II.—On Fossil Plants from the Similkameen Valley and other places in the Southern Interior of British Columbia.

By SIR J. WILLIAM DAWSON, C.M.G., F.R.S., &c.

(Read May 28, 1890.)

In the year 1877 a small collection of plants from the Similkameen River, in British Columbia, collected by Dr. G. M. Dawson, was placed in my hands for examination. A rough list of these plants was prepared, including nineteen species, most of which were, however, too imperfect for certain determination.' One of the species, an Equisetum, of which there were a number of specimens, was described as E. Similkamense; the others were referred, with more or less hesitation, to previously described Tertiary species. The general aspect of the collection was stated to be Miocene, or, possibly, Oligocene. These plants, with others from Quesnel, Blackwater and North Thompson Rivers, were subse. quently noticed in my memoirs on "Fossil Plants from British Columbia," in these Transactions for 1882. In 1888 an additional collection was obtained, including some of the former species and others not previously seen, and enabling more satisfactory comparisons to be made. I propose in the present paper to notice these specimens, and to discuss their bearing on the age of the Tertiary Lake Basins of British Columbia. It is proper to state here that since the publication of the Report of 1877-78, specimens from Chigneck Bay and Unga Islands in Alaska have come into the hands of the late Prof. Lesquereux, which seem to be of similar age, and include several of the same species. They have been described by him in the 'Proceedings of the U. S. National Museum' (Vol. 5, 1882), and have been subsequently noticed in the 'Reports of the U.S. Geological Survey,' Vol. viii, "Cretaceous and Tertiary Floras." Lesquereux does not seem to have seen my contribution on the Similkameen plants in the Canadian Report, but has evidently met with some of the same species. These papers will be referred to in the following pages, as well as notices of "Fossil Plants from Oregon," contributed by Dr. Newberry to the 'Bulletin of the U.S. Geological Survey,' No. 51, 1888.

It would appear from these papers that in Alaska, as in British Columbia, there are deposits containing fossil plants which range from the lower Cretaceous, equivalent to the Kootanie and Queen Charlotte Groups of British Columbia, to the Miocene Tertiary, and the collections which have been described by Heer in the 'Flora Alaskana,' as well as those in the papers above referred to, represent in all probability these horizons, as well as intermediate portions of the Laramic and Eocene. In the State of Washington the Laramie would seem, according to Newberry, to be represented in the so-called Puget Group. The plants of the Similkameen beds of British Columbia, which have also afforded a rich insect fauna, described by Dr. Scudder, are therefore of interest, not only

<sup>14</sup> Report Geol. Surv. Can., 1877-78, p. 186, B.

<sup>2 &#</sup>x27;Report Geol. Surv. Can.,' 1877-78, p. 115, B, &c.