

*II. Chalk without Flints, and with few Organic remains.*

This stratum rises immediately at that part of the base of Shakspeare's cliff which is nearest to Dover, and is separated from the stratum containing numerous beds of organic remains, which reposes on it, by a bed of soft marle. As this marle, like all the others of the same nature that are visible in these cliffs, becomes friable and falls away by exposure, it serves as a certain guide to the stratification, and may be seen with little interruption for more than half the way to the signal-house above Folkstone, and at intervals for the other half; so that the connexion of the two strata may be traced for five miles without difficulty. Without this aid, however, there could only have existed such hindrance as naturally arises from occasional verdure on the face of the less precipitous parts of the cliff, being those above the undercliff: for the chalk of the two strata differ greatly in appearance. That of the stratum I am describing is soft, and even white in comparison of that which lies upon it, though not so white as the chalk with few flints; and for six feet beneath the bed of marle, is of so sandy a texture occasionally, as to be even friable, but here and there it assumes the appearance and compactness of a sandstone.

The nearly horizontal crevices in other parts of the cliff appear to be nearly parallel with the stratification; but in this, the crevices differ from that position, and are even in a transverse direction; those that are nearly vertical are numerous, giving to the chalk in many places, an angular appearance, not common to any other parts of the cliff. It runs along the base of the cliff for somewhat less than half a mile, and in that space, affords, even on a close inspection, the traces of but few organic remains.

It incloses masses of pyrites, some of which are crystallised externally in the form of the octohedron, but their general form is spherical. Others, and they are not uncommon, are in the form of cylinders, rounded at each termination, to which there is frequently a short stem attached; the whole having the appearance of organic origin. When broken across, they are always found to radiate from the centre.

Here and there appears a small bed of sponges, of which the ochreous forms are visible; but this stratum contains none of the grey veins so numerous in the superincumbent strata. It is about 50 feet thick.