JOOK WINDS

OTHER CLIMATIC CONDITIONS OF THE NORTH-WEST.

Some one has said "The climate makes the country". If this proposition is only measurably true -- and there seems no doubt of it-there are few questions of greater importance in connection with capacities and future prospects of our land. It may have been noticed how readily the citizens of our country, having grown proud of the country, become likewise proud of the climate. If climate were a matter of latitude merely, and zones of temperature coincided with the parallels, the question would be as simple as the matter of day and night, the advancing sun giving summer, and the declining sun, winter. But searching into the matter of a difference of temperature in the same latitude, we become aware of the fact that summer has its cold and winter its heat in various localities, in a way not at all in accordance with latitude or season. For instance spring opens about the same time at Fargo, Winnipeg, Battleford, and Peace River. So the matter is more complex, and without committing ourselves to a search after storms or local disturbances we have a wide field for investigation. It would be counted a strange method to open up the question of our climate with a consideration of a phenomenen occurring 1,000 miles west, but our ideas readily adapt themselves to the largeness of our land. "No pent-up Utica contracta our powers, but the whole boundless continent is ours," and we easily regard the Rockies as only just the other side of our horizon. Moreover, it will appear on enquiry that the Chinook Winds are intimately connected with the whole question of our climate. These winds are noticed by the observer as coming down in the depth of winter from the snow-covered mountains so warm and dry as to cause the total disappearance of the snow in a few hours. Most striking along the mountains near Calgary, yet some effect has been noticed as far east as the boundary of Manitoba, and even as motion, the earth turning towards the

far as the Arctic Circle, there are days of decided thawing in the month of January. The Chinook Winds are so called from the tribe of Indians of that name in British Columbia.) So hard is it to credit the evidence of our senses that the common description of these winds is that they come through the passes of the mountains, from the Pacific-s wonder none the less than that which it is supposed to explain. One observer of some note, indeed, hazards the conjecture that the warm winds of the Gulf of Mexico reach all the way up north, over the high plateau of the great American desert, over the still higher mass of hot and rarified air overhanging this desert, and drop conveniently on our lower plains to the north. But as this writer -of deserved repute in his own department-manifestly confounds the lines of equal heat with the direction of the winds, we may be excused from giving much consideration to his theory. Fortunately, we have sufficient data of a strictly reasonable and scientific kind. without indulging in conjectures which, too often, ars the only support of theories on climate or the weather.

A very brief statement of a few points in physical geography may be necessary as a prelude to the consideration of the matter before us.

Joseph Cook, of Boston, said a few days ago that the first question he would ask a class in physical geography would be the following: Suppose the earth were to turn the other way on its axis, what would be the effect on the climate of North America? Net altogether an insoluble conundrum, perhaps, with a little thinking. As it is some time perhaps since most of us have been at school, we may rehearse a short lesson on the Trade winds. Heated air at the Equator rises and is replaced by a rush from the North and South. As this air comes from a part of earth having slower