

PHYSICAL CHARACTERISTICS OF CANADA.

ranges and much altered. The whole region remains mountainous, though the interior section is reduced to an elevated plateau. Agricultural pursuits are therefore limited to the valleys. In these there are numerous terraces composed of silt carried down by streams issuing from former glaciers, the latter acting as eroding agents on the underlying rocks. These valley deposits are fertile and are well adapted to fruit culture. The soil of the lower Fraser is a heavier soil and consists chiefly of alluvium.

Thus is Canada's rich heritage in green forests and broad waving fields of grain the result of the geological processes of ages. Nature in her sterner moods produced those great upheavals, foldings and crushings of the earth's crust that resulted in the rugged and uneven stretches of country suited to the growth of forests; in her kinder moments she slowly and gently and with little disturbance elevated above the sea the level or slightly undulating areas so well adapted to agriculture. Ages before man appeared upon the earth had the geological processes already determined what his pursuits should be and where they should be carried on.

FLORA AND FAUNA.¹

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Arctic Zone.—Canada, for the purpose of this sketch, may be roughly divided into three zones, the Arctic, the Canadian and the Transition, the Hudsonian zone being included in the first two, and the northern limit of trees serving to define the southern boundary of the Arctic zone. The great majority of the plants of the Arctic zone are circumpolar in their distribution, the species of the extreme north being practically identical with those of the same latitudes of Europe and Asia. The chief breeding grounds of nearly all the waders and of the larger game birds, with the exception of the grouse family, are in the Arctic zone, though many stragglers nest further south. The ptarmigan is the only game bird inhabiting the region during the winter months. The characteristic mammals are the arctic fox and hare, the polar bear, the barren-ground caribou, the musk ox and the lemming.

Canadian Zone.—The Canadian zone, as the term is used here, includes the sub-Arctic forest, and extends from northern Quebec north-westerly across the continent to the Mackenzie river; parts of New Brunswick and Nova Scotia may also be included in this zone. Spruce, poplar, birch and jack pine are the characteristic trees, and the flora exhibits so little variety that at least 90 per cent. of the species collected in one locality would be found in any other. It is from this zone that the bulk of the pulpwood is now being taken and will be taken in the future; and the sub-Arctic forest is the natural home of all Canadian big game and fur-bearing animals, except the Arctic species and those found in the Rocky mountains and British Columbia, the antelope alone being peculiar to the prairie region. Elk, moose, woodland

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