

ward. The following measured thicknesses of the Kootenay illustrate the eastward thinning, and it will be noted that in the more northerly examples, which are situated within 50 miles of the Bighorn basin, the thinning is not so pronounced as in the more southerly ones. In the Crowsnest field Mr. McEvoy measures 4,736 feet of strata, of which all but the last measurement, viz., 1,060 feet of black and brown shale, probably belong to the Kootenay. In the Frank field situated east of the Crowsnest, the thickness of the Kootenay probably does not greatly exceed 742 feet, which is the thickness of a section measured by Mr. W. W. Leach.

"Between the Bow and the Kananaskis the thickness of the Kootenay is probably about 2,900 feet, but the uppermost beds have been removed by erosion. In the foothills a short distance to the southeast, the thickness as given by Mr. Cairnes amounts to only 375 feet. In the third longitudinal valley, between Red Deer and the Clearwater, at least 2,300 feet of Kootenay strata have escaped erosion, which has removed the uppermost beds; but in the first longitudinal valley a little south of the Red Deer the total thickness of the formation is only about 1,700 feet.

Skeena Series.¹

"This series is of great economic importance, inasmuch as all the known coal of commercial value is contained therein. The strata consists essentially of rather soft, thin-bedded shales and sandstones, the former, in places, carrying many clay-ironstone nodules and holding a number of coal seams. At the base of the series there is usually found a bed of coarse, crumbly conglomerate, but this, though fairly persistent, is not always present.

"Owing to the disconnected nature of the exposures and the seeming lack of continuity of the beds, a complete section of these rocks has never been obtained. It seems probable, however, that their total maximum thickness is in the neighbourhood

¹W. W. Leach, Summ. Report Geol. Surv., Can., 1910, p. 94. See also discussion in report on Groundhog coal area, in present report.