

presents the following divisions:—1. The uppermost, or *New red sandstone*, comprising the marls and conglomerates, with gypsum and rock salt. 2. The *Magnesian limestone*, which consists of limestones, conglomerates, and calcareous breccia. This system is interposed between the lias and the grand deposits of coal, as represented in the plan, Pl. 7; its position in natural sections is seen in the sketch of the Mendip Hills (Pl. 9, figs. II. and IV.), and in Pl. 10, where it is shown to overlies the coal measures near Durham. The lower beds of this formation, in some districts, pass insensibly into the carboniferous series below, and into the lias above, presenting a natural transition from the one group to the other; yet there are certain characters which render the strata recognisable even in distant regions.

Although the organic remains, which are very locally distributed in this system, correspond in many respects with those of the lias, oolite, and coal, some animals and plants occur which are presumed to be peculiar, from their presence in the new red sandstone, and absence in the formations between which it is interposed,—for instance, the coniferous plants of the genus *Voltzia*.*

18. TABULAR VIEW OF THE SALIFEROUS STRATA.
—The following is a tabular arrangement of the principal deposits of the saliferous system.

* These plants, named after an eminent geologist and naturalist, M. Voltz, of Strasburg, will be described in the seventh lecture.