Damage to the bed of the river below the Flat Dam occasioned by the high water of last year, has been made good, and all necessary repairs have been duly executed.

NEW WORKS.

In order to render the river navigable below the locks, as far as Bryson, it it necessary to remove part of three shoals and to build two submerged dams.

Of the shoals, the first, 1000 feet below the locks, is 160 feet in length and composed of gravel; the second, one mile lower down, is 450 feet long and composed of mud and sand; the third, just above Chapeau Bridge, six miles below the Locks, is 50 feet in length and formed of gravel. An average depth of 2½ feet has to be removed from these shoals.

The dams are to be built, one on the Flat rapids in the Rocher Fendu or main channel, 24 miles below the locks, and the other at a reef above Grand Calumet Falls, 43 miles below the locks. These dams have an aggregate length of 470 feet and an average height of five feet.

When the shoals are lowered and the dams built, a navigable reach of 50 miles, with a minimum depth of 7 feet at extreme low water, will be opened between Bryson and Des Joachim.

A contract for building the dams and lowering the shoals was given to W. J, Harvey, in 1878. But owing to the unsatisfactory progress made, the contract was taken out of his hands last July.

A contract given to W. J. Burns in 1879, for the construction of a drawbridge was satisfactorily completed in the March 1880.

(App. 9, page 148.)

RIDEAU CANAL.

The Rideau system connects the River Ottawa at the City of Ottawa with the eastern end of Lake Ontario at Kingston.

Length of navigable waters	126¼ miles
Number of locks going from Ottawa to Kingston	33 ascending. 14 descending.
Total lockage ... 446¼	282¼ rise, and 164 fall. — at high water.
Dimensions of locks	134 by 33 feet.
Depth of water on sills, 5 feet; navigable depth through the several canals	4½ feet.
Breadth of canals at bottom	60 feet in earth. 54 feet in rock.
" at surface of water	80 feet in earth.

For table of distances of Stations between Ottawa and Kingston see (App. page .)