

Registration of Voters

From the Canada Law Journal.

Registration of voters is again demanded. Shall it be as in 1853? If not, in what respects different? We think the conglomeration of Municipal and Parliamentary registration, so long as the qualifications are not similar, should not be renewed.

The following we submit as proper stand points about which to weave details:

- 1st. There must be the qualification of voters, declared as at present.
2nd. All persons qualified must be enrolled, either upon their own application, or upon application made to them.
3rd. The list of enrollment must be open for inspection for a reasonable time before completion.
4th. After completion, it must undergo revision by a competent person.
5th. To lighten the duties of the latter, and for the convenience of the electors, there must be decentralization into small divisions.
6th. We have not now space to enlarge upon these heads; but will merely indicate the machinery necessary.
7th. Each Division Court division, to be a Division for the registration of voters.
8th. The Clerk of the Division Court, to be the Clerk of the enregistration division.
9th. Due notice to be given to all the electors, so that all may come forward and have their names recorded.
10th. The County Judge—the Junior Judge where there are two—to go circuit and revise the lists.
11th. An appeal under certain restrictions to be allowed from his decision to the Superior Courts of Common Law.
12th. The list when revised by the County Judge to be sent to the County Registrar.
13th. The County Registrar to have the custody of the list, and give copies to Returning officers, and to others demanding the same.
14th. In Lower Canada, where there are Circuit Courts, corresponding with our County Courts, and Courts for the trial of small causes, corresponding with our Division Courts, the scheme may, we apprehend, with little modification be adopted.

A Formidable Event.

A correspondent of the Mofussilite writing from Oude on the 6th ultimo makes the following report of a strange affair in which our troops had been concerned:—"The troops, however encountered a much more formidable and enterprising enemy on their way back to camp, and I am ashamed to say the 9th Lancers turned tail; both officers and men fled in utter confusion, while the Artillery drivers abandoned their guns, and bolted like mad, but without avail, for the enemy pursued them to camp, which friend and foe entered at the same time, the latter getting among the tents and having the audacity to attack the whole force, which had turned out in great alarm to cover the retreat of the Lancers and the others when they were seen running in such wild despair! The killed Highlanders did not on this occasion display the courage which they are famed for, if anything, the 93rd sought shelter from the attacks of the victorious enemy with more agility than their brethren comrades, though I confess that being less protected they suffer more. The sailors of the Naval Brigade also, strange to say, showed the white feather, and topped their booms with the rest, uttering naughty nautical ejaculations in the extremity of their terror.—There is no mistake about it, our fellows were utterly routed, and the enemy continued to hover round the camp for some time, without our daring to molest them, and ultimately they retired in good order, and with very trifling loss." Don't be alarmed or indignant, good reader; imagine what you would yourself have done if attacked by a swarm of bees! While the force was returning from the Allumbagh camp one of the Lancers was tempted to poke his spear into a bees' nest and the result is above described.—Bombay Gazette, Dec. 4.

France.

M. Masson Thibault, a political prisoner of 1852, and a man of extreme Republican principles, had published a letter in reference to the attempted assassination of the Emperor, in which he "abandons the party which disgraces itself, and disgraces the flag which is so shamefully soiled with blood."
It was said that the Queen of Oude died of grief. She was attended in her last moments by Dr. Royer, one of the Emperor Napoleon's physicians. The prayers enjoined by the Buddhist religion were said over her death-bed. The body was watched by four women, and the arrival of the Prince, the son of the deceased, who had been sent for by telegraph, from London, was waited, before any arrangements were made for the funeral.
Arrests of persons suspected of connection with the attempt to assassinate the French Emperor, continued to be made.

Arrival of the Steamship "Niagara."

New York, Feb. 15.

The Royal Mail steamship "Niagara," Capt. Miller, from Liverpool at 10 a. m. of Saturday, 30th ult., arrived at Halifax at 11:30 a. m. on the 15th inst. The "Niagara" experienced heavy weather during the whole passage. Among her passengers are His Excellency the Hon. the Earl of Mulgrave, the newly appointed Governor of Nova Scotia, and family and suite.

INDIA.

The correspondence from Calcutta, to Dec 24th, adds nothing of importance to telegraphic despatches, which anticipated the mail.
The Times' correspondent gives a circumstantial account of the Windham affair; but the facts do not differ from those already before the public.

