

SPECIAL  
ARTICLES

## Our Contributors

BOOK  
REVIEWS

## OUR WESTERN MOUNTAINS.

By Rev. Dr. Herdman.

Ruskin has written that at the age of two his mother placed him on a crag-summit in the north of England. Peering through the roots of a tree, there flashed into his infant eyes the sight of a wide valley with slanting rays of sunlight and the gleam of far-off distances. Then he woke, in that tender age of his, to a sense of the vastness and loneliness of Nature. Born again into the kingdom of beauty he became an artistic soul. Perhaps we older infants may also see sights and get some inspiration—will one only absorb into our hearts the glow and vision of the great mountain scenery of our Dominion.

Bewildering as our mountains are in variety and number, at least one can count upon four main ranges, roughly parallel to the Pacific shore line—the Rockies, the Selkirk, the Gold and the Coast range. Sometimes these two latter are thrown together and named the Cascade. Another range is sometimes suggested, consisting of submerged mountains, their tops forming the islands and archipelagos off the Pacific shore. The Rockies are the loftiest, running up of ten 1,000 feet higher than the Selkirks. Upon the Selkirk range, however, moisture falls abundantly, which means many glaciers and large snowfields. There are but few lakes in the Selkirks, the valleys being precipitous. The Gold range really includes an indiscriminate number of sub-ranges, fairly well flattened down. Some of the Coast peaks rise up straight from sea-level, and in that way (like Cheam, a noble mountain, 70 miles from the mouth of the Fraser river) really afford a longer climb than from the high peaks of the interior, and present views that alternate between a sea of mountains to the east and a sight of cities along the shore lines of the Pacific. But the difficulty near the coast is how to get through the dense dripping vegetation and timber.

## Literature of Our Mountains.

What books are there that deal with our mountains? The literature is charming and fascinating. First, Dr. Green's little volume published in 1888, "Among the Selkirk Glaciers." Mount Bonney was his greatest conquest. MacDonald and Sir Donald were his defeats. But he was one of the pioneer climbers of our mountains, and the mapping of routes, and the studies of rocks and of the glaciers made the book instructive to this day. Then came in 1891, Walter D. Wilcox's "Camping in the Canadian Rockies," followed by a later edition named "The Rockies of Canada." Very fine are the photographs given in these books, and the author is a man in love with nature and with the climbing of high peaks as well as the studying in detail of peaceful valleys. In 1904 came out a book of constant climbs and frequent conquests, along with a good deal of the history of the first transcontinental explorers—the authors being H. E. M. Stutfield and Prof. Collie, and the name of the book being "Climbs and Explorations in the Rockies." Another book of perhaps even more added interest, full of poetry and spiritual thought and of long lists of "first ascents," named "In the heart of the Rockies," was published last year by an intrepid mountaineer, Rev. James Outram. Then at the end of the year came the magnificent work of our leading Canadian climber and surveyor, "The Selkirk Range," by A. O. Wheeler, of Calgary,

the book being published by the department of the interior. His work presents splendid photographs and describes systematically the early explorations and the present survey system and the climbing by different parties of a large array of peaks, and is to be followed by maps and charts. One should refer also to a coming book by Mrs. Henshaw, of Vancouver, on the flora of the mountains, and to the photographs of flowers taken by Mrs. Schaffer. Besides there have been many articles concerning our Canadian mountains published in magazines in the States, especially in the Appalachian Journal, of Cambridge, Mass.

To get a proper understanding of the heights and sizes of the mountains, one must remember that the laws of perspective apply here as elsewhere. A small hill will sometimes hide a large mountain. When you look at the glacier on Mt. Temple, because it is seven miles from the railway, many travellers think it is only a few feet in thickness; it must be at least 200 feet. On the other hand, it is possible that in the early guide books of the C. P. R. the Green Glacier on the east side of Mt. Stephen was rated as entirely too thick, said to be in the early fifties 500 feet, which may be an exaggeration, and there were some descriptions that implied that our Canadian peaks were higher than the Alps! Here is one way of ascertaining the standards that should be applied to the mountains: Get first the idea of the "tree line," then of the limit of vegetation, then of the slopes of bare rock, then of the glaciers and snow fields, and the cornices that cling to the crests. Trees run up the sides of the mountains to about 7,000 feet in the Rockies, and about a thousand feet lower in the Selkirks. Vegetation, in the shape of shrubs, flowers, moss and heath, proceeds from a thousand to two thousand feet higher, when the slopes are not too steep or covered with rocks. The glaciers in the Selkirks come down sometimes as low as 5,000 feet above sea level. While from the peak of a mountain you get a great panoramic view, yet sometimes from a height of about seven or eight thousand feet you can see more detail in the way of lakes, ravines, valleys, couloirs—and pick up some good imitations of Scotch heather and capture some gaily-colored butterflies.

