

consists wholly of the chalk of this stratum, except the summit of its most elevated part, which consists of the chalk with few flints (see preceding sketch); but in this place it does not so decidedly appear to consist of a number of thin beds of organic remains, as it does after rising from the beach at Shakspeare's cliff: nevertheless it manifestly consists of a vast accumulation of organic exuviæ. This stratum may be traced without interruption for nearly four miles; but the summit of the cliff between Dover and Folkstone, for the latter half of the way, quite to its termination near the signal-house above the latter place, decidedly belongs to the chalk with few flints: a close examination of it discovers here and there a few interspersed flints, and a single bed of them is visible about 40 feet below the summit, just half way between the two places. Wherever a path is practicable, the cliff is so sloping as to be covered with a verdure which prevents an accurate discovery of the stratification by ascending it, and it cannot always be seen from either above or below.

The external roughness occasioned by the numerous thin beds of organic remains in this stratum, is far less considerable than that of the chalk with interspersed flints. Still the same appearance of sponges is visible after long exposure, but they lie close together, and when detached are less; and they are not unfrequently separated by the remains of shells, so small as to be nearly in a state of comminution, a large proportion of them being varieties of the striated shell or *inoceramus*. The two varieties of the *echinus* so common in the chalk with interspersed flints are occasionally seen in this bed, but are less numerous. *Ammonites* from 12 to 18 inches in diameter and of a circular form are not uncommon: I saw several, all of which lay parallel to the strata. Though the thin beds of organic matter are nearly in contact in the lower part of the stratum, they are more separate in the upper part of it.

Through one of the many large masses lying on the shore, a bed about nine inches thick took its course, consisting of remains essentially differing from the rest. It consisted chiefly of ramose appearances about half an inch in diameter, and the masses detached from it greatly resembled those of the *alcyonium* visible in the sand of the Isle of Wight, described by fig. 12, pl. 29, vol 2, of the *Geological Transactions*.

In this stratum I did not perceive any traces of pyrites, so common in other parts of the cliff. It includes grey veins similar to those of the chalk with interspersed flints and of that with few flints, but they are far less numerous, and though the organic remains which occasion them are similar, they are much smaller.