

*P. plumosa*; and though he insinuates a doubt as to the validity of some of my Devonian species, even this does not apply, since the species in question was carefully described by the late Prof. Hartt, and accepted by me after study of his material, which included several very considerable portions of well-preserved fronds.

Though doubts and suspicions thus cast on work carefully and exhaustively done, in so far as material exists, should not seriously affect the minds of naturalists, I have thought it desirable to set the matter at rest, as far as possible; and have therefore, through the kindness of Dr. Scudder and the Curator of the Boston Society of Natural History, obtained access to the original specimen, and would now state the actual facts.

The fern on the specimen in question (No. 8496 of the Boston Society's collection) is undoubtedly *Pecopteris serrulata* of Hartt, and exhibits in a tolerable state of preservation six secondary pinnæ of one side of a primary pinna of the species. To a hasty observer, supposing the specimen to be a piece of Carboniferous shale, it would be natural to refer the fern to *P. plumosa* of Brongniart or to *Aspidites silesiacus* of Goepfert, which it perhaps more closely resembles; and since its fructification is still unknown, it may quite as likely belong to the group or sub-genus *Aspidites* in which Goepfert and Schimper place *P. silesiaca*, as to that of *Cyathites* in which Schimper places *P. plumosa*.

The distinctive characters indicated by Hartt are principally the form and insertion of the pinnæ, the slender crenulate revolute, lanceolate pinnules, and the simple veinlets. Perhaps the most obvious characteristic is the peculiarly elongated acuminate points of the primary and secondary pinnæ, in which this species seems to differ from all its near allies. In the specimen in question, though only a portion of one side of a primary pinna is seen, and its characteristic elongate termination is absent, yet one of the secondary pinnæ shows this character very well, and the simple veins and crenate revolute margins may be made out with a lens in a good light. I do not think that any palæobotanist, in view of these characters, would decide to identify this fern with *P. plumosa*, unless indeed he were of opinion that the whole group to which that species belongs should constitute one broad specific type extending from the Devonian to the Permian, a view to which I should have no objection, provided sufficient connecting links can be found.