The distinction thus marked is clearly encountered much further south than the 40th parallel region, and it is with the purpose of tracing it to the north of the 49th parallel that the present note is presented.

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Immediately to the north of the 49th degree of httitude, in the Rocky Mountains, about the South Kootanie Pass, the red beds are characteristically developed, with a thickness of about 300 feet. The upper portion of the section in this part of the mountains, is as follows, in descending order:—

Series II. Fawn-coloured flaggy beds, seen only at a distance, but from their appearance and analogy with Series F, probably thin-bedded dolomitic sandstones and limestones. Throughout 100 feet.

Series G. Beds characterized by a predominant red colour, but including some thin, greyish layers and dolomitic sandstones. The whole generally thin-bedded. Ripple marks sum-cracks, impressions of salt crystals. 300 feet. Passes gradually down into

Series F. Fawn-coloured flaggy beds of dolomitic sandstone and limestone, with more red sandstone layers, which are especially abundant toward the top. 200 feet.

Series E. Amygdaloidal trap. 50 to 100 feet.

The last mentioned immediately overlies the compact bluish limestone of Carboniferons age, and, with the exception of the interruption caused by this contemporaneous sheet of volcanic matter, the whole of the series are conformable and pass gradually each into the next.

The conditions indicated are, in Carboniferons times, a somewhat deep sea gradually shoaling. The occurrence of an important volcanic outbreak, and shortly thereafter the more or less complete closure of the communication of this area with the ocean and the formation of the Triassic inland sea.

Westward from this region similar beds may be traced by information supplied by Mr. H. Bauerman, for about forty miles, but beyond this point they have nowhere been observed in British Columbia. Northward, along the main range of the Rocky Mountains, I have observed them for about fourteen miles only, beyond the 49th parallel. They were not seen by me in the Crow Nest Pass, in latitude 49° 50', nor anywhere along the eastern base of the mountains from this point to the Bow Pass (latitude 51°) or in that pass. Neither have they been noted by Dr. Hector in any part of the Rocky Mountains to the north of the Bow which he traversed, or by Dr. Selwyn in the Yellow Head Pass. While, therefore, the evidence se far adduced is purely negative, it would appear that the Triassic inland sea in this longitude found its northern shore not far beyond the 49th parallel, and probably never extended west of the Selkirk and Gold Ranges of Central British Columbia.

Still further north, however, we meet with evidence of a more decided character. For, on the upper Pine and Peace Rivers, on the eastern flank of the mountains, a series of blackish shales and argillites, sometimes calcareous, occur, and hold characteristic Alpine Trias fossils. Beds containing similar forms are found in a number of places to the west of the Gold Range in British Columbia, and it is probable that the Triassic ocean, in the latitude of the Peace River, extended completely across the Cordillera belt eastward. No mountain houndary occurs between this region and that first described \neg the souch, but a tract of probably low land must have separated these two areas in the Triassic period.

In the Queen Charlotte Islands Triassic rocks, holding fossils of the same strictly

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