

Channel of
outlet from
Lake Agassiz.

part of the water-shed that divides the basin of the Red River of the North from that of the Mississippi. This channel has been evidently the course of a great river since the drift was deposited. After the river ceased to flow here, portions of the bottom of the valley have become filled to the slight depths of ten or twenty feet by alluvial beds brought in by tributary streams, and the intervening portions of the old valley are occupied by the long, narrow and shallow Lakes Traverse and Big Stone, the former outflowing northward by the Bois des Sioux to the Red River, and the latter southward by the Minnesota River to the Mississippi. The general level of the land on each side of this water-course is about 1,100 feet above the sea; the heights of Lakes Traverse and Big Stone are respectively 971 and 963 feet above the sea; and the lowest point of the divide between them, in Brown's Valley, is only three feet above Lake Traverse. A valley of similar size extends all along the course of the Minnesota River; but toward the north the broad water-course, with the adjoining highland on each side, ends within a few miles.

The Red River
Valley.

The country north of Lake Traverse sinks gradually to a level not much above the small Bois des Sioux River, which flows north 35 miles, emptying into the Red River of the North at Breckenridge and Wabaton. The Red River, here turning abruptly from its western course, flows thence north to Lake Winnipeg, 285 miles. These streams occupy the axial depression of a vast plain of glacial drift and lacustrine and fluvial deposits, forty to fifty miles wide and more than 300 miles long, stretching from Lake Traverse to Lake Winnipeg. This expanse, widely famed for the large harvests and superior quality of its wheat, is commonly called the Red River Valley. It has a very uniform continuous descent northward, averaging a little less than one foot per mile. So slight an inclination is imperceptible to the eye, as is also the more considerable ascent, usually two or three feet per mile, for the first ten or fifteen miles to the east and west from the Red River. This river flows along the lowest portion of the plain, somewhat east of its central line, in a quite direct general course from south to north, but meanders almost everywhere with minor bends which carry it alternately a half mile or one mile to each side of its main course. It has cut a channel twenty to fifty feet deep and is bordered by only few and narrow areas of bottomland, instead of which its banks usually rise steeply on one side and by moderate slopes on the other, to the lacustrine plain which thence reaches nearly level ten to thirty miles from the river.

Where the surface rises on each side of this expanse, definite and continuous bench deposits are found marking the shore lines of a vast lake which formerly covered the Red River Valley and by its outlet

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