VOL. V.

MONTREAL AND TORONTO, OCTOBER, 1903

No. 5

A Mighty Waterway.

BY ARTHUR O. WHEELER, F.R.G.S.

At Medicine Hat, a small thriving town on the Canadian Pacific Railway, the great trans-continental highway crosses the south branch of the Saskatchewan River. The traveller notes with interest the deep, sharp-cut trough in which it flows, worn through the course of ages in the rolling prairies, midst which it winds its way. Further to the north and east, the terraced valley, growing ever deeper and wider and the wooded bottom lands more frequent, it joins, after a course of nearly one thousand miles, the north branch of the same stream. United, these waterways present a mighty river from half to a mile wide, flowing several hundred feet below the prairie level, terrace rising upon terrace to form a valley two to three miles from side to side and bear witness to the irresistible flood that in by-gone ages gradually gouged out the existing bed. In the depths below are many channels, separated by tree-clad islands and sun-lit gravel and sand bars. Maples, cottonwoods, aspens, high-hush cranberries and red willow (the K.i-ni-ki-nick of the Indian) clothe the islands and the valley bottoms with a tangle of forest growth, and in the late fa'll render it a highly coloured picture of yellow and green,

Along the margin of the stream, in the soft mud or sand, may be seen an encyclopedia of the natural history of the country, and one versed in hunting lore can readily read the many footprints as in a book:—bear, deer, wolf. coyote, fox, beaver, muskrat, otter, mink, marten and many others are there seen, and form a study of deepest interest. And so, this mighty river, augmented by many a tributary, rolls onward to pour its waters into the great inland sheet of Lake Winnipeg.

Some seventy miles above the town of Medicine Hat, the South Saskatchewan is formed by the united waters of the Bow, Belly, Highwood, Oldman's, Waterton and St. Mary Rivers, and at a somewhat greater distance below is joined by the Red Deer River. All receive their supply more or less directly from the eastern watershed of the Continental Divide and the vast areas of snow and ice stored at the summit of the main range of the Rockies of Canada.

Gazing at the sullen, mud-coloured torrent, the traveller cannot but wonder where such a body of water first comes from, and through what process of evolution it arrives at the stage which here meets the eye. The journey westward by the Canadian Pacific Railway largely helps out a solution of the problem. At Calgary, a busy distributing centre for the ranching, farming, timber and mining lands of Western Alberta, situated on the railway, 180 miles west of Medicine Hat, the Bow River, one of the two principal streams forming the South Saskatchewan-the Belly River being the other-is now encountered and followed by the railway into the moun-