

Beds are found to decrease greatly in thickness and as noted before gradually thin out to less than one hundred feet north of the mouth of the Saskatchewan.

Farther to the south at Rosenfeld, the evidence of drilling gives a thickness of limestone, undoubtedly the same series, of 305 feet,* thus showing a slight tendency to increase in that direction.

HUDSON RIVER BEDS.

Under the city of Winnipeg, red, impure limestones are reached in drilling for wells. The surface of the underlying rock slopes very abruptly to the east, the depths at which it is found varying from 60 feet on the west, and under most of the city, but increasing suddenly to 112 feet at the outer end of Point Douglas † This seems to be about the extent of these soft beds to the east. They extend west, and are to be found at Little Stony Mountain in an undisturbed state, capped by beds of an ashy coloured dolomite. The thickness of this part of the formation is indefinite, but part of the section has been recorded by Prof. Pantou, from the exposure at Stony Mountain. Here the dolomite seen at Little Stony Mountain, appears at the surface on the top of the hill, dipping slightly to the southeast, showing a tilting up of the underlying beds, and a consequent break in the section between this place and Stonewall. The section recorded amounts to 110 feet.

‡“The following is a vertical section of the rock, as observed during the digging of a well at the southwest part, upon which the Provincial Penitentiary is located.”

- 1--20 feet solid hard stone like that at the quarries
- 2--4 feet thin layers of the same.
- 3--2 feet solid rock.
- 4--6 feet thin and broken.
- 5--8 feet yellowish rock, quite ochreous.
- 6--10 feet reddish layer, full of fossil shells.
- 7--60 feet, a mixture of yellow and red, containing some flinty material.”

Between the top of the Stony Mountain beds, and those at Stonewall, where the rocks appear to be Niagara, there are no exposures, but at the latter place the section in the quarry seems to be very similar in

*Trans. Royal Society, Canada, Vol. IV. 1886.

†Transactions No. 27, Manitoba Historical and Scientific Society, Winnipeg.

‡Transactions No. 15, season 1894-5, Manitoba Historical and Scientific Society, Winnipeg.