

22. *DIOONITES BOREALIS*. S. N. (Pl. III., Fig. 37.)

Petiole thick, longitudinally striate. Leaflets 16 millimetres wide, parallel-sided, decurrent at base on the petiole, longitudinally striated with about 15 striæ. Length of leaflets, 9 centimetres or more, terminations unknown.

This is a fragment of a leaf similar to that of *Dioonites Columbianus* from the Queen Charlotte Islands, but differing in size and venation. Similar leaves have been found by Fontaine in the Lower Cretaceous of Virginia, and in Europe they are considered to be characteristic of the Lower Cretaceous. In America, however, *Dioon edule* still survives as a representative of this type of cycads.

Collected by Mr. R. G. McConnell, on Willow Creek, N. W. Territory.

2.—Upper Cretaceous of Vancouver Island.

✓ 1. *NEUROPTERIS CASTOR*, S. N. (Fig. 14, 14a.)

Pinnules at right angles to rhachis, closely set, oblong, abruptly pointed, attached by whole base. Midrib strong, fading before reaching the point. Veins obscure, but apparently at an acute angle to the midrib. Very abundant at Beaver Harbour.

Collected by Dr. G. M. Dawson. 1878.

✓ 2. *TÆNIPTERIS PLUMOSA*, S. N. (Fig. 15.)

Resembles closely *T. Vittata* and *T. Gibbsii* of Newberry, but has the veins forming an angle of 50° with the midrib, which is very strong, giving off to the even margin strongly marked parallel veins. Breadth 2 centimetres; length and termination unknown.

Collected by Dr. G. M. Dawson at Baynes' Sound. 1878.

✓ 3. *NILSSONIA LATA*, S. N. (Figs. 15, bis. 15 a.)

Frond at least 6 centimetres broad. Pinnules about 1.2 centimetres in breadth, each with about 30 parallel veins at angle of 50° from the rib. Pinnæ separated from each other by narrow acute lacunæ. Midrib broad and channeled. Terminal pinna a little broader than the lateral segments.

Collected by Dr. G. M. Dawson at Baynes' Sound. 1878.

✓ 4. *PTERIS (OLEANDRA) GLOSSOPTEROIDES*, S. N. (Fig. 16.)

Pinna lanceolate, 2 centimetres wide, 8 or more long. Midrib strong, giving off ascending curved twice-forking veins, which from their flexuous character sometimes appear netted. Margin of pinna apparently inflexed or thickened. Resembles *Oleandra arctica*, Heer, from Greenland; but has the veins at a more acute angle.

Collected by Mr. J. Richardson, at Protection Island. 1873.

✓ 5. *SPHENOPTERIS ELONGATA*, Newberry. (Figs. 17, 17 a.) Newberry, Boston Journal of Natural History, Vol. VII., No. 4.

This species was described by Newberry, from specimens collected at Orcas Island, on the Coast of Oregon. It is compared by him with *S. Verletii*, Brngt. It is doubtfully referred to *Sphenopteris*, but as the fructification is unknown, may be allowed to remain there at present.

Collected by Mr. J. Richardson, at Protection Island. 1873.