Mr. Salter, however, to whom I sent specimens, regards these shells as belonging to his new genera Anthracomya and Anthracoptera, the former being supposed to be allied to Myade.<sup>1</sup> More recently Gümbel and Geinitz havo described similar shells from Thuringia as belonging to the genera Unio and Anodon, and regard my Naiadites carbonarius (Anthracoptera carbonaria of Salter) as a Dreissena.<sup>2</sup> In the present uncertainty as to their genuine relations I shall retain the name Naiadites for the whole of the species, giving, however, Salter's generic names in brackets."

In correspondence with Mr. Salter at that time, I had pointed out that these shells were probably freshwater, and objected to his name Anthracomya as expressing an incorrect view of the affinities of the shells that I had sent to him; assigning the following among other reasons, afterwards published in 1868 in a new edition of 'Acadian Geology' along with descriptions and figures of the principal species, seven in number :---

(1) Under the microscope these shells present an internal lamellar and subnacreous layer, a thin layer of prismatic shell, and an epidermis, all corresponding to similar structures in the Unionidæ.

(2) The ligament was external; there seem to have been no teeth. The shell was closed (or slightly open) posteriorly, and in some species there are indications of a byssal sinus. The general aspect is in some species that of Unio, in others that of Mytilus. The wrinkling of the epidermis seems to be, for the most part, an effect of pressure.

(3) I know of no instance of the occurrence of these shells in the marine limestones, or associated with species unquestionably mørine.

(4) The mode of their occurrence precludes the idea that they were burrowers, and favours the supposition that they were attached by a byssus to sunken or floating timber.<sup>3</sup>

(5) The attachment of Spirorbis to the outer surface of many specimens seems to show that they were free in clear waters.

On these grounds, and being unable fr 1 the specimens in my possession to make out evidence of generic distinctness, I continued to use the name Naiadites in preference to adopting the newer names suggested by Mr. Salter. Under this name I have described seven species from the Coal Formation of Nova Scotia, and have now sent specimens of these to Dr. Wheelton Hind for examination and comparison.

I may add that I do not object to the division of the species into two or more genera, for one of which Salter's name Anthracoptera should be retained. I doubt, however, whether these can be distinguished by form alone, which in most cases is all that we have

Quart. Journ. Geol. Soc. vol. xix. (1863) p. 80.
Neues Jahrb. 1864, pp. 646, 651, and Geol. Mag. 1865, p. 204.

<sup>3</sup> Dr. Hind informs me that a specimen in the British Museum (Nat. Hist.), at South Kensington, has the byssus preserved. [This specimen consists of a piece of fossil wood, round which numerous individuals of Anthracoptera are clustered in several rows, as they would be if attached by a byssus.-W. H.]