

fruits ; intercalated with limestone containing marine shells.

3. *Silicious limestone*, fresh-water and terrestrial shells and plants, and marine limestone, or *Calcaire grossier*, a coarse compact limestone, passing into calcareous sand, and abounding in marine shells.— These beds often alternate, and are considered by M. Constant Prevost to be contemporaneous formations ; the marine strata having been formed in those parts of the basin which were open to the sea ; and the fresh-water limestone, by mineral waters poured into the bay from the south ; the continent being situated then, as now, to the south, and the ocean to the north. Partial layers of *milliolite* limestone,* almost entirely composed of microscopic chambered shells, occur in this part of the basin.

4. *Gypseous marls, and limestones*, with bones of animals, and fresh-water shells of fluviatile origin. These are supposed to have been discharged by a river which flowed into the gulf ; the gypsum being precipitated from water holding sulphate of lime in solution, in the same manner as the travertine or calcareous tufa, of which we have already spoken (page 56.)

5. *Upper marine formation*, consisting of marls, micaceous and quartzose sand, with beds of sandstone abounding in marine shells.

* So called from its inclosing immense quantities of a minute shell, named *Milliolite*.