species. The great chemist Lavoisier made several geological sections through the Paris basin, and pointed out the alternation of littoral and pelagic deposits. The stratigraphical succession established by Lavoisier was added to by Coupé's detailed examination of exposures in the vicinity of Paris.

The greatest work on the "Paris Basin" appeared in 1808, in the *Journal des Mines* and *Annales du Muséum*. The authors were Brongniart, Professor of Mineralogy in the Natural History Museum in Paris, and Cuvier, the famous zoologist and palæontologist. They drew up a systematic table of the succession of stratigraphical horizons in accordance primarily with the sequence of the deposits in the ground, and with the particular fossils characterising each group of deposits; the varieties of rock, and the thicknesses and distribution of different deposits were also fully considered. The following are the formations, in ascending order from the Cretaceous rocks, as they were recognised in the first work by Brongniart and Cuvier:—

9. Loess clay and pebble deposits, containing bones of large terrestrial mammals.

Now rank as Oligocene deposits.

8. Unfossiliferous millstone quartz and fresh-water limestone of Beauce (Orleans), containing species of Planorbis, Cyclostoma, Helix, and terrestrial plant-remains.
7. Sandstone, without molluscan remains (Fontainebleau sandstone).
6. Siliceous limestone, a facies of deposits 5 and 7 present in the southern parts of the basin.
5. Sands and sandstone with molluscan remains (Fontainebleau sandstone).
4. Gypsum and fresh-water marls, etc., with Planorbis, Linnæus, etc., passing upward into marine oyster beds.

Now rank as Eocene deposits.

3. Sands and coarse limestone series of Paris.
2. Plastic clay without fossils.

1. Cretaceous rocks; fifty fossil species were enumerated in the chalk deposits.

A second and larger work was issued by the same authors in 1811, with a special part devoted to geological descriptions,