

temperatures occasionally rise above 60°F., and no month has an average mean temperature above 50°F. Precipitation is low throughout the year. Rains fall in July and August, and snowfall is most frequent in October and November.

The seas and straits off the mainland and between the Arctic Islands are frozen over for about nine months of the year. The ice begins breaking up in July along the mainland, the exact time of break-up varying regionally and from season to season. The wide channels north of the Western Arctic Islands remain jammed throughout the year with heavy pack-ice from the Arctic Ocean.

Section 2.—Political Geography

Politically, Canada is divided into nine Provinces and two Territories. From east to west these are: the Maritime Provinces of Prince Edward Island, Nova Scotia and New Brunswick; Quebec; Ontario; the Prairie Provinces of Manitoba, Saskatchewan and Alberta; and the most westerly province, British Columbia. North of the area included in the provinces the country is divided into Yukon and the Northwest Territories. The political characteristics and the resources of each of these areas are reviewed at pp. 23-27 of the 1946 Year Book. Each of the provinces is sovereign in its own sphere, as set out in the British North America Act (The B.N.A. Act with amendments to date, appears at pp. 40-60 of the 1942 Year Book) and, as new provinces have been organized from the Federal lands of the Northwest, they have been granted political status equivalent to that of the original provinces. Yukon and the Northwest Territories with their boundaries of to-day are administered by the Federal Government.

PART II.—GEOLOGY

For the latest material published under this heading see the 1947 edition of the Year Book, pp. 19-29.

Further reference to earlier articles will be found at the front of this edition.

PART III.—GEOPHYSICS*

Section 1.—Gravity

Absolute and Relative Measurements of Gravity.—Determinations of gravity fall into two classes (a) absolute determinations (b) relative determinations. The latter are made by setting up an apparatus and taking observations with it at a base station (where gravity is known or assumed to be known) and at other stations where the value is required. Relative measurements which really determine only differences in gravity can be made with great accuracy because they do not necessitate the measurement or evaluation of certain quantities that are required in absolute determinations.

There are only very few places where absolute gravity measurements of the highest accuracy have been made; the best of these are probably The Geodetic Institute at Potsdam, Germany, the Bureau of Standards at Washington, U.S.A., and the National Physical Laboratory at Teddington, near London, England. Such measurements have all been made by determination of the time of vibration

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