(b) Mineral contents. The occurrences of beds of ironstone and ochre in this formation, has been already mentioned. Specimens of hæmatitic and stalactitic iron may be found among the former. Nodular concretions, having an outer shell of iron ore containing a nucleus of loose sand, and others in which bands of a darker and lighter shade, are so disposed as to resemble the aspect of the Egyptian pebble, are common. Chert and quartz crystals are found in some of the beds, but never in any considerable quantity; nor do they ever rival those of the green sand in beauty.

(c) Organic remains. The organic remains of this formation have yet received very little illustration. They appear to be very sparingly dispersed through it, generally, although abundant in some particular spots. Of these, Faringdon in Berkshire is the most productive : we have collected from the pits near that town, a large nautilus, fragments of ammonites, belemnites, ostreæ, terebratulæ, and spines of an echinus cidaris; but the most abundant and interesting fossils of this spot are the spongitæ, of which many varieties, tubular, funnel-shaped, and palmated, occur: very beautiful minute corallines also occur, and a very singular ramose tubular fossil divided like a chambered shell by transverse septa.

Insulated casts in the septa of the ammonite are common

feet in thickness, but so friable as easily to be reduced to powder. On this immediately a marle sets on, in the different depths of which the ironstone comes on regularly in all the various sorts as follows:

- 1. Small balls.— Provincially twelve foots : because so many feet distant from the first to the last bed.
- 2. Gray limestone. Used as a flux.
- S. Foxes.
- 4. Riggit.
- 5. Bulls.
- 6. Caballa balls.
- 7. Whiteburn. What tripoli, properly calcined and treated, is made of.
- 8. Clouts.
- 9. Pity.

This is the order in which the different ores are found:

Advancing on, there is a valley where the mineral bed seems entirely broken, and the sandstone sets on. At the distance of something above a mile, the ironstone is again seen—another intervention of sand, and then at low water when the tide goes out, the beds of ironstone appear regularly on the shore; an indisputable proof that, however the appearance of the surface may vary, the substrata continue the same.

In taking the range northwardly, from the bottom of Ashburnham Park for 12 miles at least, the strata are nearly the same, there being no material inequality of surface that does not partake of sandstone, marle, ironstone, and sand again at the top.