

## II.—ON THE DISTRIBUTION OF ARCTIC FLOWERING PLANTS IN VARIOUS REGIONS OF THE GLOBE.

There is but one distinct genus confined to the arctic regions, the monotypic and local *Pleuropogon Sabini*; and there are but seven other peculiarly arctic species, together with one with which I am wholly unacquainted, viz., *Monolepis Asiatica*. The remaining 762 species are all of them found south of the circle; and of these all but 150 advance south of the parallel of 40° N. lat., either in the Mediterranean basin, Northern India, the United States, Oregon, or California; about 50 are natives of the mountainous regions of the tropics; and just 105 inhabit the south temperate zone.

The proportion of species which have migrated southwards in the Old and New World also bear a fair relation to the facilities for migration presented by the different continents. Thus,

Of 616 Arctic European species,	Of 233 Arctic Asiatic species,
456 inhabit the Alps, and	210 reach the Altai, Soongaria, etc. ;
450 cross them ;	106 reach the Himalaya ;
126 cross the Mediterranean ;	0 are found on the tropical mts. of Asia ;
26 inhabit South Africa.	5 inhabit Australia and New Zealand.
Of 379 Arctic East American,	Of 346 Arctic West American species,
203 inhabit the United States.	274 are north temperate ;
34 inhabit tropical American mountains.	24 on tropical mountains ;
50 inhabit temperate South America.	37 in south temperate zone.

These tables present in a very striking point of view the fact of the Scandinavian flora being the most widely distributed over the globe. The Mediterranean, South African, Malayan, Australian, and all the floras of the New World have narrow ranges compared with the Scandinavian, and none of them form a prominent feature in any other continent than their own; but the Scandinavian not only girdles the globe in the arctic circle, and dominates over all others in the north temperate zone of the Old World, but intrudes conspicuously into every other temperate flora, whether in the northern or southern hemisphere, or on the alps of tropical countries.

The severest test to which this observation could be put is that supplied by the Arctic Scandinavian forms; for these belong to the remotest corner of the Scandinavian area, and should of all plants be the most impatient of temperate, warm, and tropical climates. The following will, approximately, express the result:—

Total Arctic Scandinavian forms.....	586	Cross Alps, etc.....	480
In North United States, Canada, etc....	360	Reach South Africa .....	20
In Tropical America .....	40	Himalaya, etc.....	300
In Temperate South America.....	70	Tropical Asia.....	20
In Alps of Middle Europe, Pyrenees, etc.	490	Australia, etc.....	60