

So much has been written by many authors (see Seward, 1898, p. 374 for reference to the work of Kidston, Zeiller, and others) on these difficult and poorly preserved species of *Calamites* that it will serve no useful purpose for me to elaborate the matter; more particularly as in the recent work by Dr. Jongmans (1911) we have an admirable and exhaustive treatment of the whole group of the *Calamites*. Of the species *cannaeformis* as a whole Jongmans (1911 p. 176) writes "Diese 'Art' ist... von Schlotheim sehr schlecht charakterisiert"... "es nicht zu unterscheiden ist, was Schlotheim darunter verstanden hat, und dass die Exemplare, welche Brongniart dazu rechnet, fast alle schlecht erhalten sind oder zu anderen, besser definierten Formen gebracht werden können." After further illustrating the unsatisfactory nature of the species he continues—"Ich glaube, dass es deshalb am besten ist, auch *C. cannaeformis* aus der Liste der 'Arten' zu streichen oder wenigstens keine Exemplare mehr als solchen zu bestimmen."

The specimen described in 1871 by Sir William Dawson as *C. cannaeformis* is No. 3336 in the McGill University collection (see fig. 2, pl. II of the present paper). It is the best specimen of this type that I have seen in the St. John beds, and shows the characters of *C. Suckowi* (see Jongmans, 1911, p. 165) well enough to make the identification reliable. Dawson recognised that this plant was the same as the Carboniferous forms, for he wrote "I have examined a number of additional specimens representing this species, from the Devonian of New Brunswick, but cannot find any characters separating it from the specimens found in the Carboniferous." Recently Dr. Matthew has gone into the subject of these specimens with great care, and he records series of detailed measurements (Matthew, 1906, pp. 106, 108) and comparisons with Carboniferous forms from Joggins, Nova Scotia. He finds that in nodes of the same length the ribs in the latter are somewhat narrower, but he concludes that "the plan of structure of these stems, so widely different in age, is similar."

In some bands of shale at Duck cove, there are innumerable specimens of *Calamites* of this and other "species." They generally occur together and are less commonly mingled with the fern debris.