



ROCK CUTTING, TRENT CANAL, BETWEEN KIRKFIELD AND VICTORIA ROAD, IN NORTH VICTORIA  
Station No. 1, showing Station No. 2 in the distance.

canal as rapidly as the finances of the country would allow. He was true to his word. A large sum was put in the estimates the following year, and work was at once commenced.

The magnificent locks at Fenelon Falls, Buckhorn, Lovesick, and Burleigh, and numerous dams were built and completed about the year 1889.

Meantime Sir Charles Tupper was called to London, England, as High Commissioner for Canada, and the Trent canal lost a strong advocate in the councils of the Government. The opening up of the great Canadian North-West consequent on the construction of the Canadian Pacific railway, caused interest in the scheme to wane, and for several years it was at a standstill. During that period deputations from all along the route visited Ottawa to urge the completion of the work; but it was not till the year 1893 that it was again taken up.

In 1892 Major Sam Hughes was elected member of Parliament for North Victoria. The "height of land" section of the canal connecting Balsam lake in Victoria county with Lake Simcoe is in the electoral district which he represents. Major Hughes, with characteristic vigour, took up the question, and being fortified with data by his old personal friend, Superintendent Engineer Rogers, brought the strong features of the scheme to the attention of the Hon. John Haggart, Minister of Railways and Canals.

Ever quick to note the advantages and drawbacks in a scheme, Hon. Mr. Charles Tupper, Bart., was directed to this project, and after making a personal examination over the whole line of the canal, he was so pleased with the great possibilities of the scheme that he publicly announced that the Government would certainly build this Haggart promptly saw that while the strong points favourable to the completion of the work were many, the adverse ones were few. Accordingly, in 1893, he came to the decision to press the entire work to a successful finish with the least possible delay. Large sums were placed in the estimates, and surveys and plans were prepared for contracts. As an additional guarantee of the intention of the Government to complete the entire work as soon as possible, Hon. Mr. Haggart determined to construct the "height of land" section first, and concurrently with it the part between Peterborough and Lakefield. These completed would leave to be done only the two ends, Couchiching to Georgian Bay, and near Campbellford to Trenton on Bay of Quinte.

The Balsam lake to Lake Simcoe section, running through North Victoria and North Ontario, was let to Mr. Andrew Onderdonk and Mr. Wm. Dennon, of Chicago. Work was begun by them on the "height of land" in 1894, and the contract will be completed by the end of 1896. Messrs. Brown, Love, and Aylmer, of Toronto, secured the Lakefield to Peterborough section, No. 1, and will finish it early in 1897. Mr. Corry, of Ottawa, has been awarded section No. 2 of the Peterborough to Lakefield division. Meantime the surveys and plans for the two end sections are now being pushed rapidly forward, it being the in-

tenion of Hon. Mr. Haggart to complete the work at the earliest possible moment.

With the completion of the two divisions now under contract the route will be open from Severn Bridge on Lake Couchiching to near Campbellford in East Northumberland. With the exception of the height of land section shown in these illustrations, the work



BATHERS—BOSKUNG LAKE, NORTH VICTORIA

is largely the connecting of navigable lakes by means of dams and locks, and the overcoming of rapids on the rivers by the same means. Starting from Midland on Georgian Bay the route lies up the Severn river to Lake Couchiching, thence to Lake Simcoe, via Orillia; thence up the Talbot river valley to near Kirkfield in North Victoria, where the height of land into Balsam lake is cut.

Balsam lake is the feeder east and west, it receiving the waters of the Gull river from the north. Through Balsam lake and Rosedale river, only a mile long, Cameron lake is reached, at the foot of which are the falls and village of Fenelon Falls. Splendid locks already connect Cameron lake through the beautiful Fenelon Falls river, a mile long, to Sturgeon lake. This lake is connected by the river Scugog with Lake Scugog. Thus Lindsay and Port Perry possess the advantages of water connection with the route. Bobcaygeon lies between Sturgeon and Pigeon lakes. Locks connect these waters. Below Pigeon lake on the same level lie Buckhorn and Chemong lakes. Locks connect Buckhorn with Deer lake, Deer lake with Love Sick, and Love Sick with Stoney; thence into Clear lake is open sailing. Locks are at the foot of Clear lake into the Otonabee river, or Lake Katchewanawana, giving navigation to Lakefield. Thence to Peterborough the improved river route is being followed. From Peterborough the route lies down the Otonabee river, Rice lake, and Trent river to Trenton.

