

according to the position on the leaf. One of the smaller specimens shown in fig. 38, pl. XV, may possibly represent another species, but is not conclusive. In the undoubted examples the rounded, lateral pinnules vary from 5 mm to 15 mm, which is the largest I have observed in the Canadian impressions. The single terminal pinnules vary from 10-30 mm in length. Fragments of the leaf abound in the series of Fern Ledge beds.

To establish the presence of *N. heterophylla* in the St. John beds is an important point, for the plant is a particularly well-known and representative Coal Measure form and is specially characteristic of the Westphalian series. It has also proved of exceptional interest to the students of plant evolution, for it was the first "fern" impression to which seeds were found attached. Scott's Studies (1909) gives a general account of this very valuable plant, where reference to the detailed work upon it can be found. Reference should also be made to Kidston's (1911, p. 71) latest paper on the subject.

*NEUROPTERIS ERIANA, Dawson, sp.*

Plate XV, figure 39, and text fig. 11.

- 1881. *Cardiopteris eriana*, Dawson, Quart. Journ. Geol. Soc., vol. 37, p. 305, pl. XIII, fig. 18.
- 1882. *Cardiopteris eriana*, Dawson, Foss. Pl. Erian (Devon.) Upp. Silur. Canada, pt. 2, p. 114, text fig. 4.
- 1910. ? *Cardiopteris eriana*, Dawson, Matthew, Oldest Silur. Flora, Bull. Nat. Hist. Soc. New Brunswick, vol. 6, p. 248.

The description and figures in the two accounts of the species are identical. The original fragment from which Sir William Dawson's figure is drawn, is No. 3337 in the McGill University collection. The specimen does not offer sufficient colour, contrast or surface sculpturing to make a photograph worth reproduction, so that Dawson's original text drawing is reproduced to represent the type specimen. In my pl. XV, fig. 39, a photograph of a single pinnule is illustrated from the British Museum collection, No. V 4141, which shows the veins very clearly.