The scenes after Windham's defeat are said to have been fearful. The hospitals were crowded to suffocation. The enemy directed their fire specially upon them, and it was not till Sir Colin Campbell returned, and, with a dozen hasty words, brought every man to his place, that order was restored.

The Bishop of Calcutta died on the 3rd of January.

LONDON, JAN. 20.

The Government has received a despatch from Malta announcing the arrival of the Bombay mail, of January, at Suez. The news is of little importance.
Sir Colin Campbell was at Cawnpore at last advices, but he was expected shortly to move westward with a powerful force.

Sir James Outram, at Allambagh, attacked and defeated the enemy on 22nd of December, and captured four guns. He sustained but trifling loss.

Genl. Roberts is appointed to the command of a full force in Rajshapotna, which is assembling at Deesa, and will march on to Musserabul.

No fresh disturbances have occurred in any part of Deccan or Central India.

The Punjab is tranquil.

DEPARTURE TO INDIA.—
LONDON, JAN. 30.

The following despatch was received late last night:—
BOMBAY, JAN. 9.

Sir C. Campbell, on Dec. 12th, advanced towards Ferukabad, and intended to proceed thence to Agra.

Col Weston's column re-occupied Mysapore on the 27th December, after defeating the rebels and taking 6 guns.

Bigdier General Chamberlain proceeded, with a column to Rohilkhand, and afterwards joins Sir Colin at Agra.

The Decca mutineers had entered the Assam country, and Her Majesty's 54th Foot were in pursuit of them.

The conduct of the 31st Regiment of native infantry had excited suspicion.

The population of Indore have been disarmed and tranquillity restored.

The Punjab and Scinde are quiet, but strong suspicions are entertained of the Kholapore rajah's movements.

New depredations by the Khandore rebels are reported, and the Hassi rebels have been severely handled.

A grand entertainment has been given by the native generals of Bombay to all European officers in garrison at that place.

CHINA.

The correspondent of the Times, writing from Canton river, under date of Dec. 16th, says that Yeh has returned an insolent answer to the ultimatum of the English and French plenipotentiaries, and that the two forces would in a few days attack Canton. Lord Elgin's demand was of the most temperate character. He asked for no more than that the treaty should be carried out—that Canton should be put upon the same footing as other treaty ports; its gates to be open to commerce; that compensation be given for damages to British merchants, and the occupation of the Island of Honan be acquiesced in as a guarantee, until all matters are settled. Yeh's answer to Lord Elgin is said to be couched in a sarcastic vein. He tells his Lordship that the question of the treatment of strangers at Canton, has been settled by the Emperor's decree; that Sir George Bousham was made a Baronet for respecting that decree, and recommends Lord Elgin to follow his example; and as for compensation, Yeh had demanded it of the British Government for loss and suffering, by China, a few days before this answer was received.

Mr. Reed, the American Commissioner, solicited an interview in the city, and Yeh replied that he would meet him outside of the city; but that no barbarians should put their foot within the limits of Canton.

The Paris Pays publishes accounts from Cochinchina. The persecution of Christians continued with unparalleled violence. The country was in a state of the greatest confusion.

GREAT BRITAIN.

Parliament assembled 4th February.

Prince Frederick William, of Prussia, had received the Order of the Garter.

The steamer "Leviathan" had been pushed 24 feet off the ends of the launching ways, and her cradles were being removed. She had over 17 feet of water under her, and it was expected that she would float on the 30th or 31st.

Heavy drafts of troops were under orders to embark for India.

The Bank of England had reduced its rate of discount to 4 per cent. The reduction had little effect on the money market or stock exchange.

FRANCE.

The addresses from some of the regiments to the Emperor are worded so strongly that they attract much attention. The Zouaves regretted that they had no opportunity to manifest their zeal in a striking manner, and the address of the 82nd regiment contains the following sentence:—"If your Majesty wants soldiers to reach those men even in their haunts, we humbly pray you to designate the 82nd Regiment as part of the advance guard of this army."

The Pope has addressed an autograph letter of congratulation to Napoleon.

It is said that Orsini was at Stuttgart, when the Emperor was there last year, but that he and two or three other Italians were expelled.

A Brussels paper affirms that the French foreign minister had addressed a letter to the British, Belgian, Swiss, and Sardinian Governments, demanding certain measures which may prevent renewed attempts at assassination.

