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? WHY THE WEATHER ?

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MONTREAL'S WINTER FLOODS

A peculiar variety of flood occurring every winter at Montreal, on account of the damming of the narrow parts of the St. Lawrence below the city, is described by Prof. H. T. Barnes in his book "Ice Engineering," in which he quotes as follows from an official report on the subject:

"The St. Lawrence River is not subject to floods in the ordinary sense in which this term is applied to other rivers, such as the Ohio and the Mississippi. The floods at Montreal are not due to excessive quantity of water but of ice, and are entirely local, being confined to a comparatively insignificant extent of the river. Although due to ice formation, they differ from ice gorges in the more southern rivers, which are of short duration and often more destructive, and are produced only by the breaking-up and departure of the ice. In the St. Lawrence, on the contrary, there is a permanent elevation of the river level in the affected districts, while the volume of the flow is diminishing, which elevation, though not maintained at maximum height, continues throughout the winter. Although this takes place every winter, and the wharves at Montreal are submerged about four months in the year, this winter rise of the river is not always accompanied by what may be called a flood. The river reaches its highest winter level from the packing of the ice in December and January, and its highest spring level, arising from the breaking up and departure of the ice, in March and April."

The winter rise "is the result of an unusual burden of ice blocking the channels and requiring a temporary rise before the river can force open a larger area of waterway and settle down to its winter bed."

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