

The banks are very low, seldom rising more than 4 or 5 feet above high water. The maximum rise of the river in time of flood above low water stage is reported to be only about 3 feet, by the Hudson's Bay Company's agent at Cedar lake. The slight effect which floods have on the level of the lower river is due to the fact that any excess of water is taken up by the large lateral lakes connected with the river.

It would be possible by lowering, a few feet, the discharge channel of Cedar lake in the vicinity of the rapids by which the lake waters pass into the lower river to drain a vast area of marsh land along the lower part of the river above Cedar lake. When unoccupied land becomes sufficiently scarce in the northwest the engineering problems involved in such an undertaking will no doubt receive careful consideration.

From Lake Winnipeg the Saskatchewan drainage passes through the Nelson river to Hudson bay.

AREAL DISTRIBUTION OF SILURIAN DOLOMITE.

In the region of the large Manitoba lakes the Silurian and Devonian rocks lie so nearly horizontal that neither strike nor dip can ordinarily be determined from individual exposures. The combined areal work of several geologists, however, has shown that in the territory west of Lake Winnipeg the Palæozoic rocks for 250 miles or more strike 20 to 25 degrees west of north and dip to the southwest away from the Laurentian rocks at a few feet per mile. This northwesterly strike swings abruptly to the west not far from the north end of Lake Winnipeg. This change in strike is accompanied by the overlap of Cretaceous beds upon the Devonian and Silurian to the north of Red Deer river. The westerly and northwesterly strike of the Silurian rocks in the Saskatchewan River valley probably differs little from the general trend of the river between Pas and Grand Rapids; consequently the entire 150 miles of river and lake shore intervening between the mouth of the river and Pas are within the areal limits of the Silurian limestones. Owing to the very deep filling by glacial, lake, and river deposits along the Saskatchewan valley between Pas and Cedar lake no outcrops of bed-rock ap-