these different colours