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EXPERIMENTS IN CLIMATOLOGY—THE CANADIAN SUMMER.*

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THE summer of the southern hemisphere is colder than that of the northern. In the development of the meteorological theory which bears his name, Croll in his work on "Climate and Cosmology" incidentally brings out this fact.

"It is well known," he says, speaking of the temperature at the Equator, "that, notwithstanding the nearness of the sun in January, the influence of the present distribution of land and water is sufficient to make the mean temperature of the whole earth, or, what is the same, the mean temperature of the air over the surface of the earth, higher in July than in January.

"The reason of this is obvious. Nearly all the land is in the northern hemisphere, while the southern hemisphere is for the most part water. The surface of the northern or land hemisphere becomes heated in summer and cooled in winter to a far greater extent than the surface of the southern or water hemisphere. Consequently, when we add the July or midsummer temperature of the northern to the July temperature of the southern hemisphere, we must get a higher number than when we add the January or midwinter temperature of the former to the January temperature of the latter. The tendency of the present distribution of land and water, when our northern winter occurs in perihelion, is to counteract the effect of eccentricity."

The popular notion that stations in the same latitude have approximately the same climate, and that it becomes progressively colder as the polar regions are approached is thus only correct in

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