

trifling difference, and Dr. Jongmans who saw the specimens all together in the British Museum, when he visited me while I was concluding my work, expressed himself as confident that the plant should be included in *A. stellata*. The slightly greater width of the leaves, and the fact that the Canadian specimens are not well enough preserved or complete enough to make their identity *absolutely* certain, induces me to enter them still under Dawson's name.

SPHENOPHYLLALES

Genus SPHENOPHYLLUM, Brongniart

1828. *Sphenophyllum* Brongniart, Prodrome, p. 68.

Founded for delicate stems bearing whorls of wedge-shaped leaves, the genus is now best known from its internal anatomy. Reference should be made to Scott's studies for the structure of these plants, and for the impressions to Jongmans, 1911, p. 367 et seq.

SPHENOPHYLLUM ANTIQUUM, Dawson

- 1861. *Sphenophyllum antiquum*, Dawson, Canad. Nat., vol. 6, p. 170, fig. 7.
- 1862. *Sphenophyllum antiquum*, Dawson, Quart. Journ. Geol. Soc., vol. 18, p. 312.
- 1868. *Sphenophyllum antiquum*, Dawson, Acadian Geol., Ed. 2, p. 540, Fig. 188 B.
- 1871. *Sphenophyllum antiquum*, Dawson, Foss. Pl. Devon. Upp. Silur. Canada, Geol. Surv. Rep., p. 32, pl. V, figs. 61, 62.
- 1888. *Sphenophyllum antiquum*, Dawson, Geol. Hist. Pl., p. 65 (from 1905 edition).
- 1906. *Sphenophyllum antiquum*, Dawson, Matthew, Trans. Roy. Soc. Canada, vol. 12, p. 129, pl. III, fig. 3.
- 1910. *Sphenophyllum antiquum*, Dawson, Matthew, Bull. Nat. Hist. Soc., New Brunswick, vol. 6, p. 247.

As Dawson (1871 p. 32) said, "This sole Devonian representative of its genus appears to have been very rare." Dr. Matthew (1906 p. 129) also remarks on the rarity of the plant, and states that he has no specimens which are better than Sir William Dawson's. Consequently, we are still in possession of very imperfect knowledge of the species, for, as Schimper pointed out in his text book (vol. 1), the diagnosis of the Canadian plant is incomplete. The fig. 61 pl. V in Dawson's paper (1871) shows three whorls of leaves of sphenophyllum.