



THE OFFICIAL INAUGURATION OF THE 27½ FOOT CHANNEL.—The 7th of November, a bright, crisp morning, at 6.30 sharp the splendid Allan Line steamship Sardinian is unmoored, towed into the stream, and glides down the broad St. Lawrence, to test the depth of the channel. The method adopted for this purpose is simple and conclusive. A huge piece of timber, about 18 inches square and 50 feet long, has been firmly lashed to the side of the ship with ropes and chains, 27½ feet of its length being submerged in an upright position. If its lower end do not strike or scrape the bed of the river (and if it should, the vessel would tremble from stem to stern), then the feat is accomplished; the Montreal Harbour Commissioners have made the St. Lawrence safe for vessels drawing 27½ feet of water. The deck was well crowded, and when the sun came out with genial warmth, the Sardinian's passengers settled down to enjoy themselves. Among those present were:—Sir Hector Langevin, Minister of Public Works; Hon. C. H. Tupper, Minister of Marine and Fisheries; Messrs. Andrew Robertson, (chairman), Henry Bulmer, J. O. Villeneuve, Hugh McLennan, Charles H. Gould, Andrew Allan, Harbour Commissioners; and Alex. Robertson, secretary; Acting-Mayor Clendinning, Alphonse Desjardins, M.P.; J. J. Curran, Q.C., M.P.; Senator Ogilvie, Thomas C. Keefer, C.E.; John Sirois, C. Herchell, C.E., of Holyoke, Mass.; Wm. Smith, deputy minister of marine; D. O'Brien, R. Prefontaine, M.P.; G. Balcer, secretary of the Three Rivers Harbour Commission; Charles Garipey, G. M. Kinghorn, M. Lefebvre, Hon. B. D. Babcock, Mayor of Cleveland; W. B. Anderson, engineer of the Marine Department; P. B. Valin, chairman Quebec Harbour Commissioners; A. Trudel, editor *L'Etendard*; Henry F. Perley, chief engineer Department of Public Works; D. H. Henderson, Ald. J. D. Rolland, A. A. Ayer, W. R. Elmenhorst, Jas. Williamson, G. E. Jaques, Capt. Labelle, M.P., Professor Bovey, E. B. Hannaford, chief engineer of the Grand Trunk; R. M. Esdaile, A. F. Riddell, R. W. Shepherd, W. M. Stewart, F. A. Routh, H. Wallis, mechanical superintendent Grand Trunk Railway; City Surveyor St. George, T. D. Hood, James Slessor, A. B. Lavigne, J. Kennedy, chief engineer Montreal Harbour Commissioners; D. McCarthy, Sorel; H. Buchanan, A. A. Taillon, Mayor of Sorel; H. Harvey, editor *Trade Review*; W. G. Sproule, G. R. W. Notman, G. Baird, W. W. L. Chipman, Ontario Bank; G. E. Desbarats, DOMINION ILLUSTRATED; H. Archibald, J. H. R. Molson, B. Beaudet, Capt. Douglas, R.N.R.; J. L. Scott, Capt. R. W. Shepherd, W. S. Kennedy, J. R. Dougall, editor *Witness*; Daniel Wilson, A. D. Milloy, E. Schultz, Austro-Hungarian Consul; Ald. Richard White, J. O'Neil, J. C. Sinton, G. Lessard, L. Bruille, deputy harbour master, St. Louis; Ald. M. Malone, G. A. Robertson, Thos. Long, Calcutta; Lieut.-Col. Forsyth, Quebec Harbour Commission; E. L. Bond, A. Demartigny, R. R. Dobell, G. M. Dufresne, City Clerk Glackmeyer, Harbour Master Thos. Howard, Jos. Howden, C. B. Leprohon, M.D., Spanish Vice-Consul; Alexander Murray, Wm. Muir, Chas. McLean, C. Cantin, Collector of Customs Ryan, City Comptroller Robb, E. Roy, L. J. Seargeant, Jas. G. Shaw, Ald. Stevenson, Hon. L. O. Taillon, Ald. Villeneuve, Molyneux St. John, editor *Herald*; Geo. Hadrill, secretary Board of Trade; W. D. Master, Alex. Milloy, F. Gardner, W. P. Wenhäm, E. D. Pease, Bank of Halifax; Lieut. W. H. Smith, R.N.R., steamship Parisian. The party consisted altogether of about 120 persons. The steamer's masts were gaily decorated with flags and bunting, and everybody was in the highest spirits. A more successful outing it would be hard to imagine. Off Longueuil breakfast was announced and was done full justice to. The deck, after breakfast, was the favourite parade. During the early part of the trip Mr. Desbarats, of the DOMINION ILLUSTRATED, utilized the time in obtaining several groups for the next issue of the paper. The Board of Harbour Commissioners, the M.P.'s, with the two ministers, the aldermen and the Press were honoured. As we slip down the river, past the miles of wharfage, the early morning is beginning to glow with promising brilliancy. The smoke is rising from thousands of homes; as we pass the great Hudson Cotton Mills, their twin chimneys are belching forth a murky cloud. Here we risk a plate, and photograph the waking city, still enshrouded in the morning's mists. A little further down, as we pass one of the Harbour Commissioners' steam dredges, we take a shot at her, and secure, at the same time, a view of the fast receding Mount Royal, and of the huge buildings of the St. Lawrence Sugar Refining Company. These two views, taken from mid-stream, before 7 o'clock, and bespread with the glory of early morn, serve well to give people at a distance an idea of the ample width of our St. Lawrence, away up in the heart of the continent, a thousand miles from sea. Six miles below Montreal, we pass the pretty church of Longue Pointe, of which we get a picture, together with the *St. Benoit*, or St. Benedict, asylum for infirm, epileptic and aged men, and, we are told, for inebriates also, kept by the Brothers of Charity. In the background is the *Aile St. Jean de Dieu*, commonly known as the Long Point Insane Asylum. Later on we get several beautiful photographs of the Canada Shipping Company's steamer

