CANADIAN NATURALIST.

SECOND SERIES.

OUTLINES OF THE DISTRIBUTION OF ARCTIC PLANTS.

Ly Jos. D. Hooker, M.D., F.R.S., &c.*

I shall endeavour in the following pages to comply, as far a I can, with a desire expressed by several distinguished Arctic voyagers, that I should draw up an account of the affinities and distribution of the flowering plants of the North Polar Regions. The method I have followed has been, first to ascertain the names and localities of all plants which appear on good evidence to have been found north of the arctic circle in each continent; then to divide the polar zone longitudinally into areas characterized by differences in their vegetation; then to trace the distribution of the arctic plants, and of their varieties and very closely allied forms, into the temperate and alpine regions of both hemispheres. Having tabulated these data, I have endeavoured to show how far their present distribution may be accounted for by slow changes of climate during and since the glacial period.

The arctic flora forms a circumpolar belt of 10° to 14° latitude, north of the arctic circle. There is no abrupt break or change in the vegetation anywhere along this belt, except in the meridian of Baffin's Bay, whose opposite shores present a sudden change from an almost purely European flora on its east coast, to one with a large admixture of American plants on its west.

The number of flowering plants which have been collected within

^{*} Read before the Linnean Society, London, June 21st, 1860, and reprinted (by permission of the President) from its Transactions, Vol xxiii., pp. 251-£ 1: with some corrections by the Author.