ITALY.

A plot against the life of the King of Naples had been discovered. Ten persons, all Frenchmen, are said to have been landed at Naples to carry out the design. A conspiracy had also been discovered. An insurrection movement, at Rome, was said to have been planned for the 15th of January, but the police frustrated it.

AUSTRIA.

A Vienna journal says that the National Bank contains a greater amount of specie by 300,000 florins than ever before.

RUSSIA.

It is said that Russia intends to restore all marine stations on the Circassian coast, but on a new system, which will evade the treaty of Paris. A new Sebastopol is also in contemplation.

TURKEY.

Serious disturbances were said to have broken out in Bosnia. A force of 3,000 men had been sent to suppress them.

THE VERY LATEST.

London Jan. 30th.—On the Stock Exchange loans are obtainable at 1 1/2 to 2 per cent. Nearly £30,000 in gold was taken to Bank to-day.

AUSTRALIA.

The mail steamer has arrived at Suez, with advices from Melbourne to Dec. 16th, and Sydney to 11th. Trade at Melbourne had commenced very dull. Several failures are reported. There was little gold leaving for England. London money market was decidedly easier. Consols closed on Friday at 95 1/4 for money and account. The Bullion in the Bank of England had increased £292,000.

LIVERPOOL PRODUCE MARKET.

Ashes quiet at 3 1/2s for pots and pearls. Sugar dull and 6d lower. Tea slightly advanced.

LIVERPOOL BREADSTUFFS MARKET.

Richardson, Spence & Co., quote flour un-saleable and quotations nominal. Western Canal 2 1/2s a 2 1/2s. Philadelphia and Baltimore 2 1/2s a 2 1/2s. Ohio 2 1/2s a 2 1/2s. Wheat very dull and declined 2d since Tuesday. Red western 5s a 6s, and fine samples, which are scarce, 7s; white 7s a 7s 9d for best quality.

Corn quiet, but steady; mixed and yellow 3 3/4d a 3 1/2s; white 3 1/2s. Pork quiet, but steady. Lard steady, at 52s a 54s 6d for choice.

LONDON MARKETS.

Baring Bros. & Co. quote wheat dull; white 46s a 48s. Flour 24s a 26s.

Advices from Manchester and the manufacturing districts are generally favorable.

New Advertisements this Week.

- Painting—T. Macbeth, Jnr.
Post Office Notice—M. Teffy.
A Great Bargain—G. McMoran.
A Farm Wanted—Robert Nichols.
Crown Land Department.
Formation of Horticultural Society—Town of Belleville.
Formation of Horticultural Society—Village of Fergus.
Temperance Lecture—J. A. Davidson.
Found—A Lady's Head-dress.



British Tribune.

RICHMOND HILL, FEB. 19, 1858.

A destructive fire broke out in Reynold's saloon, St. Paul street, St. Catharines, on the 17th inst., which resulted in the loss of upwards of \$12,000 worth of property.

The Daily Colonist, Toronto, has changed hands, Messrs. Thompson & Co., having disposed of their interest to George Sheppard & Co., by whom it has recently been most ably conducted.

The New York money market continues easy, the supply greatly in excess of the demand. Strictly prime mercantile paper is in demand at 7 to 8 per cent; and second-class notes at 9 to 12 per cent.

We regret to learn that Charles Thompson, Esq., died at his residence, Summer Hill, Yonge Street, on Monday last the 15th inst., in the 58th year of his age. His funeral will take place this day at two o'clock, p. m.

Our readers, having business at the Richmond Hill Post Office, will please read the Postmaster's advertisement. The arrangement is made to suit the convenience of the public during the Auction Sale, commencing on Monday next.

The London Free Press states that his Excellency the Governor General has commuted the sentence of death on the condemned criminals, Neil and Janet Beaton, to that of imprisonment for life. They were convicted at the last assizes of murdering Edmund Russell, at Lobo, by poisoning him with arsenic.

The Colonist says:—From the records of the Toronto Post Office, it appears that the number of valentines posted this year for delivery in the city, on the 13th, amounted to 1618, being an increase of 868 over the same day last year. On Monday, not more than some 1300 passed through the Post Office, being a deficiency of 3200 as compared with the 14th of February last year.