Lake Ontario, of the Beaver Line, which, on her way to the ocean, convoys the excursion, hovering sometimes on the starboard, sometimes on the larboard quarter, and, again, dropping dead astern, as we see her in the picture taken as we pass Three Rivers. Here the tooting of a score of steamers and tugs, saluting our passage, makes diversion. Few of us had ever seen Three Rivers by daylight, and the impression made by the shimmering of substantial buildings and shining roofs, through the lace-like veil of trees, was very pleasant. The shipping men viewed, with an eye of envy, the great piles of lumber stacked along the shore. But the feature of the morning was, undoubtedly, the photographing of the groups. There was an amount of enthusiasm and good humour displayed by those subjected to the process that spoke volumes for the excellence of the breakfast they had on board. Volunteers were found to muster and convene the members of the several bodies, and, at the signal, all came forward with alacrity, although they had, for the most part, to sit in the sharp north wind, on the shady side of the ship. Thus the genial Captain Labelle convened the ministers and members of Parliament, who all look happy and comfortable in the picture we give of the group. As the names are all given beneath the engraving, it is not necessary to repeat them here. Sir Hector and Mr. Taillon look rather chilly. They were chilly; but they bore up like men. We next record, with photographic accuracy, the Montreal Harbour Commissioners present on this occasion. The legend under the picture gives the names. We wish we could have had the Commission complete. We miss Mr. Edward Murphy and Mr. Victor Hudon, unavoidably absent, and Hon. Mr. Abbott, away in England. We hope to have an opportunity of giving their portraits later on. Mr. Alex. Robertson, secretary of the Board, was the convener. Next come the Quebec Harbour Commissioners, kindly marshalled by Mr. Edmond Giroux. Their presence on board was a source of great satisfaction to the guests, as betokening a friendly and liberal interest in the great work. Mr. J. M. Dufresne, president of the French Chamber of Commerce, of Montreal, mustered his own men, and to show he was not exclusive, managed to get an Irishman, an Englishman and a German into his group. The shippers, forwarders and merchants naturally formed a numerous body on this occasion. Mr. Wm. Stewart, of the Montreal and Kingston Forwarding Company, took charge of them and gathered a representative group of shipowners, shipbuilders, ship captains, forwarders, bankers, manufacturers, sugar men and vinegar men, Customs officers and Post officers, to share his immortality. And every one of the twenty-four is a perfect likeness. Now comes the Press gang. They all speak for themselves, generally and frequently, and often, as on this occasion, all together, but not, as on this occasion, unanimously. Here they were all of one opinion—that they were having a fine time. Excellent engravings of the members and officials of the City Council of Montreal, of the Civil Engineers present, of Senator Ogilvie, Mr. Seargeant and Mr. Allan, and a very artistic picture of the Steamship Lake Ontario, will be published next week, together, probably, with large portraits of the Minister of Public Works and of the chairman of the Montreal Harbour Commissioners, accompanied by the continuation of our narrative and commentary.

