

Forests and Snowslides.

Mr. Arthur Lakes, Sr., Ymir, B.C.

When much of a theoretical nature is being written and spoken with reference to the influence of forests on snow and water, it is stimulating to receive the first-hand impressions of a man whose many years of practical experience in mining operations has led him to some definite conclusions on the subject.

Mr. Arthur Lakes, Sr., of Ymir, B.C., writing recently to Mr. H. R. MacMillan, Chief Forester of British Columbia, gives a description of a snowslide in the vicinity of the mine in which he is interested.

Says Mr. Lakes:—

‘I saw yesterday what seemed to me a striking object lesson in the importance of conserving and preserving growing standing timber and the benefit of the forestry policy in averting or checking great forest fires. The mountain opposite to the Wilcox Mine, above Wild Horse Creek, is smooth-faced, indented here and there by deep furrows or shallow ravines which during last winter were the pathways of small snowslides. Yesterday after a succession of severe and nearly continuous snowstorms which accumulated some six or eight feet of snow on a level, the entire face of the mountain for a space of over half a mile and to a height of a thousand feet above the river slid down bodily in one continuous sheet or snowslide, starting at every point simultaneously as though by preconcerted signal, and cracking off from the snow above, leaving a distinct irregular or crenated line of cliff apparently from five to ten feet high along the zone where the slide originated, strongly resembling an irregular brush fence at a distance. The snow scaled off from the underlying older and harder snow like the coat of an onion and plunged down enveloped in white foam and smoke-like mist, into the river.

BEGAN IN BARE PLACES.

‘The remarkable feature, to me, of this slide was the way in which at its starting point it avoided all growing or standing timber. The slide invariably had its inception and origination point in bare places just at the lower edge of the timber—never from within it although the timber occupies V-shaped depressions well adapted for the accumulation of snow.

‘During the year before last I noted that none of the numerous individual slides headed from within growing timber areas, but invariably from bare places burned off by the forest fires. If the timber covered the mountain as it did before the fires there would be no snowslides on that mountain and no menace to mining houses or plants. As it is it would be hazardous or impossible, in case ore bodies (believed to exist) were discovered, to mine the ore or to erect buildings.

‘This little incident which I doubt not is common enough and which the foresters must often have observed in this country, showed me clearly the protection from snowslides that standing timber affords, especially at their inception and near the summits. No prudent miner would cut off to any extent the timber back of his mining plant on the poor excuse of its being “handy,” thereby destroying his best friend and protection from the attack of his worst enemy, the snowslide. At the same time he would, no doubt, clear off a certain space around his mining plant as security against forest fires.

DEADLY TO MINING CAMPS.

‘It seems to me that a great forest fire such as those which have swept these mountains, is one of the greatest conceivable misfortunes to a mining camp. It endangers the plant. It destroys necessary timber for future use. It extinguishes the timber protection against snowslides. It even encourages slides, originates them or makes them possible, and seriously affects the water supply.

‘The effect of these snowslides is damaging on the water supply. Not only does it demolish our flumes, as in our own case at the Wilcox, but it carries away uselessly a vast amount of snow that should be stored up for gradual use in the spring season. Both lode miners and placer miners realize this. On the other hand, timber left standing gathers the snow and lets the water out gradually—about the time it is most required in the spring and summer, not in useless torrents swept away rapidly in swollen rivers, but quietly and beneficially. I have read of several placer mines in Northern British Columbia being placed *hors de combat* by the sudden departure of the snows and water borne away in unavailable torrents.

‘To me the sight of the effects of a great forest fire such as that which swept through these mountains is a most pitiable one. The