

the coolness of the air increases in pace with its rarification. Professor McCleed, in the second lecture of this course, made this plain by his diagrams, showing how an increase of altitude above the sea is equal to an increase of latitude away from the Equator, until, on the tops of very lofty mountains truly polar weather exists. The summits of the eastern Rockies are not much higher, however, than the crests of the Gold and Selkirk ranges; and they are colder than their more western compeers, not because they are higher, but because they are more inland, and hence receive air already dry, rarified and well cooled.

It is this characteristic of the atmosphere of the eastern side of the Rockies—in the neighborhood of Banff Springs, for instance—which gives it such a sanitary value, particularly in diseases of the lungs and throat.

Now let us make a hasty review: The winds of British Columbia are, broadly speaking, from the west. They are warm from the ocean, and loaded with moisture. Condensing into fog at the coast, they give a uniform, English-like, muggy climate along the Pacific coast. Further condensed, they are less foggy, but produce a more cloudy sky and heavier rainfall on the coast mountains. Raised to the elevation of the crest of the Cascades or Coast range, they take a flying leap across the interior basin, discharging little rain on the Thompson valley,—leaving it subject to extreme cold in winter, excessive heat in summer, and drought all the time. Condensed again by the Gold Range, the moist winds give those mountains rain and heat almost equal to that of the Coast Range. Condensed still further, by the Selkirks, there is a copious rainfall and snowfall upon these mountains, and a further giving up of warmth, which greatly tempers the climate; but by the time the Selkirks are past, the winds have lost nearly all their moisture and warmth, and have been rarified by being forced to an average height of seven or eight thousand feet. Hence, when they pass to the Rockies they are dry and cool in summer—dry and very cold in winter. What little humidity and warmth they may retain is almost lost on the western slope,