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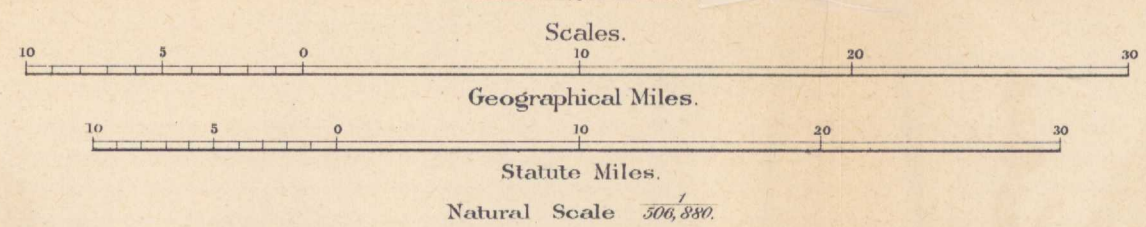
# Geological Survey of Canada

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## MAP OF PART OF BRITISH COLUMBIA AND THE NORTH WEST TERRITORY from the PACIFIC OCEAN to FORT EDMONTON.

To Illustrate Report by George M. Dawson, D.S., A.R.S.M., F.G.S., 1879-80.

Compiled & Drawn by W. B. Bell, Dawson, M.A.E., Assoc. M. Inst. C.E.



Weights are stated in feet above the sea level. Those underlined thus (1925) have been accurately determined. Those marked thus (1925) depend on the assumed height of Stuart Lake. Those marked thus (1925) on that of Dunsmuir.

### SOURCES OF INFORMATION.

The Coast, chiefly from Admiralty Chart 1925 A. North bank of Skeena, from Work Islet to the 25 miles, from Railway Location Survey by G. A. Roper (1879). South bank of Skeena and upper Skeena to the Forks, with tributaries, from track survey by H. J. Cambie (1879). Western Kootenai Valley and trail to Fraser Lake, from surveys of the Telegraph Company (1866). Region north of the Babine Pass and east to Germanen Landing, including Tuck and Deer Lakes, from instrumental and track surveys by G. Hentley (1879). Babine and Stuart Lakes, chiefly from track surveys by G. M. Dawson (1879). Region south of Stuart Lake from the Head of Fraser Lake to Port George, adapted from Geological Survey Map of 1875-76. Trail from Stuart to McLeod Lake, with Crooked River, Lower Peace River, and the Porcupine and Peace Rivers to mouth of Smoky River, chiefly from Geological Survey Map of 1875 by A. R. C. Selwyn, but corrected (with the exception of Crooked River and Lower Peace River) by the traverses of others. McLeod and Cambie (1879). Upper Porcupine and Deer Rivers, from Sir A. Macdonald's Journal (1873). Region between Port George and South Fork of Fraser, from Canadian Pacific Railway Survey Plans. North Fork of Fraser and Upper Smoky River, from traverses by E. W. Jarvis (1874). Trail by Mintoche and Peace River, to Dunsmuir, from track survey by G. M. Dawson (1879), with additions from track surveys by J. Hunter (1877) and H. A. F. MacLeod (1879). Region north of Peace River, from track surveys by H. J. Cambie and R. G. McConnell (1879). District between Peace and Smoky Rivers, from track surveys by G. M. Dawson and H. A. F. MacLeod (1879). Wapiti and Smoky Rivers, Athabasca River from Drift Hill Camp to Landing and Lower Slave River, from same traverses by G. M. Dawson (1879). Region between Smoky River, Lower Slave Lake and the Athabasca, from track surveys by H. J. Cambie, H. A. F. MacLeod and G. M. Dawson (1879). Trail from Drift Hill Camp to Deer Lake, from track survey by H. A. F. MacLeod (1879). Lower Slave Lake and trail from Lower Slave River to Fort Assiniboine, and route from Athabasca Landing, via Red River and Lac la Poudre to Victoria, by R. G. McConnell (1879). Trail from Athabasca Landing to Edmonton, from track survey by G. M. Dawson (1879). Trail from Fort Saskatchewan eastward to Vermilion River, etc., from track survey by H. A. F. MacLeod and G. M. Dawson (1879). Saskatchewan River from traverses by A. R. C. Selwyn (1873). Regions not covered by the above surveys filled in from various published maps and plans, and according to report of Indians and others. Camps with date attached are those of G. M. Dawson or Assistant R. G. McConnell (1879).

RANGE RANGE.  
From the Forks to Babine Lake, by the trail, the rocks are all Mesozoic, and probably Cretaceous in age. The strata is generally north and south, but irregular.  
A. Sandstones and hard shales, sometimes carbonaceous.  
B. Hard sandstones with shales, sometimes carbonaceous and rocks of contemporaneous volcanic origin.

HEBRIA RIVER.  
From the head of this to Kitimungallum, the river spreads in many channels among low, flat islands. The current is uniformly swift. It has been ascended with difficulty by stern-wheel steamer to about two miles above Kitimungallum. The valley is from 1 1/2 to a mile wide between the base of the mountains. From Kitimungallum to the Forks the current is more rapid, and there are several rapids in a course of about twenty miles. At Spide Lake Falls, or Light, an abrupt descent of several feet renders a portage or dam-portage necessary. At Kootenai, rapids or boats are usually tracked up the rapids, the cargo being carried a variable distance overland. The remaining rapids are generally tracked up without unloading. With the exception of a few places, the valley above Kitimungallum still continues wide, and near Kit-wan-ga opens out to a width of several miles and offers some arable land.  
From the coast to near the Kitimungallum River, the rocks seen on the Skeena are granite or highly crystalline shales with granite, and belong to the meta-morphic series of the Coast Range. Above this point Mesozoic rocks, with occasional granite intrusions, prevail. They are at first almost exclusively volcanic in origin, and represent the 'Porphyritic' of former reports, but further up are largely replaced by hard sandstones and argillites.

For Geology of this Region see map accompanying Report 1876-77.