be detected; a circumstance depending on the extreme solubility of the iodic and bromic salts.

Gypsum, a very general product of the red argillaceous members of this system, and very commonly found in the vicinity of rock salt, is largely foliated (selenite) at Fairburn, near Ferrybridge, granular at Chelweston, near Derby, but generally fibrous, as at Pocklington, Nottingham, Aust Passage, &c.

Structures of Deposition. — Stratification is distinct in all these rocks; but in all of them some peculiarities appear in this respect. Among the argillaceous beds lamination prevails; but the gypseous interpolations produce great anomalies, and suggest what is probably true, that this mineral is often a segregation of later date. The sandstones are laminated or bedded, and the pebbly varieties commonly present most decided proofs of the agitation under which they were collected, in the abundance of oblique lamination ("false bedding" of authors), as in Nottingham Castle Hill.

The fine-grained upper limestones of Knottingley are thin-bedded: the granular rocks of Nottinghamshire are either thick-bedded or flag-like; it is sometimes difficult to trace the beds at all in the powdery magnesian rocks; and in certain sparry rocks near Sunderland, the bedded structure is almost overlooked in admiration of the coralloidal forms of the concretionary masses, which sometimes are enveloped in soft yellow powder (Building Hill).

Divisional Planes. — The fine-grained limestones of Knottingley are traversed by vertical divisions from top to bottom, which in some places are open to a foot in width, or filled with clay and rolled pebbles; in other cases they are merely thin cuts in the rock; always their regularity, parallelism, and polarity (if we may so term their direction to N. or N. N. W., and its rectangle E. or E. N. E.), are remarkable. In other thick-bedded limestones, the joints are less symmetrical, though always numerous: most of the rocks are traversed by small secret cracks, which, on being exposed by frac-