

Potsdam Sandstone, *New York Geol. Survey*, 1842. Primal Sandstone, H. D. and W. B. Rogers. Upper Taconic, fossiliferous slates of Georgia, etc., E. Emmons, 1844, 1846 (not in the Taconic System of 1842).

History of the terms Cambrian and Silurian. — The terms *Cambrian* and *Silurian* recognize the united labors of Murchison and Sedgwick in the first careful study, in Great Britain, of the older fossiliferous rocks of Paleozoic time. The two eminent English geologists worked together in some of their earlier investigations. The memoirs of that period, "Communications on Arran and the north of Scotland, including Caithness (1828) and the Moray Firth, others on Gosau and the eastern Alps (1829–1831); and still later, in 1837, a great memoir on the Paleozoic strata of Devonshire and Cornwall, and another on the coeval rocks of Belgium and north Germany, show the labors of these intimate friends combined in the happiest way — the broad generalizations in which the Cambridge professor delighted, well supported by the indefatigable industry of his zealous companion."¹ In 1831, they were both at work "without concert" on the borders of Wales, — Murchison chiefly on the English side and in southern Wales, and Sedgwick beyond the boundary in north Wales. Sedgwick had earlier investigated somewhat similar rocks in the Cumbrian Mountains. By 1834, Murchison had laid down his grand divisions of Ludlow, Wenlock, Caradoc, and Llandeilo, and had referred the first two of them, on the ground of the wide difference in fossils, to the *Upper Silurian*, and the latter two to the *Lower Silurian*. In 1835, the terms *Cambrian* and *Silurian* appear together in a combined paper presented by the two authors to the first meeting of the British Association. *Silurian* had been announced by Murchison nearly two months before in the July number of the *Philosophical Magazine*. In 1838, each put forth more fully his results: Sedgwick, in a paper read before the Geological Society, giving the distribution and character of the rocks, with but little notice of the characteristic fossils; but Murchison, before the close of the year, in a quarto volume of 800 pages copiously illustrated with figures of fossils and geological sections, entitled the "*Silurian System*." Murchison's work and his names of subdivisions came into immediate use in all countries, and were recognized in all geological treatises.

Gradually it came to light that the Lower Silurian of Murchison comprised rocks and fossils of the age of the Upper Cambrian; and also that the fossils from beds of still lower level differ little in general type from those of the Lower Silurian. Thus geologists, with Murchison's book in hand, were led to use the term *Lower Silurian* for the fossiliferous Cambrian. No full account of Sedgwick's Cambrian fossils was published before 1852 to 1855, and not even lists of species before 1843.

In 1846 Sedgwick made his first protest against the absorption of the Cambrian by the Lower Silurian of Murchison; and in 1852 the controversy, thus begun, ended in his claiming the whole of the Lower Silurian as Upper

¹ Professor John Phillips, *Nature*, Feb. 6, 1873.