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### CONTENTS OF THIS NUMBER :

PAGE	PAGE
Automobile Trip, A Remarkable..... 41	Metal Imports from Great Britain... 59
Aluminum, The Advance in..... 42	Mining Matters..... 56
Building Regulations..... 36	Mineral Production of Nova Scotia 41
Bit, An Improved..... 40	Mica in Quebec..... 46
Blocks, Yale Chain..... 47	McGill prizemen in Applied Science 59
Brief but Interesting..... 43	Nickel Production, Canadian..... 33
Canadian Electrical Association..... 59	Personal..... 57
Canal, Ottawa Valley..... 40	Power Question, The Niagara..... 35
Catalogues, New..... 45	Practical Man, The..... 53
Civil Engineers, The Canadian So- ciety of..... 42	St. Lawrence Route, The Beginning of..... 31
Dam Building..... 51	Sanitation in Schools, Modern..... 34
Dodge Mfg. Co., of Toronto..... 51	Sand Stone, Artificial..... 39
Draft Upon the Ultimate Efficiency of the Steam Boilers, The In- fluence of Mechanical..... 48	Sewers of the City of London, Ont., The construction of the Main In- tercepting..... 43
Drill, A New..... 50	Smelter for Toronto, A..... 34
Durley, R. J., B.Sc. (London)..... 47	Trowern, P., Engineer Toronto Asylum..... 42
Electric Flashes..... 54	Trust Formations in the United States..... 41
Engineer, A Dismissed..... 47	Water..... 36
Engineers' Club, The..... 39	Water Supplies, Sand Filtration of Public..... 39
Fires of the Month..... 35	Workmen's Compensation for In- juries Acts..... 35
Heating, Hot Water..... 35	
Industrial Notes..... 53	
Literary Notes..... 52	
Locomotive, A New Grand Trunk Railway..... 51	
Marine News..... 57	

### THE BEGINNINGS OF THE ST. LAWRENCE ROUTE.\*

(Continued from last issue).

The first canals of Canada were constructed for mili-  
tary purposes, and by royal engineers. They were the  
direct result of the American Revolution. During this  
war there were about six thousand troops in the Great-  
lake region who depended upon Montreal for supplies, no  
fewer than 670 boats being required to transport provisions  
in six months. These batteaux sailed in brigades of ten  
or a dozen to aid one another in surmounting the sluicing  
cataracts of the upper St. Lawrence, particularly the Long  
Sault, which required an entire day to ascend. This was  
an object lesson not lost upon the authorities, and im-  
provements were begun at these rapids in 1779 by Captain  
Twiss, R.E. The first canal was begun at Coteau du Lac,  
the first plan being to make the lock walls of timber, but  
they were subsequently made of masonry. It was begun  
in 1779 and completed by 25th October, 1780, with three  
locks and iron flood gates. The locks were forty feet long,  
six feet wide and less than thirty inches of water covered  
the sills. It would have been useless to make them deeper  
without undertaking a much greater length of canal. Mr.  
de Longueuil, who had built a mill a little above the  
Cascades, had thereby somewhat improved navigation, but  
Captain Twiss further improved the canal here, which

was designed merely to overcome the current, and he was  
shrewd enough to make Mr. de Longueuil defray part of  
the expenses. In 1781 work was begun on canals at the  
Cascades and Cedars, and the Split Rock channel was  
deepened. Cornish miners were employed upon the vari-  
ous rock cuttings and blasting work, which was carried on  
in various dangerous places throughout the series of  
rapids, dangerous rocks being blown to atoms. The  
Cascades Canal was at Cascades Point, where a shallow  
and rapid channel discharges from the St. Lawrence into  
the Ottawa, known as Les Faucilles, between the main  
river and Ile le Moyle. It was a batteau canal with two  
locks, and about 200 yards long. The Split Rock Canal  
was at a point where the current is greatly accelerated by  
the projection into the stream of Point au Buisson, on the  
southern bank. The remains of this lock are still to be  
seen.

These canals were all batteau canals. The batteau  
had about the dimensions of the Venetian gondola, but  
there the resemblance ended. It was built of pine wood,  
about 5½ feet beam, 35 feet long, was flat bottomed,  
pointed at both ends, and drew very little water. A bat-  
teau containing 25 persons, their baggage and 25 barrels  
of flour is said by a traveler of the time to have drawn only  
eight inches. But this must have been a very large bat-  
teau, as the average batteau load was 30 barrels of flour  
and the crew of four or five men. When these canals  
were constructed the annual traffic on the upper St.  
Lawrence to Carleton Island amounted to from 240 to 320  
batteaux. On the completion of the Coteau du Lac Canal,  
Twiss imposed, with the cordial consent of the merchants,  
a toll of ten shillings currency per batteau, increased to  
twenty-five shillings when the series of canals was com-  
pleted. Ten barrels of flour being reckoned as a ton, we  
find that the early canal tolls were \$1.66 per ton. The  
present rate on the Beauharnois Canal, which replaces  
these canals, is \$0.15 per ton.

The canals remained in this condition until 1800, after  
the formation of Upper Canada, which took place in 1793.  
The effect of the improvement in the rapids is well shown  
by the toll receipts, although we must not forget that Upper  
Canada was being rapidly populated by exiled United  
Empire Loyalists. In 1781 some 263 batteaux, two  
canoes and one boat used the Coteau Canal. The tolls  
for a time declined, probably because no ships were per-  
mitted upon the Great Lakes except the King's vessels,  
but subsequently increased and in 1799 were double what  
they had been in 1795. By 1800 the traffic was so great  
that improvements were demanded, and although to detail  
these here is to trespass upon our third period, it may be  
well to do so and complete the history of canals at this  
point prior to the Union. In 1800, Col. Gother Mann pro-  
posed to increase the capacity of these canals. The  
Coteau Canal was to be widened to 9½ feet in the lock  
gates, the lock itself to be widened four feet and the canal  
prism two feet. This would make the locks ten feet wide,  
and the dimensions are from the report of our Archivist,  
although Mr. Keefer in his admirable monograph on the  
canals of Canada states that they were enlarged to twelve

\*Abridged by the author, Arthur Weir, B.Sc., from a lecture delivered  
before the Applied Science Students of McGill University, Montreal, January, 1899,  
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