

by the discovery of the vertebræ of *Eosaurus Acadianus*, at the Joggins, by Marsh.¹ The locomotion of *Baphetes* must have been vigorous and rapid, but it may have been effected both on land and in water, and either by feet or tail, or both. A jawbone found at the Joggins in Nova Scotia, and to which I have attached the name *Baphetes minor*, may have belonged to a second species. Great Batrachians allied to *Baphetes*, but different specifically or generically, have since been found in the coal formations of Great Britain, the continent of Europe and the United States.

With the nature of the habitat of this formidable creature we are better acquainted. The area of the Albion Mines coal field was somewhat exceptional in its character. It seems to have been a bay or indentation in the Silurian land, separated from the remainder of the coal field by a high shingle beach, now a bed of conglomerate. Owing to this circumstance, while in the other portions of the Nova Scotia coal field the beds of coal are thin, and alternate with sandstones and shales, at the Albion Mines a vast thickness of almost unmixed vegetable matter has been deposited, constituting the "main seam" of thirty-eight feet thick, and the "deep seam," twenty-four feet thick, as well as still thicker beds of highly carbonaceous shale. But, though the area of the Albion coal measures was thus separated, and preserved from marine incursions, it must have been often submerged, and probably had connection with the sea, through rivers or channels cutting the enclosing beach. Hence beds of earthy matter occur in it, containing remains of large fishes. One of the most important of these is that known as the "Holing stone," a band of black highly carbonaceous shale, coaly matter, and clay ironstone, occurring in the main seam, about five feet below its roof, and varying in thickness from two inches to nearly two feet. It was from this band that the rubbish heap in which I found the

¹ *Silliman's Journal*, 1859.