

crosses the 49th parallel near the 121st meridian, southward to the Blue Mountains of Oregon, south-westward to Mount Shasta, and from this, according to Whitney, still further southward along the western slope of the Sierra Nevada. To the north it appears nearly to follow the present north-eastern line of the Coast Range to the 52nd parallel, when it turns north-eastward, passing completely across the line of the Gold Range, and by straits and openings through the Rocky Mountains on the 55th parallel, connecting this with the great Cretaceous Mediterranean Sea of the interior of the continent. In the southern part of British Columbia it would appear that the Rocky Mountains proper were not at this time elevated, but that the Cretaceous Mediterranean washed the eastern shore of the Gold Range. In the Peace River region, however, just mentioned, there is ample proof that the Rocky Mountains formed even at this time a more or less continuous shore-line or series of islands, around which the Cretaceous beds were deposited.

The existence of a great thickness of rocks of volcanic origin in the Cretaceous of several parts of the Province has already been alluded to. Their resemblance to those described as occurring in the Cordillera region in Chile, by Darwin, has been pointed out by the writer in a former communication to the *GEOLOGICAL MAGAZINE*.<sup>1</sup>

The Cretaceous closed with another period of folding, in which additional height was given to the Vancouver and Queen Charlotte Island Ranges, the Coast Ranges were produced, as well as corrugations doubtless caused still further eastward which cannot now be separated from those of other periods. At this time, or shortly after, the Rocky Mountains attained their full height and development.

No trace of the earlier or Eocene Tertiary has been found in British Columbia, and it is probable that the Province was throughout at that time a land area. In the Miocene, the relative elevation of sea and land was much as at present, but the great inland lake formerly alluded to was in existence. This lake was doubtless the northern continuation or homologue of that which has been called the Pah-Ute Lake by Clarence King, and which lay east of the Sierra Nevada on the 40th parallel. The rocks formed in it thus represent the Truckee Miocene of King's section.

The Miocene closed with extensive volcanic disturbances throughout the country south-west of the Gold Range, and eventually by still another epoch of corrugation and crumpling probably synchronous with that which produced the Tertiary Coast Hills of California, and which may have given to the northern part of the coast the greater elevation, which it appears to have possessed during Pliocene times, when the wonderful system of fiords, by which it is now dissected, were cut out.

The most striking points brought out by the study of this region are probably the following. First, the repeated corrugation, parallel in the main to a single axis, which has occurred in the Cordillera region. Second, the occurrence of great and wide-spread masses of

<sup>1</sup> *GEOL. MAG.* 1877, p. 314. The rocks elsewhere described were at the time the article in question was written supposed to be Jurassic.