

petrographic province farther north and form an areal link between the rocks of Alberta, B.C., and those of Montana.

It is suggested that this international area characterized by alkalic rocks of widely varying types, from the felsic blairmorite to the mafic analcite basalts, for instance, be termed the Rocky Mountain Petrographic Province.

This large area, characterized on the whole by alkaline rocks, and containing subdivisions which form smaller petrographic provinces, illustrates the idea that the regional progression of types, first mentioned by Pirsson¹ by which he means the varying relative distribution of types among different localities in the same province, may be extended to include the "regional progression of petrographic provinces." Just as any individual province is characterized from place to place by varying related individual rock types, so the larger petrographic provinces may be characterized by varying related individual provinces. Iddings states virtually this same idea in the form of a question in volume two of his work on "Igneous Rocks."²

It is perhaps worth reiterating that the Rocky Mountain alkaline province is in sharp contrast with the even more extensive subalkaline province of the northern Coast ranges of the Cordillera.

The earlier age of the volcanic rocks which are here described is compatible with the generally accepted sequence of igneous action; first volcanic, then plutonic, and lastly dyke phases. Pirsson,³ infers that the time of igneous activity in the Highwood mountains was coincident with the general geologic disturbance at the close of the Cretaceous and in the early Tertiary.

The stratigraphic position of the Crowsnest volcanics may be evidence that the first tectonic disturbances of the Laramide revolution took place in Alberta in mid-Cretaceous time. After these first uneasy stirrings of the earth's crust, a period of subsidence and quiet ensued, before the final upheaval began, that culminated in the folding and uplift of the Rocky Mountain

¹Loc. cit p. 48.

²Iddings, J. P. *Igneous Rocks*, Vol. 2, John Wiley & Sons inc., N. Y., 1913, p. 467.

³Pirsson, L. V. *Bull. U. S. Geol. Survey* No. 237, p. 199.