

by such slight inclinations that no dip is observable in individual sections. The beds of both series have, however, participated in the western uplift of this part of the Continent, and are found at ever increasing levels on approaching the Rocky Mountains. Near the base of the range they are also found to show more pronounced undulations, and in a narrow belt along the foot of the mountains are sharply folded and contorted. Isolated areas of these newer rocks have also been found in the Rocky Mountains themselves, and in one of these the anthracite of Cascade River, in the Bow Pass, occurs.

The most important question depending on the study of the Cretaceous and Laramie rocks of the North-West, is that of the fuel supply. In the eastern region, lignites of fair quality and workable thickness occur in the Laramie rocks of the Souris district, but have so far not been found in the underlying Cretaceous. Further west the Cretaceous also becomes a coal-bearing formation, and in the vicinity of the Bow and Belly important lignites or coals have now been found in the Belly River series (Medicine Hat, etc.): base of the Pierre (Coal Banks, etc.): top of the Pierre (Bow River) and in the lower subdivision of the Laramie (Blackfoot Crossing, etc.). In the Peace River district seams which may prove to be of a workable character have been found only in the Dunvegan series. The precise horizon of many of the lignites and coals of the western part of the plains and foot-hills has not yet been fixed. The fuels found in the area of the plains may be characterized generally as lignites, but on approaching the mountains these are found to contain a decreasing percentage of water, and eventually, in the foot-hills and areas included within the first limestone range frequently become true coking bituminous coals, and in one instance, as above stated, have actually been converted into an anthracite which contains 86 per cent. of fixed carbon.

In treating of the rock structure of the Cordillera belt, it will be most convenient to outline that of each of its great component regions, in so far as the older formations are concerned. The Cretaceous and Tertiary of the entire belt, which rest upon these in a comparatively little disturbed or altered state, may then be considered.

In the Rocky Mountains we have the broken western margin of the undisturbed palæozoic strata which underlie the great plains. These are here sometimes sharply flexed and lying at high angles, but very generally elevated in block-like and nearly horizontal masses. In British America our geological knowledge of the ranges is confined to the observations of its extreme northern part by Sir J. Richardson, of its southern portion by Dr. Hector, a traverse on the Peace River by Dr. Selwyn and the observations of the writer in the last named locality and in the region between the Bow River Pass and the 49th parallel.