

little on the north of the nearly vertical chalk of Alum bay. (G. T. vol. ii. p. 191.) The fossil coal of the several beds already mentioned, and of which the vegetable origin is discoverable by the fruits and branches still observable, burns with difficulty and with very little flame, giving out a sulphureous odour. Eight beds occur, each about a foot thick. (W.)

#### APPENDIX.\*

##### *On the Formations above the Chalk in Yorkshire and Lincolnshire.*

The northern extremity of the formations above the chalk in Lincolnshire and Yorkshire, separated from the main tract of the London basin by the æstuary of the Wash, has not yet been satisfactorily explored, and has been too hastily considered as entirely concealed by alluvial or diluvial deposits; but, from the following sources of information it should appear that this is far from being universally the case, and that the regular substrata may be observed through considerable tracts; this district therefore seems to merit a particular notice: since however the intelligence to be gleaned is too scanty to identify the exact place of the strata mentioned in the regular series, it has been determined to throw them together in this article.

The south-east angle of Yorkshire from Bridlington bay to Spurn head, known under the name of Holderness, is peninsulated by the Hull river, which is skirted on either side by a broad tract of marsh land, protected from the incursions of the high tides by its embankments only; a breach in which would reduce it to the state of an island, separated by a strait about six miles broad from the chalk hills of the Wolds. These marshes are remarkable for the occurrence of the remains of an extensive forest at the level of the present low water-mark, which may be traced at the same level round the coast of Holderness and through Lincoln; this will, on a future occasion, form an interesting subject of inquiry (see Book VI.); at present our concern is with the regular strata.

The district of Holderness rises from these marshes into low hills, which face the sea with a line of cliffs sometimes exceeding 100 feet in height, remarkable for the rapid encroachments of the sea, which in these quarters seems more than once to have gained on the land, and again relinquished its contests.

\* By the Rev. W. D. Conybeare.