CANADIAN SPRUCES.

The beautiful evergreen coniferous trees called "spruces," form a marked feature of the wild forest lands of the Canadian Dominion, especially in the Atlantic maritime districts, and in the tracts of country lying around the great lakes. The spruces are valued, not only for their large yields of useful lumber, applicable to so many purposes of life on land and sea, and for the summer shade and winter shelter which, as living trees, they afford our dwellings, but they are likewise regarded with interest, and as having some importance, from scientific points of view. How far the differences in struc ture and habit presented by the several species, and their aberrant or so-called intermediate forms, are to be regarded as indicative of genetic differences, or may be accounted for by the mere effects of past or present external conditions, is a question of more than incidental interest. It naturally leads to a comparison of these treeswith their allies in other parts of the northern hemisphere, far beyond the range of the present Canadian forest, immense as it is, and to the consideration of other facts bearing upon their probable ancestry, in regard to which, however, the results, so far, are insufficient to warrant satisfactory conclusions.

These trees, and their extra-Canadian allies, have been variously described by botanists, at different times, under the several generic names : Pinus, Abies, Picea. Linnæus, upon whose system our nomenclature is founded, embraced under Pinus: the true pines, the Lebanon cedar, the larch, the silver (or balsam) fir, and the hemlock. In selecting specific names for the silver fir and spruce, he adopted those used by Pliny and other classical writers, who called the spruce Picea, and the silver fir Abies. But he unfortunately transposed these names, calling the spruce Pinus Abies, and the silver fir P. Picea. This opened the way for much confusion, for when the old aggregate genus Pinus came to be successively divided up into. segregate genera, and the classical names were adopted as generic ones, choice had to be made between two courses,-either to apply these names so as to denote the trees intended by the classical writers, or to use them, at variance with classical usage, in accordance with the Linnæan nomenclature. As has just been indicated, succeeding botanists separated the true pines, and other marked groups of the Linnæan genus Pinus, into separate genera; at first the spruces and

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