Section VII.

*Isle of Wight.**

As we have already observed, the formations which it is the object of this chapter to describe, form the substrata throughout the southern half of this island. They may be most effectually studied at their junctions with the range of vertical chalk which crosses the island from east to west; on the former side at Sandown bay, on the latter at Freshwater bay.

Of this appearance in Sandown bay Mr. Webster gives the following account.

'Immediately below the chalk without flints, is a stratum of yellowish white marle, or argilleceous chalk. This is also wholly without flinty nodules. A thick stratum of sandstone succeeds, consisting of siliceous sand united by calcareous matter, and containing also mica and green earth. It is often very friable, and being here of a whitish colour, is not readily distinguished, at a distance, from the chalk.

The next stratum consists of a dark blue or grey marle, which readily falls to powder when exposed to air and moisture; accordingly its place is marked by a considerable hollow, the cliff having mouldered away, so as to form a slope which may be climbed up without much difficulty.

The blue marle is followed by a very thick stratum of dark red and highly ferruginous sand, sometimes containing beds firmly cemented into rock. To this succeeds a yellow sand stratum; then shale; and a very irregular succession of dark red and yellow ferruginous sands with clay, and shale, extending nearly to the middle of the bay.

The section of these ferruginous strata forms a very lofty perpendicular cliff, distinguished by the name of Red cliff; which bears a striking contrast to those of the neighbouring chalk. Vast masses of it are constantly falling down; on which account it is rather dangerous to walk underneath.

Near the termination of these cliffs towards the middle of the bay, are several thin strata of a stone composed wholly of bivalve shells in a calcareous matrix, much resembling Purbeck stone; but the shells are larger. These strata are from three inches to one inch in thickness, are separated from each other by beds of shale and fibrous carbonate of lime, and have the same inclination as the strata lying immediately above them. The greatest part of what could easily be got at, has

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