

## 7.—Principal Heights in each Province and Territory—concluded

Territory and Height	Elevation ft.	Territory and Height	Elevation ft.
<b>Yukon Territory—concluded</b>		<b>Northwest Territories—concluded</b>	
St. Elias Mountains—concluded		Arctic Islands—concluded	
McArthur Peak.....	14,253	Ellesmere—concluded	
Mount Augusta.....	14,100	Mount Townsend.....	7,200*
Mount Kennedy.....	13,905	Mount Jeffers.....	6,500*
Mount Strickland.....	13,818	Mount Wood.....	5,900*
Mount Newton.....	13,811	Mount Cheops.....	5,200*
Mount Cook.....	13,760	Devon—	
Mount Craig.....	13,250	Ice Cap.....	6,190
Badham Mountain.....	12,625	Mackenzie King—	
Mount Malaespina.....	12,150	Leffingwell Crags.....	1,500
Mount Seattle.....	10,082	Banks—	
		Durham Heights.....	2,218
<b>Northwest Territories</b>		Victoria—	
Arctic Islands—		Shaler Mountains.....	3,000
Baffin—		Mount Bumpus.....	1,700
Penny Highland (Ice Cap).....	8,200-8,500	Mainland—	
Mount Thule.....	5,800*	Mount Sir James MacBrien.....	9,062
Cockscomb Mountain.....	5,300*	Franklin Mountains—	
Barnes Ice Cap.....	3,700*	Cap Mountain.....	5,175
Knife Edge Mountain.....	2,493*	Mount Clark.....	4,798
Ellesmere—		Pointed Mountain.....	4,610
United States Range.....	9,600*	Nahanni Butte.....	4,579
Commonwealth Mountain.....	7,500*	Richardson Mountains—	
		Mount Goodenough.....	3,219

\* The summit of the Cypress Hills, with an elevation of 4,810 feet, is in Alberta.  
 † Part of the British Columbia-Alaska boundary.

‡ Part of the Alberta-Alaska boundary.  
 § Part of the Yukon-Alaska boundary.

\* Approximate.

## Section 2.—Geology and Economic Minerals of Canada\*

The bedrock foundation of Canada and its adjacent continental shelves seem rigid and unchanging to human eyes, yet, in terms of geological time, these rocks and their contained mineral wealth represent only a momentary stage in the evolution of the Continent, an evolution which began more than 4,000,000,000 years ago. Geological study of most of the present land surface of Canada has shown that at various periods and in various regions dark molten rocks rose from great depths, volcanoes erupted on the ancient land and sea floors, thick sequences of sediments accumulated, granites were either intruded as molten magma or derived from earlier rocks during intense folding and mountain building, erosion wore down or subdued the older mountain chains, shallow seas repeatedly encroached on and receded from the Continent of today, continental glaciers covered most of Canada and, as part of these geological processes, valuable minerals and fossil fuels became concentrated under exceptionally favourable conditions. These interrelated geological processes have produced the buried crust and the present face of Canada. They control the distribution of its economic mineral deposits, its physiography and, in large part, its present and potential land use.

To introduce some relatively simple concepts, let us go back in geological time and select a few examples in which erosion of land, deposition of the resulting detritus, and a series of favourable circumstances have concentrated valuable minerals for man's use. Geological processes are best understood when they can be observed in action at the earth's surface or in relatively shallow lakes or oceans. Modern Atlantic waves, pounding on exposed cliffs of the Maritime Provinces, greatly accelerate the rate of erosion. Fallen blocks are rounded and abraded on the cobble beaches, while waves and currents sweep the sand and rock flour along the coast to sandy beaches or spits, or carry them seaward to add to the slowly growing sedimentary beds of the continental shelf. This natural erosion and

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