

# Department of Public Works.

## V.—BRIDGES.

During 1892-93, repairs were made to the undermentioned bridges, viz.:

- Grand River, bridge at York, Ont.
- Ottawa City, bridges at Ottawa, Ont.
- Battle River, bridge at Battleford, N.W.T.
- Belly River, bridge at Lethbridge, N.W.T.
- Bow River, bridge at Calgary, N.W.T.
- Old Man's River, bridge at Macleod, N.W.T.

The following is a detail of the work done:—

### GRAND RIVER BRIDGE.

The Grand River Bridge is a structure connecting the eastern and western sides of the Grand River at York, Haldimand County.

On the 20th September, 1892, authority was given to repair the western approach to the bridge; work was at once commenced and completed by the 17th October, the amount expended being \$97. In June last it was found necessary to protect the slope of the embankment in front of the west abutment with rip-rap, and the sum of \$50 was expended upon this work.

### OTTAWA CITY BRIDGES AND ROADWAY BETWEEN OTTAWA AND HULL.

A report on the work done on the bridges in the city of Ottawa and on the roadway between Ottawa and Hull, will be found in that of Mr. G. P. Brophy, superintending engineer of the Ottawa River Works, in section iv. of my report.

### BATTLEFORD BRIDGE.

This bridge crosses the Battle River in the town of Battleford, between 2nd and 3rd Avenues. The town is situated at the junction of the Battle and Saskatchewan Rivers, and is on the line of the Canadian Pacific Railway 500 miles west from Winnipeg.

The repairs to and painting of this bridge which were in progress during the preceding year were completed. The expenditure during 1892-93 amounting to \$725.22.

### BELLY RIVER BRIDGE, LETHBRIDGE.

Belly River Bridge is situated in the north-west quarter of section 1, township 9, range 32 west of the fourth principal meridian, and about 2 miles from the town of Lethbridge.

The construction of the east and west approaches to the bridge has been completed during the year ended 30th, June, 1892, and communication established between the two sides of the river.

During 1892-93 some further necessary work was done on the eastern approach to the bridge through what is known as the "Brick Yard Coulée."

After the work was completed, this place was visited by the heaviest rain storm ever witnessed in this part of the country and in a few minutes the coulees were swollen into rivers. The flow of water down the "Brick Yard Coulée" was such that, backed up by the debris carried down the coulée, the water rose 4 feet above the top of the bank, and as the bank was 20 feet in height at this point the water was 24 feet deep. When the bank started to give way, in ten minutes the whole of the bank including the culvert was carried into the river, while the rest of the road was not damaged.