HISTORY OF THE WORK.

Previous to the date of Confederation, July 1st, 1867, the ship channel had been improved at various times, until at that time there was, throughout the whole distance between Montreal and Quebec, a minimum width of 300 feet, with a depth of 200 feet at ordinary low-water. Shortly after that the growing trade of the St. Lawrence, and the increasing size of vessels, demanded that the ship channel should be further deepened, and an act was passed by Parliament in May, 1873, authorizing the Government to contract a loan of \$1,500,000 to defray the expenses of completing the ship channel from Montreal to tide-water, above Quebec, to a depth of not less than 22 feet at low water, and a width of not less than 300 feet, the work to be performed under the superintendence of the Department of Public Works, either by the Harbour Commissioners or in such other manner as the Governor-in-Council might determine. It was further provided that the interest on the loan fixed at 5 per cent. should be paid by the Harbour Commissioners out of the revenue of the port of Montreal. Operations were commenced in the spring of 1874 with one dredge and a stone-lifter, and contracts were entered into for the building of six large elevators or ladder dredges, and also for the purchase of tugs, scows and other plant required. The new plant was finished and set to work in the spring of 1875 and was kept steadily at work during the season of navigation of each year, until the close of 1878, when a minimum depth of 22 feet had been attained at all points, except between Cap Levant and Cap Charles, where it was necessary to take advantage of the tide. Up to that time there had been spent for new plant \$523,902, and for working expenses \$628,610, or in all \$1,152,512. It was then decided, in view of the rapid increase in the size of vessels engaged in the Atlantic trade, and the moderate cost of carrying on the dredging with the plant already on hand, to continue the deepening of the ship channel to 25 feet at low water. Work was, therefore, continued until the fall of 1882, when a depth of 25 was attained at all places, except Cap la Roche and Cap Charles, where it was necessary to take advantage of high water of an average tide. In the straight parts of the channel, between No. 1 lightship and the white buoy, Lake St. Peter, the dredging was 325 feet wide; in the straight parts elsewhere it was generally 300 feet; but in the bends, and all important places, it was widened out to 450 feet or more. The quantities of dredging done in deepening from 20 to 25 feet were: Shale rock, 289,600 cubic yards; earth of all sorts, including boulders lifted by dredges, 8,200,000 cubic yards; large boulders, lifted by stone-lifting barges, 16,700 cubic yards; making in all 8,508,400 cubic yards. The channel in Lake St. Peter, the largest piece of dredging in any one place, is in all 17½ miles in length, 300 to 450 feet in width, and involving the removal, since the beginning of dredging in the present channel in 1851 to 1882, of about 8,000,000 cubic yards. The outlay for the deepening from 20 to 25 feet was for dredging plant \$534,809, and for working and other expenses \$1,245,321, or a total of \$1,780,130. No sooner, however, had a depth of 25 feet been reached than the Harbour Commissioners decided to prosecute the work still further, and in the following year, 1883, application was made to the Government and Parliament for a loan of \$900,000 for the further deepening of the channel to 27½ feet. This was granted, and for the past six seasons of navigation the work has been actively carried on. The Chief Engineer, in his report at the close of 1887, said:—"It was hoped

that all except Cap Charles and Cap la Roche would have been practically finished by the close of navigation, and to accomplish it the greater part of the dredging fleet was worked night and day. Its accomplishment was, however, found impossible, owing mainly to unusually great interruptions by storms and for repairs, and to the dredging in several places having proved harder than was anticipated. Above Cap la Roche several small pieces of dredging remain to be done, but there are no considerable sections, except about 2½ miles of very soft clay in Lake St. Peter, and about ¼ of a mile, mostly detached lumps, at Point aux Trembles, *en haut*, all of which can be finished by the time of low water next summer." The work has this season been prosecuted to a successful completion at all points, and the 27½ foot channel from Montreal to Quebec has been formally opened. The following statement shows the growth of the sea-going shipping trade at Montreal since the work of deepening from 20 feet at low water to 27½ feet was begun:

