

as figured by Stur (1875 pl. XVI, figs. 4, 5). Kidston (1889 p. 421 pl. I, fig. 1) figures a specimen in the British Museum Geological Department (V 1761) with which the Canadian specimen has some similarity, but the pinnules of the latter are rather larger and more rounded, and are all entire (so far as the evidence available indicates) instead of splitting as do the pinnules of *A. antiquus*.

Genus **NEUROPTERIS**, *Brongniart*.

1822. *Filicites*, section *Neuropteris*, Brongniart, *Class. Végét. Foss.*, p. 233.

The impressions of foliage included in this genus are probably almost all Pteridosperms. The most important species, *Neuropteris heterophylla* was discovered by Kidston (1904) in organic continuity with a large seed. For an account of the important bearing of such results on botanical morphology reference should be made to Scott's "Studies" and Kidston's recent account (1911 p. 71) of the genus. The fronds generally dichotomise, and are of large size, aplebiae are characteristic. In the compound leaves the terminal pinnule of each pinna is generally the largest, often markedly so; the pinnules are entire and appear leathery or stout. There is no single well marked mid-rib, though in some species an aggregate of veins running centrally for some way, much resembles one. The veins follow a more or less arched course, and frequently dichotomise.

NEUROPTERIS HETEROPHYLLA, *Brongniart*.

[= *Neuropteris polymorpha* Dawson].

Plate XIV, figure 35; Plate XV, figures 36, 38; Plate XXI, figure 56; and text figs. 9 and 10.

1822. *Filicites (Neuropteris) heterophyllus*, Brongniart, *Classif. Distrib. Végét. foss.*, p. 233, pl. XIII (ü), figs. 6a and b.
 1831. *Neuropteris heterophylla*, Brongniart, *Hist. Végét. Foss.*, p. 243, pl. LXXI, LXXII, fig. 2.¹
 1862. *Neuropteris polymorpha*, Dawson, *Quart. Journ. Geol. Soc.*, vol. 18, p. 320, pl. XV, figs. 36, a, b, c.
 1868. *Neuropteris polymorpha*, Dawson, *Acadian Geol.*, ed. 2, p. 549, fig. 192c.
 1871. *Neuropteris polymorpha*, Dawson, *Foss. Pl. Devon Upp. Silur. Canada, Rep. Geol. Surv.*, p. 49, pl. XVIII, fig. 212.
 1886. *Neuropteris heterophylla*, Brongniart, Zeiller, *Bassin houill. Valenciennes Atlas*, pl. XLVIII, figs. 1, 2; pl. XLIV, fig. 1.
 1888. *Neuropteris heterophylla*, Brongniart, Zeiller, *Text of Same*, p. 261.
 1888. *Neuropteris polymorpha*, Dawson, *Geol. Hist. Pl.*, p. 72, fig. 22c (from 1905 edition).

¹ See note p. 15.