2. Champlain Period.

AMERICAN.

The Champlain period is so named from the occurrence of beds of the period on the borders of Lake Champlain.

The term Champlain was first used by C. H. Hitchcock, in the Report on the Geology of Vermont (1861), for the marine beds of the period occurring along the lake, and for similar beds in the St. Lawrence valley, as a substitute for the term, "Laurentian deposits," applied to the latter by Desor. The author, in a paper, in 1856, adopted the latter name; but as Laurentian was earlier given by Logan to a subdivision of the Archæan, Champlain was substituted in the first edition of this work (1863).

The prominent events of the period are: (1) the completion of the subsidence begun in the closing part of the Glacial period; (2) the subsidence over large areas, greatest to the north; (3) the disappearance of the ice that remained on the mountains and elsewhere within the borders of the United States, and finally from the Canadian ice-plateau, completing the deglaciation of the continent; (4) a change of climate to one even warmer than that of Recent time; (5) the conversion of many of the southward flowing streams, that were eroding streams in the Glacial period, into feebly moving and feebly working streams, and the making of lakes; (6) the rapid growth of vegetation, covering hills, mountains, and prairie regions with the greatest of forests. A moister climate than the present is rendered probable by the greatly increased surface of fresh waters in lakes and rivers over the continent, as well as by the greater warmth of the climate.

The Champlain has been sometimes designated the Pluvial period, to mark its contrast with the Glacial period.

THE SUBSIDENCE.

1. *Kind of evidence.* — Evidence of the subsidence is found on the borders of the continent in elevated shore-lines of the Champlain period, as beaches, shell-beds, seashore flats, rock planulations or terraces; and over the interior of the continent in the existence of lake-basins that were occupied by Champlain lakes, some of them exceeding in size any modern lake.

2. *Amount over the eastern Continental border.* — The subsidence increased in amount over eastern America from the south, northward, and also from the seashore, landward. The difference between the level of the Champlain period and the present as indicated by shore-lines, terraces, shell-beds, and other evidence is about as follows at the places mentioned: on the southern shores of New England, near New Haven, 20 feet; shell-beds in deposits at Sancati Head, on Nantucket, 80 feet; on the coast of Maine, as proved by fossils, 150 to 300 feet; the upper benches at Mount Desert, Me., 270 to 300 feet (Shaler).

Along the north and south valley of the Connecticut, terraces increase in