

The same writer further says:—"Tracing these isothermals still further north, the line of greatest heat passes near Fort Vermillion in lat. $58^{\circ} 24'$ and long. $116^{\circ} 30'$ west" (that is, over nine degrees north of the Manitoba boundary). "I may mention that at this point I found barley cut on August 6th, 1875, and wheat almost ripe." And again, "From the west coast the isothermal lines commence to turn northward from the Gulf of California, and for a time skirt the western side of the Rocky Mountains; but on reaching the low point of the plain between lat. 41° and 45° , they turn to the east, cross the mountains, and strike the Dominion boundary on the 115^{th} meridian. These westerly currents, named the 'Chinooks,' have been known to cause a rise in the temperature of 60° in a few hours. When in that country I enquired from a Half-breed about their effect on the snow. His reply was, 'the Chinooks "lick up snow, water and all." After crossing the Rocky Mountains the thermometric current of the west meets that of the east at or about the Hand Hills in lat. $51^{\circ} 20'$, long. 112° . There, in 1879, I found that for days together, during August, the thermometer in the shade registered from 87° to 92° F."

Our "Guide" will see from this report that it is a fact the "Chinook winds" have their home in the Canadian North-West; and the transformations of temperature they cause is indeed one of the wonders.

Mr. Macoun goes on to say that these conditions confer "the blessings of a climate not only exceptional as regards character, but productive of results to the agriculturist which, I believe, are unsurpassed in any part of the world."

We find precisely similar positions laid down in the work of Mr. BLODGETT, a standard writer on the Climatology of America, and he shows that the conditions which prevail in Europe and contiguous parts of the continent of Asia, repeat themselves on this continent.

Prof. Macoun summarizes this doctrine in the following words, by referring to the cold of winter, as well to the north of the Manitoba frontier as the south, but more particularly to the south, on the more elevated American plains:

"On the withdrawal of the southern warm currents (in the winter), other currents from the north and from the west follow them up, particularly on the east side of the Rockies, and establish the prevailing north-west winter winds, which being affected by the temperature of the Arctic regions on the one hand, and by the mountains on the other, bring the minimum line of cold far to the south. Were the American Desert an inland sea, the summers of our plains would lose their exceptional character, and our winters would be like those of Eastern Europe."