

The sea of Azof, which empties into the Black Sea, forming the eastern border of the Crimean peninsula, freezes about the beginning of November and seldom opens before the beginning of April. A point less than one hundred miles north, but far down in Southern Russia, namely, Catherinoslav, has been found from the observation of many years, to be identical in summer and winter climate with Fort Snelling. Nine-tenths of European Russia, therefore—the main seat of population and resources—is farther north than St. Paul. In fact, Pembina is the climatic equivalent of Moscow, and for that of St. Petersburg, (which is 60 deg. north,) we may reasonably go to latitude 55 deg. on the American continent. Like European Russia, also, the Saskatchewan district has a climate of extremes—the thermometer having a wide range; but it is well understood that the growth of the cereals and of the most useful vegetables depends chiefly on the intensity and duration of the summer heats, and is comparatively little influenced by the severity of winter cold, or lowness of the mean temperature during the year. Therefore, it is important to observe that the northern shore of Lake Huron has the mean summer heat of Bordeaux, in Southern France, namely 70 deg. Fahrenheit, while Cumberland House, in latitude 54 deg. longitude 102, on the Saskatchewan, exceeds, in this respect, Brussels and Paris. The United States Army Meteorological Register has ascertained that the line of 70 deg. mean summer heat crosses the Hudson river at West Point, thence descends to the latitude of Pittsburg, but westward is traced through Sandusky, Chicago, Fort Snelling, and Fort Union, into British America. The average annual heat at Quebec is experienced as far north as latitude 52 deg. in the Saskatchewan country. Mr. Lorin Blodgett, of Washington, (who has published a comprehensive work upon the climatology of the United States) asserts that there is a rapid increase of heat in going westward, on a line of latitude from points in Minnesota, and this even where the elevation increases. "It is warmer," he says, "at Fort Benton on the Missouri, in latitude 46½ deg. west, and latitude 47½ deg. north for every season, than at St. Paul, Minnesota. The mean winter temperature at Fort Benton is 25 deg., and the same as that of Chicago, Toronto, Albany, and Portland, Maine. At St. Paul it is but 15 deg., or 10 deg. less; it is not so cold as this on the main (south) branch of the Saskatchewan."

Mr. Blodgett claims that not only is the vicinity of the south branch of the Saskatchewan as mild in climate as St. Paul, but the north branch of that river is almost equally favorable, and that the ameliorating influence of the Pacific, through the gorges of the Rocky Mountains, is so far felt on Mackenzie River, that wheat may be grown in its valley nearly to the sixty-fifth parallel.