

METEOROLOGY

Canada's Winter Depends Upon India's Summer Weather

Air Pressure Above Normal in India Presages Moderate Cold for Canadian Prairies, Studies Since 1875 Indicate

A MODERATE winter on the Canadian prairies is the indication of certain world weather correlation formulas applied by Dr. Charles F. Brooks and Earl B. Shaw of Clark University, in the current *Bulletin of the American Meteorological Society*.

This computation, applying to the current winter taken as a whole, including the current month of February, is based on weather conditions of India and Argentina during last summer.

When India's pressure is above normal for the months from January to October, the following winter in Canada and the north central part of the United States is likely to be above normal in temperature as indicated by formulas devised by Fred Groissmayr of Passau, Germany, Dr. Brooks and Mr. Shaw are convinced.

During the months of 1930 before October, India, as represented by Nagpur, has had the high pressure which usually heralds a mild winter for Canada on the other side of the ocean and the globe. And although the other weather factors in India, usually associated with a mild winter in Canada, do not entirely substantiate this indication, the evidence is considered sufficiently strong to form the basis for a reasonable expectation that this winter will not be so cold as the average.

Temperatures in Central Argentina are also thought to have an influence on Canadian winters, and reports from South America add strength to the prophecy of a moderate winter. Mild temperature in Central Argentina is usually followed by a moderate winter in central North America and this year Central Argentine temperature, represented by Goya, was above normal for the months through July.

Investigations of the relationship between Canadian winters and weather conditions in distant parts of the world take into account meteorological records since 1875. During the period from 1875 to 1920, the indications for a mild winter in 13 instances have been as favorable as they now are and in

each instance a moderate or mild winter ensued.

"While present calculations should hardly justify us in counting on a moderate winter, 1930-31, at Winnipeg as a certainty, we can say that all previous indications as strong as those for the present winter being above normal have been correct," Dr. Brooks and Mr. Shaw conclude.

Prediction Holding True

Weather reports received by the U. S. Weather Bureau from Winnipeg for the months of December and January show that the Canadian winter thus far has been above normal in accordance with calculations based on weather in India and Argentina. Although the monthly averages have not yet been computed, government meteorologists stated that daily weather reports for this January ranged mostly between zero and 32 degrees Fahrenheit instead of between zero and minus ten degrees as usual in January.

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ELECTRICITY—PHOTOGRAPHY

First Stroboscopic Movies "Still" Whirling Motors

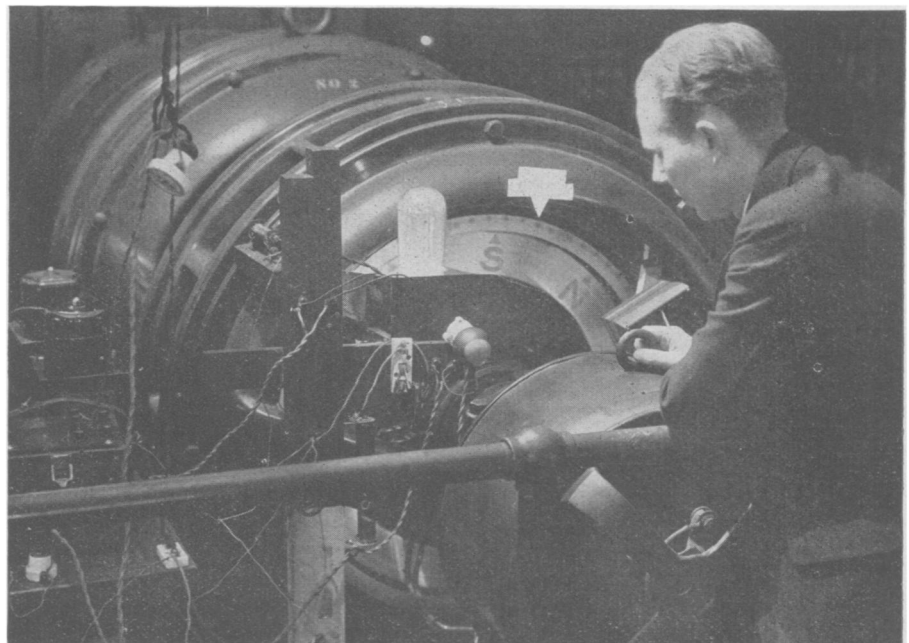
AN APPARATUS that will instantaneously "stop" a whirling electric motor for ten one-millionths of a second, long enough to take a picture of it, and then start the motor just as quickly has been developed in the laboratories of the Massachusetts Institute of Technology.

The motor is not actually halted in its mad rotating at a circumferential speed equal to that of a wheel traveling over the ground at 95 miles per hour, but it certainly does look as though it were standing still.

The new instrument is an improvement of the stroboscope, a type of apparatus that has long been used to study motion. Stroboscopic motion pictures, believed to be the first ever taken, have been made possible by the instrument. They were shown before the meeting of the American Institute of Electrical Engineers in New York last week.

The unique feature of the new stroboscope is the electrical circuit which causes a condenser to discharge periodically through a thyratron mercury arc tube. An intense blue actinic light of extremely short duration, precisely timed to correspond with the speed of the machine, is produced and makes possible the use of the stroboscope for photographic as well as visual observation.

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WHIRLING MOTOR "STANDS STILL" FOR ITS PICTURE