not till about the middle of October are they to be expected at Ponds Inlet. The average temperature drops to zero at Melville island by the 15th of October but does not fall to zero at Ponds Inlet till the 5th of November, by which time the temperature usually swings from 5° below zero to 5° above. After the 15th of November temperatures of 25° to 30° below zero may occur and are of ordinary occurrence in December, January, February and March, with occasional mild days when the temperature may approach 20° above in January and February at Ponds Inlet and 5° or 10° above at Melville island.

As one moves down the eastern part of the Archipelago to Hudson strait the winters average nearly 20° milder than in the upper and western Archipelago. At Lake Harbour on the north shore of the strait, the extreme temperature in some winters has barely touched 30° below zero, while 40° below is of rare occurrence in any winter. Large variations in the temperature are a feature of the weather of the region of Hudson strait. A winter month may average twenty degrees either warmer or colder than the corresponding month in the preceding year, while the temperature in winter may rise from 40° below zero to 45° or more above zero in a remarkably short time. These changes are preceded by such a redistribution of atmospheric pressure that the ordinarily mild conditions obtaining on the south-western coast of Greenland extend across Davis strait to south Baffinland. On such occasions the temperature rises rapidly in the strait and sometimes the rise extends well into Hudson bay with mild weather obtaining at Churchill, while at the same time it may be intensely cold in Saskatchewan and the northern United States. The curve of annual mean temperature at Ivigtut in south Greenland is given in the diagram. It will be seen that the winter on the southern Greenland coast is very little colder than that of Toronto, Buffalo, Rochester or Chicago, and is warmer than many parts of New Hampshire and Vermont, and very much milder than the winters of western Canada and the northwestern United States. The map of mean temperature for January shows the isotherm of 20° passing near Milwaukee, Toronto, Oswego, Albany, southern Maine, through Nova Scotia, Newfoundland, then north to the tip of Greenland. There is ordinarily a steep drop in temperature in winter across Davis strait, but this gradient vanishes or is much reduced when the atmospheric circulation carries air up the strait and turns westerly to flow into Baffinland and Hudson strait and bay.

These pulsations of mild weather do not affect the interior of the Hudson bay and its coasts so often as they do the Hudson strait. For this reason the winters at Churchill and Chesterfield inlet and on the whole western coast of the bay from Nelson north to Fullerton are colder than at Lake Harbour.

In the bay, however, the temperatures begin to rise rapidly after midwinter and by the middle of March Churchill and Nelson are as mild as Lake Harbour and from that time till the first week of November the whole interior of the bay and its coasts are warmer than the Hudson strait.

In the diagram it will be seen that Moose Factory at the southern end of James bay is considerably warmer than Churchill at all seasons, about twelve to fifteen degrees warmer in midwinter and about seven degrees in midsummer. The curve for Tobolsk, in Siberia (which is about the most northerly point where wheat is successfully grown in Siberia), does not differ very greatly from that of Moose Factory. Tobolsk is as far north as Churchill but is far in the interior and not subject to the cooling influence of such a large body of water as Hudson bay. The month of July is a little hotter at Tobolsk than at Moose Factory, but the period when the average temperature is above the freezing point is about the same for both, that is