

suffering from pulmonary tuberculosis than higher altitudes, where the pressure upon the blood vessels is so much greater in the rarified air which aggravates a liability to hemorrhage. At great heights respiration is stimulated (quicker), partly because, perhaps, of the lessened percentage of oxygen in the air. At 7,000 feet above sea level the rarification causes it to have only three-quarters as much oxygen in a given volume as at sea level. Mountaineers, therefore, develop large chests, most likely from frequency of respiration, but generally a vigorous people.

The heat and light from the summer sun here, and from the great length of the day, many of the harmful bacteria are destroyed that may chance to be on the surface of the ground.

Our vast prairie land does not become too warm, from the fact that the sun's rays are intercepted by the grass, and so do not reach the ground, while the radiation from the grass causes considerable coolness during the day time, not depressing, but agreeable to the invalid. The same free radiation causes a rapid cooling at night, having a delightfully refreshing, recuperating effect, so beneficial to the phthical patient. The prevailing winds are generally either from the northwest or southeast, the latter usually warm and agreeable, the more westerly bringing the purest of air, free from dust and other impurities from its passage over the large range of prairie. The chinook is a notable instance of a benign climatic influence in winter. It is a warm, dry wind, felt on the eastern slope of the great mountain range, felt most in the country farther west, but influencing the table lands all along.

Taking the map, you will observe, as you approach the Rocky Mountains, the Columbia river has made its way through its mountain barriers. The Fraser river, passing through the Cascade range, you find gorges in the mountains everywhere. Those great natural valleys, those intervals of the Rocky Mountain chain, let in the influence of the gulf stream of the Pacific, materially influencing the climate in

the winter season to the west of us.

We have in Manitoba all the essentials in the way of climate of value, likely to be advantageous to the phthical patient.

1st. We have the purest air.

2nd. Low relative humidity.

3rd. Absence of a cloudy sky. Our bright, clear sky almost all the year round has an exhilarating effect upon the consumptive, quite different to the condition experienced nearer the sea level, where it is often cloudy, with an absence of sunlight, producing depression of spirits, lack of energy and loss of appetite, disturbance of digestion, turbid urine, and a general feeling of unrest akin to homesickness.

4th. Absence of sudden and frequently repeated changes of temperature.

5th. A uniformly dry atmosphere and dryness of soil, etc., which, taken all together, enabling those affected with tubercular lesion to live longer with more comfort than in any part of the world, especially if they spend the greatest portion of their time in the open air.

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#### PENETRATING GUNSHOT WOUND OF INTESTINE, WITH RECOVERY, BY DR. WESTEROOK.

Patient, age 49, was brought by ambulance into the service of Dr. Fowler in the City Hospital, with a history of having been shot in the abdomen in a midnight brawl. He was unconscious when found by the ambulance surgeon, and when admitted was in a condition of profound shock. An hour and a half later he had rallied considerably; his pulse was 84, with no evidence of serious hemorrhage; the abdomen was tympanitic, and he complained greatly of thirst. Abdominal section was performed by Dr. Westbrook as soon as possible, probably not later than four hours after the injury.

A large single bullet hole was present two and a half inches below the umbilicus and one and one-half inches to the right of the middle line, made with a 38-caliber revolver. After the patient had been completely anesthetized, the wound