The steeper a mountain is on one side, the more accessible it usually is from some other side. Mountains have all they can do to maintain their equilibrium and preserve their own peaks! And where a castellated tower or crest rises up, as on the Crow's Nest mountain, and the highest wall of Stephen and the top of Cathedral and other summits—Nature has thoughtfully, in most cases, thrown a ledge around a precipice, and opened up a chimney crack just at the perilous places. Many of the mountains have sent down small or large rock-slides. A curved peak near Arrowhead threw a mass of debris into the Arrow lake three years ago, which raised a tidal wave that broke the C. P. R. steamer from her moorings at the wharf, and only for the cool headedness and good seamanship of her captain she would have been dashed to pieces or sunk. Near Field from the slopes of Cathedral mountain there are visible evidences of a great slide, perhaps second only to the Frank slide. As for this last one, I think Turtle mountain was largely composed of gravel on the side from which the rocks fell, and some other mountains in that neighbor-

hood present the same appearance, the heavy rocks on the surface being apparently a sort of veneering. There are evidences of slides also in the "ice-gorge" on Mt. Stephen and in a valley between Peaks Stutfield and Wooley. A little slope of earth slid right away some years ago at Maple Ridge near Westminster Junction and last year a small hill moved away at Spence's Bridge and buried a settlement of Indians.

## Our Loftiest Mountains.

What is the height of our loftiest mountains? The highest so far known is Mount Robson, 13,500 feet, west of the Yellowhead Pass. Next to it are Mounts Columbia (12,500), Forbes (12,100), Alberta (12,000). These last named mountains are 50 to 90 miles north of Laggan. Then come Lyell, Athabasca, and Assiniboine. The highest mountains visible easily from the railway are Temple (11,637), Stephen (10,523), Vaux (10,741), Sir Donald (10,806), and Bonney (10,700).

Avalanches fall from the cornices and the overhanging glaciers on the mountain crests. In Abbot's pass, between the steep sides of Lefroy and Victoria, great masses are often to be seen, launched out suddenly into space. Then there is a noise like the roar of Niagara, and behind the avalanche streams of snow-dust trail down like cascades. Climbing up the steep side of a high crest you often find a shelf of snow and ice extending over your head for 20 feet or more into space. This needs caution and more caution perhaps when you are rounding peaks or corners where the snowslope seems firm but has nothing but air beneath it. As for the glaciers, they move an inch or two on an average each day. Some are steep, others—like the Victoria glacier, near Lake Louise—almost level. The ice is vicious and the snout of the glaciers is usually the most slippery and dangerous part. The reason of this is because the warm air of the valley has effect upon the ice, and the glacier itself is fed usually from a snow field (reve) covering a large area. The reve on the slopes of Mount Columbia is said to include 200 square miles, and in many places, as near Glacier House, the snow fields often connect and combine. In climbing to the great ice-field of Mount Hector, you mount up to a height of perhaps 9,000 feet and reach a high escarpment; the climate seems tropical all the way if the sun is shining, but when you come to the gap which forwards you towards the lion-like peak, you plunge in five minutes' time into Arctic conditions—snow, cold air, ice, frigidity. Nature abounds in moments and varieties.

Maritime Baptist: Churches are, as a rule, about as broad in their sympathies as self-sacrificing, as liberal, as progressive, as devoted in every way to Christ and His cause as their ministers, in their lives and teachings, are. Sometimes churches are far behind their ministers; but they are not often in advance of them. Churches do not lead; they follow. How important that they be wisely led and taught.

A naturalist, discussing the materials out of which birds sometimes make their nests, mentions cases where dog's hair, wool, watch springs, and strips of newspaper have been used.

When men put politics above Christianity they cease to be either patriots or Christians.