

disturbed, which clearly indicates that an interval elapsed between the two formations.

(c) *Analagous formations in other countries.* Before proceeding to consider these subdivisions, a few words may be added on the general extent of formations of this æra in Europe.

They may generally be recognised at once from the loose and unconsolidated state of the beds composing them, from the greater abundance and variety of their fossil shells, especially univalves, and from the high state of preservation of those remains ; which, being seldom in any degree mineralized, have undergone no further change than the loss of their colouring matter, and perhaps of part of their animal matter and phosphoric acid, and might often be mistaken for recent shells.

The extensive tract called the basin of Paris, exhibits a close conformity to that of the Isle of Wight, as will be hereafter pointed out, both in the fresh-water and marine formations ; an exact coincidence being observable in the shells of both districts.

Another similar tract of fresh-water and marine formations occurs in the south-west of France surrounding Agen (department Lot et Garonne) ; and hence these modern beds stretch to the very foot of the Pyrenees to Pau on the south-west, and Carcassone on the south-east. There is yet another of these recent districts near Aix (Bouches du Rhone), where fish resembling those of Monte Bolca are found.

On the north-east, the beds above the chalk range from near Calais through the Netherlands to Aix la Chapelle ; at Cassel, Brussels, Maestricht, and Aix, great deposits of their shells may be seen, but these differ considerably from those of the English series ; and the Maestricht beds appear to be older, and approach more nearly to the age of the chalk.

The north of Germany, to some distance from the shores of the Baltic, seem occupied by these formations ; they are however generally concealed by an immense accumulation of diluvial debris ; but near the lake Swerin in Mecklenburg, deposits of shells are found which must be referred to this class ; and the gypsum of Luneburg, close to which a chalk pit is opened, must belong to the same formation with that of the basin of Paris.

Along the course of the Rhine, near its junction with the Maine, fresh-water and marine beds of the same class are found.

In the great valley of Switzerland, and especially near the lake of Constance, similar formations occur, and Professor Buckland has discovered that the Naglesflue of that district, which often forms considerable mountains, is a conglomerate of the same age. These recent formations stretch through the