

CALAMITES sp.

Plate I, figure 1; Plate III, figure 3.

- 1861. *Calamites transitionis*, Geoppert, Dawson, Canad. Nat., vol. 6, p. 168, fig. 5 (same cut as 1862).
- 1862. *Calamites transitionis*, Geoppert, Dawson, Quart. Journ. Geol. Soc., vol. 18, p. 309.
- 1868. *Calamites transitionis*, Geoppert, Dawson, Acadian Geol., Ed. 72, p. 536, fig. 186. (This is the same cut as in Geol. Hist. pl. fig. 27, called *C. radiatus*.)
- 1871. *Calamites (Bornia) transitionis*, Geopp., Dawson, Foss. Pl. Devon. Upp. Silur., Canada Geol. Surv. Rep., p. 25, pl. IV, figs. 41-46.
- 1888. *Calamites radiatus*, Dawson, Geol. Hist. Pl., p. 77, fig. 27 (from 1905 Ed., same cut as 1868).
- 1906. *Asterocalamites scrobiculoides*, Matthew, Trans. Roy. Soc., ser. 2, vol. 12, p. 112, pl. I, fig. 1.
- 1906. *Calamites geniculosus*, Matthew, Trans. Roy. Soc., ser. 2, vol. 12, p. 109, pl. II, fig. 5.
- 1910. *Asterocalamites scrobiculoides*, Matthew, Bull. Nat. Hist. Soc., New Brunswick, vol. 6, p. 247.

In plate III fig. 3 of the present paper, is illustrated a specimen similar to that figured by Dawson, 1871, pl. IV fig. 41, which is now in the McGill University collection, No. 3335. Another specimen in the same collection, No. 3339, is on a much larger scale. This is shown in fig. 1 pl. I of the present paper. It does not appear to have been illustrated before, and bears a label "*Calamites radiatus*, donor Sir W. Dawson." They both show clearly in some parts the way the ribs appear to run straight through the node. *C. radiatus* was evidently the name adopted by Sir W. Dawson after his chief publications on these fossil plants had appeared, and that name is applied in his "Geological History of Plants" to the same block (p. 77) as was called *C. transitionis* in "Acadian Geology," p. 537, fig. 186, and in which the ribs are shown as running straight from node to node, and not alternating as is the case in *Calamites*. Were it possible fully to establish that the ribs ran in this way in these plants, it would indicate that the plant is *Asterocalamites scrobiculatus*, Schlotheim (see Schlotheim 1820, p. 402, pl. XX fig. 4). The specimens, however, fail to show this important character conclusively, though, as figures 1 and 3 show, there is at first sight much to suggest the view that we are dealing with *A. scrobiculatus*. If the ribs be followed carefully through the nodes it will be seen that some alternate and some appear to run straight. Dr. Jongmans, who saw the specimens, was emphatic against their