	No.	Tons.	No.	Tons.
Steamships	242	245,237	600	807,471
Ships	72	65,823	6	8,684
Barques	164	75,594	68	43,273
Brigs	18	4,660	2	1,115
Brigantines	59	8,581	7	2,031
Schooners	149	12,583	83	8,194
Totals	794	412,478	767	870,773

VIOLA.—This is one of the sweet visions of Sir Frederick Leighton, President of the Royal Academy of Art. The shapely head stands well balanced on the shoulders, and is crowned with a wealth of straight hair, as black as the raven's wing. The broad side-face, relieved by the Grecian nose and nostril, full lip and large eye, combine to make a face that arrests the gaze of the beholder. The necklace of pearls, large as apricots, the graceful sweep of the white sleeve, bound by the embroidered bodice or corsage of black velvet, bring out the figure gracefully, as far as the bust goes. Who is this Viola, and what countrywoman is she? Every one of our readers may guess as he lists, but we have a fancy of linking her with the arch and fair heroine of Shakespeare's "Twelfth Night, or What You Will." Viola was an Illyrian maid, and she won her suit—the hand of Orsino, the Duke of Illyria—by personating a page, under the name of Cesario. Who knows but that the demure girl whom we have before us, thoughtful and ingenious as she seems, is now planning her plot with the coast captain and his sailors:

I prythee (and I'll pay thee bounteously),
Conceal what I am; and be my aid
For such disguise as, haply, shall become
The form of my intent. I'll serve this Duke.
It may be worth thy pains; for I can sing,
And speak to him in many sorts of music,
That will allow me very worth his service.

And the Duke was taken in at once, and he fed his soul on the music of love:

That strain again; it had a dying fall;
O, it came o'er my ear, like the sweet sound
That breathes upon a bank of violets,
Stealing and giving odour!

COLERIDGE is at the head of the Lake of Bays, Muskoka, and is the end of the free grant road known as Bobcaygeon Road. It is the place where hunting parties hire canoes to start on their fishing and shooting excursions to Hollow, Bear, Round and Kimball's Lakes, where deer and bear have been very plentiful, sad inroads upon which have been made by insatiate hunters. Zach. Cole, the first settler, after whom the place was named, is a characteristic specimen of the Canadian pioneer. He died last winter, after a chequered career of twenty-five years in this spot. The drawing which we reproduce is a pen and ink sketch by Mr. Thos. Mower Martin, R.C.A., from which this artist intends to paint a large water-colour picture of the scene.

CALGARY.—Here is another of the wonders of the Northwest. Five years since there would have been nothing of Calgary to show in a photograph. To-day it is spread before us, within sight of the Foot Hills, within easy distance of the great Ranch territory, with all the appliances of a modern town—a railway, a river, churches, schools, newspapers, public buildings. The people have unbounded faith in their growing town, saying that Alberta is the sirlain of Canada and Calgary the tenderloin of Alberta.

A SKETCH IN MONTREAL HARBOUR.—The engraving on our cover is a fitting accompaniment to the main features of this number. A tug is towing into midstream a heavily laden steamer about to sail for Europe. The photograph was evidently taken in the spring, at high water.

LITERARY NOTES.

Mr. Rameau, the French Publicist, has received a diploma from the Laval University conferring on him the title of Doctor of Letters.

The Abbé Bois, curate of Maskinongé, and one of the most learned collectors of Canadian antiquities in the Province, is lying dangerously ill.

The *Progress* is the name of a bright and able literary weekly published at St. John, N.B. Among the contributors are C. G. D. Roberts, M.A.

The *Almafilian* is a neat little monthly paper, of quarto shape, published at Alma College, St. Thomas, Ontario. It is edited mainly in the interests of the young ladies of the institution, but has also a considerable subscription list outside.

We are glad to learn that Mr. Gerald E. Hart has in mind to put forth a second edition of his important work on "The Fall of New France," with notes and additions suggested by the wide range of review which the volume has received.

The Montreal Society for Historical Studies opened its winter session last week with two interesting papers, one on "The Family Compact," by Mr. John Fair, Jr., N.P., and the other on "Marquette," by the President, Mr. John Talon-Lesperance.