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The Crowsnest Volcanics.

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INTRODUCTION.

GENERAL STATEMENT.

The Crowsnest volcanics are a series of tuffs and agglomerates, with exceptionally occurring flow rocks, that are found in the eastern Rocky mountains of Alberta, in the general vicinity of the Crowsnest pass.

During the summer of 1912, the writer was engaged in the geologic mapping of the southern extension of the Frank-Blairmore-Coleman coal fields, in southwest Alberta, and had frequent opportunities to study the field relations of these volcanics. Specimens of the more typical varieties of the rocks were collected, and have since been studied petrographically, the results forming a part of this paper.

Personal observation has been confined to the valley of the Southfork river and adjacent exposures, and visits to some outcrops on York creek, near Blairmore. The following observations and remarks thus apply more particularly to the southern exposures of the formation; but descriptions of the more northern occurrences by Leach and Dawson show that the characteristics of the volcanics are essentially as described below. Owing to the press of other matters in the field not as much time could be devoted to the study of these pyroclastic rocks as is desirable, but the facts that have been gained are