The improvement of the Gull river waters to Minden and beyond among the beautiful lakes of Haliburton, is also projected and is easy of accomplishment.

The advantages of the Trent canal are as follows:—

(a) The farmers, villagers, and townspeople along the route will have the advantages of water rates. It now takes 8c. to 9c. to deliver a bushel of grain from the inland points along the canal to Montreal. Yet the Illinois farmer can send his to New York or Montreal for from five to six cents. The canal completed the rates would be more favourable.

(b) The distance from the great North-West and the West by water would be shortened 254 miles. Taking Sault Ste. Marie as a common starting point the following are the distances to Liverpool:—

(1) Via Erie canal:—		Miles.
Sault Ste. Marie to Buffalo, via Lakes.....	600	
Buffalo to Albany, via Erie canal	352	
Albany to New York, via Hudson river.....	145	
New York to Liverpool.....	3,340	
<b>Total, Sault Ste. Marie to Liverpool, via Erie canal.....</b>	<b>4,137</b>	

(2) Via Welland canal:—

Sault Ste. Marie to Port Colborne	582
Port Colborne to Montreal, via Welland canal, Lake Ontario,	

and St. Lawrence canals..... 352  
Montreal to Liverpool..... 2,790

Total, Sault Ste. Marie to Liverpool, via Welland Canal..... 3,724

(3) Via Trent canal:—  
Sault Ste. Marie to Waubauskene 252  
Waubauskene to Trenton..... 197  
Trenton to Montreal, via Bay of Quinte and St. Lawrence canals 231  
Montreal to Liverpool..... 2,790

Total, Sault Ste. Marie to Liverpool, via Trent canal..... 3,470

Thus the difference in favour of the Trent route over the Welland is 254 miles, and over the Erie and New York is 667 miles.

(c) A third great advantage in favour of the Trent route is its being sheltered. The storms and dangers of lakes Huron, Erie, and Ontario are avoided. Vessels will follow the sheltered Georgian Bay route to the canal entrance at Midland or Waubauskene, there tranship to canal barges, which, onward to Montreal, will be continuously in sheltered waters.

Of the 197 miles from Midland or Waubauskene to Trenton there will be of actual canal cutting less than ten miles. The remainder will be clear, open inland lake or river sailing. Thus delays from fear of washing in the banks will be avoided.

In the construction of the canal, by agreement with the Government, the contractors are, as far as possible, to employ only British labourers. This has been carried out to the letter by Messrs. Onderdonk and Dennon on the Balsam lake section. When the work was first begun the young Canadian farmers were averse to engaging in what many termed "navvy labour," bog work had to be undertaken. It was, therefore, necessary, as Canadians would not work in slush and muck to the knees, to engage Italians for the purpose. That work is now completed, especially as considerable swamp and mud as Canadians are becoming familiar with drilling, blasting, and rock handling, Messrs. Onderdonk and Dennon now employ none but Britishers. Those gentlemen pronounce them the best men they have ever had in their service, and they pay them well accordingly.

The new system of hydraulic lift locks has been adopted by the Government. By this system vessels can be locked 50 to 70 feet with the same ease

Peterborough High School and Trent College School, Port Hope. He graduated from McGill University, Montreal, in civil and mechanical engineering in 1877, receiving the degree of Bachelor of Applied Science. From the same famous university he graduated in 1878 in mining engineering and surveying; received diplomas as provincial land surveyor in 1879, and as Dominion land surveyor in 1880. In 1881 Mr. Rogers entered the Trent canal office as assistant engineer. In 1882 he became assistant engineer on the Grand Trunk railway. In 1883 he was assistant engineer on the survey of the construction of the Trent canal, and in 1884 became superintending engineer for the maintenance of the Trent canal. When the work was begun in 1884 he was in charge of the final completion of the canal, Mr. Rogers was appointed engineer in charge of the entire canal during February, March, and April, 1896. Engineer Rogers was commissioned by the Canadian Government to proceed to Belgium, France, and Holland to examine and report on the



MAJOR SAM. HUGHES, M.P.

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R. B. Rogers, Esq., C.E., of Peterborough, superintending engineer of the Trent canal, was educated at

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Chief Engineer Rogers is son of late Col. Robert D. Rogers, of Peterborough, who bravely led the



"THE FORT," BALSAM LAKE, NORTH VICTORIA—ENTRANCE OF THE TRENT CANAL IN THE DISTANT BAY  
This is the famous George Laidlaw property, and the spot where Champlain encamped nearly 300 years ago. It is also becoming a pleasant summer resort. Victoria Road and Kirkfield are distant but a few miles.