LOWER SILURIAN ERA.

Synonymy.— Lower Silurian, Murchison, Phil. Mag., vii. 46, 1835; Brit. Assoc., v., 1835. Lower Silurian, Upper Cambrian, Sedgwick, but not aware of their identity, Brit. Assoc., v., 1835. Lower Silurian, including the Lingula flags, Murchison, Sil. Syst., 1838; Geikie, in 3d edit. of Jukes's Geol., 1872; Dana's Manual of Geol., 1874. Lower Silurian, Lyell, Elements Geol., 2d edit., 1841, and later; Geikie, Text-book Geol., 1885; Seeley and Etheridge, Man. Geol., 1885; Prestwich, Geol., 1886; Credner, Geol., 1887. Cambro-Silurian, Jukes, Canadian Geological Survey. Fauna D, or Second Fauna, Barrande. Silurienne, Étage Armoricain, Lapparent, Tr. Géol., 1883.

Champlain group, but with the Potsdam sandstone and the Oneida conglomerate included, Hall, Rep. N. Y. G. Surv., 1843; same, with the Oneida conglomerate excluded, Mather, Vanuxem, Emmons, Rep. N. Y. G. Surv., 1842, 1843.

Ordovician, Lapworth (from the name of the British tribe, Ordovices), G. Mag., 1879, p. 13. Upper Cambrian, Ordovician, H. B. Woodward, Geol. of Eng. and Wales, 1887.

The counter-claims of Sedgwick and Murchison with reference to the geological formations in which they both had worked, appeared to have been settled by the recognition of a Cambrian system below the Lower Silurian. But the independent characteristics of the Lower and Upper Silurian becoming increasingly evident, it has seemed to demand that the two eras should have independent names. Notwithstanding the great claims of Murchison, the new name of Ordovician, proposed in 1879 by Lapworth, is much used for the Lower Silurian, the one which represents the larger share of Murchison's labors, and thereby the old Murchisonian name of Silurian is left for the Upper division. As this is not the disposal of the question which the law of priority appears to require, the name of Lower Silurian is here retained, awaiting the full expression of geological opinion.

NORTH AMERICAN.

SUBDIVISIONS.

3. Hudson Epoch: that of the Hudson slate group or Hudson River group, Mather, Ann. Rep. Geol. N.Y., 1840; Hudson River group, Mather, Hall, Vanuxem, Final Rep. Geol. N.Y., 1842, 1843; Lorraine shales, Emmons, Final Rep. N.Y., 1843; Nashville group, of Tennessee, J. M. Safford, Am. Jour. Sci., xii., 1851; Cincinnati group, Worthen, Rep. Geol. Ill., i., 1866.

Trenton Period.

- 2. Utica Epoch: that of the Utica slate, N.Y. Geol. Rep., 1842, 1843; Black slate, Ann. N.Y. Rep.
- 1. TRENTON EPOCH: that of the Trenton, Birdseye, and Black River limestones, Vanuxem, Conrad, Ann. Rep. Geol. N.Y., 1838.