

It will be seen from the above table that in America the flora of the Lower Cretaceous or Neocomian retains the meagre character of the Mesozoic age, even in its upper part; but in the Cenomanian a rich Angiospermous flora was introduced and continued throughout the remainder of the Cretaceous into the Tertiary.

## II.—THE MIDDLE AND UPPER CRETACEOUS FLORA.

For descriptions and figures of the plants of the Middle Cretaceous beds of the Queen Charlotte Islands, reference may be made to the Report of the Geological Survey of Canada for 1872-73. I would merely remark here that though regarded on the evidence of animal fossils as Middle Cretaceous, their fossil plants show that they must be somewhat older than the Dakota Group of the United States geologists, and therefore approaching to Lower Cretaceous. On the other hand, the beds on the Pine and Peace Rivers, explored by Dr. Selwyn and Dr. G. M. Dawson, would seem to be somewhat later than the Dakota Group, and near to the horizon of the Niobrara, in which period the greater part of the interior plain of North America was occupied with a warm-water sea, near the North-western margin of which the plants which abound in these beds must have flourished, and probably enjoyed as far north as 50° to 55°, a mild and equable climate, which may have become colder in the Upper Cretaceous period, but was again mild in the Laramie age. Both on account of the probable difference in age, and the geographical separation of the floras of the eastern base of the Rocky Mountains and of the Pacific Coast, it will be expedient to notice these separately. The first represents the flora of the interior of North America in the Lower or Middle Senonian of European geologists. The second, that of the Pacific Coast in the Upper Senonian or Lower Danian of Europe. (See table supra.)

### I.—*Eastern Side of Rocky Mountains, more especially in the vicinity of the Peace and Pine Rivers.*

#### 1. ASPLENIUM NIOBRARA, S. N. (Fig. 1.)

Frond bipinnate, small and delicate, the pinnules elongate, crenulate and with rows of oblique linear prominences, probably representing the indusia. I have referred this pretty little fern to *Asplenium*, on the evidence of the remains of fructification which it presents. The figure represents a single pinnule enlarged about four times. The specimens contain considerable portions of fronds, but imperfectly preserved.

Collected by Dr. Selwyn on the ~~Peace~~ River.

#### ✓ ✓ 2. CYCADITES UNJIGA.\* S. N. (Figs. 2, 2a.)

Midrib strong, channeled, pinnae linear, one-nerved, acute, at angle of about 50° to the midrib. Ordinary pinnae about 3 centimetres long; longest, 5 centimetres or more. Near to *C. Dicksoni*, Heer, from the Upper Cretaceous of Greenland, but petiole stouter, pinnae more acute and at more acute angle to petiole.

Collected by Dr. Selwyn at Pine River Forks, also at Table Mountain, in sandstone containing *Inoceramus altus*; also at Peace River, 25 miles above Dunvegan. (875, 1875.)

\* The Indian name of the Peace River.