

greater than any previous ones for fifty or one hundred years, and other signs of greater rainfall. If these conditions have existed for even a few years, the glaciers would be sensibly increased.

Present Glaciation.—A reference to the map shows that the present glacier is quite extensive. The longest glacier occupies the end of the Louise valley, and is over $3\frac{1}{2}$ miles long. The structure of the rock strata is such as to cause the formation of great fields of snow near the summits of many of the mountains, which become glaciated and flow downwards for 1000 or 2000 feet at steep angles, often 45° , and then break off in great masses as the ice is slowly pushed over the precipice. This condition of things is the cause of frequent magnificent avalanches, for the hanging glaciers often exist at the top of a nearly perpendicular

VICTORIA



LOOKING TOWARDS MOUNT VICTORIA, 11,585 FEET, FROM THE SUMMIT OF COAT MOUNTAIN, 8918 FEET, FOUR MILES DISTANT.

rock wall from 1000 to 2000 feet high. The ice thus breaking off is a source of fresh supply to the glaciers below. In July and August the thunder of these avalanches is very frequent, especially before sunrise. Water freezing in the crevasses must be the immediate cause of this. The thickness of the ice in the hanging glaciers is from 200 to 250 feet. They show about twenty dark lines running horizontally in the cross-section. These are 12 or 15 feet apart near the top, but compressed to a foot or less at the bottom. They undoubtedly register the annual snowfall, the dark bands being the dirt which is brought down by slides during July and August, while the white part represents the uninterrupted accumulation during the rest of the year.