

mulation is, however, perfectly proved by the regular arrangement of the flint nodules, which are so common in its upper part. No layers of sand (or clay?) occur in any part of its thickness. Joints are not, in general, either numerous or regular in these formations, nor, excepting geodes and shells of oxides of iron, and the nodules of flint and chert, are concretionary structures common among them

Succession of Strata.—The basin of Europe offers generally the same succession of cretaceous deposits, as in the British islands; but there are local variations of importance. Two formations constitute this system in England and Ireland, which may be thus analysed and described:—

Chalk formation, 600 ft. thick.	{	g	Upper chalk, usually a soft white calcareous mass, with chert nodules at regular intervals: the upper part in the Isle of Wight is of a marly nature.
		f	Middle chalk, not very clearly definable; of intermediate character as well as place between the upper and lower chalk.
		e	Lower chalk, harder and less white than the upper, sometimes varied by green grains, generally with fewer flints (red in the North of England).
Green sand formation, 600 ft.	{	d	Chalk marl; a soft argillaceous form of chalk.
		c	Upper green sand (firestone, malm rock, &c.); a mass of sands, occasionally indurated to chalky or cherty sandstone, of green, gray, or white colour; with nodules or laminæ of chert.
		b	Golt (Tetsworth clay, Folkstone clay, &c.); soft bluish marly clay, with green grains.
		a	Lower green sand (iron sand, Shanklin sand); a considerable mass of green, or ferruginous sands, with layers of chert, local beds of golt, rocks of chalky or cherty limestone, and deposits of ochre and fullers' earth.

In the north of England the upper green sand is totally deficient; nor is it so distinct from the chalk formation in Kent and Sussex as in Berkshire and Wiltshire. In Yorkshire there is no lower green sand, but in Lincolnshire it is greatly developed, and contains useful calcareous beds. In the north of Ireland the series of cretaceous rocks corresponds nearly to the English type, the green sand being called mulatto, but the series is generally harder. Round the basin of Paris the chalk