It is said that Sir Colin Campbell, in twenty-one days, travelled nine hundred miles in India, forced an entrance into a city defended by sixty thousand fighting men, relieved a garrison besieged for five months, withdrew nine hundred women and children in the face of an overwhelming force, relieved his detachment at Cawnpore, twice defeated an enemy thrice his own strength, and finally stripped them of every vestige of artillery.

A farmer from Innisfil, named Samuel McKindless, met with a serious accident on Wednesday last, at the Hay market, Toronto. While proceeding to Gooderham's mill to deliver a load of wheat, his horses became frightened by the approach of a train of Railway cars along Front street, and being close to track, the platform of one of the cars struck the sleigh, throwing Mr. McKindless with great violence on the ground and severely injuring him about the head. Medical aid was promptly obtained, and at last accounts he was in a fair way of recovery.

CANADA AND ITS CANALS.

The character of a people, and that of an individual, may be judged very much in the same way. Our good or bad opinion, of the one or of the other, must rest upon similar grounds. We, in general, estimate the worth and force of character in both, not from the accidental or fortuitous advantages of birth or fortune, but from the manner in which they control and improve the circumstances that exist around them and the success with which their efforts are crowned in overcoming or removing the obstacles that would seem to obstruct their progress in the path of honorable and commendable advancement. For example, in illustration of this statement, it is a matter of common observation that a person of contracted mind and limited education will be found occupying his time, to a large extent, with trifles, or herding with the worst and most vicious associates in the haunts of dissipation, caring little or nothing for his own welfare or that of the neighborhood around him; whereas, on the other hand, a man of intelligence, of moral worth, of enlarged and generous sympathies, will be found not only entertaining accurate and comprehensive views of men and things, but also constantly engaged in planning and calculating how he may best promote the highest interests, present and future, of himself, his family, and the community among whom his lot is cast. In proof of this assertion it is only necessary to ask, is there a town or city in Upper Canada the history of which would not have been something very different from what it is but for the persevering and well-directed efforts of a few enterprising and self-denying individuals? Now, while it is not our intention, at present, to say anything laudatory of our character as a people, or to bring ourselves, in any way, into invidious comparison with our neighbors, nevertheless we consider that something of our intelligence, energy, and indomitable industry may be learned from the number and magnitude of the public works in which, as a people, during our brief history, we have been engaged. At present, we shall confine our observations to one class of these works, viz., our canals.

Burlington Bay connects the flourishing City of Hamilton and the fine wide spread country beyond it, through an alluvial bar with the waters of Lake Ontario; thus opening a wide gateway to the vast regions of the West. The St. Anne's Lock, connecting Lake of Two Mountains with St. Louis, is one hundred and ninety feet long by forty-five broad, and levels an inclination of three and a half feet.

The St. Oar's Lock, which completes the navigation between Chambly Basin and the river St. Lawrence, is two hundred feet long by forty-five broad, and relieves an elevation of five feet. The Chambly canal, between the St. Lawrence and the Richelieu, eleven and a half miles long and five feet deep, with locks one hundred and twenty feet by twenty-four, ascends a height of seventy-four feet. The distance between the City of Kingston and the City of Ottawa is traversed by a ship canal one hundred and twenty-six miles long and five feet deep, with locks one hundred and thirty-four feet long by thirty-three broad, which unites by the aid of the Rideau, the waters of the Ottawa with those of Lake Ontario. Between the City of Montreal and the City of Kingston an elevation of more than two hundred feet is overcome by seven ship-canal, varying from one mile to twelve in length, and forty-one in aggregate, with locks two hundred feet by forty-five, and with an excavated trunk ten feet deep and from one hundred to one hundred and forty feet broad on the water surface. The elevation between Lakes Erie and Ontario, is three hundred and forty feet. This immense height is surmounted by a ship-canal, twenty-eight feet in length, with locks one hundred and

fifty feet long by twenty-six and a half broad, and with an excavated trunk sufficient to pass propellers and sailing craft. The locks on this canal are capable of admitting vessels of five hundred tons burden, while those on the St. Lawrence have a capacity for passing vessels just the double, or one thousand tons burden. In no other country are there canals of such magnitude and importance, the cost of constructing which amounted to the sum of £14,000,000. To these there will, in a few years, in all probability, be added the Toronto and Georgian Bay Ship Canal.

It will be in the recollection of some of our readers that on the 13th of September, 1855, a Convention of Delegates from Chicago, Oswego, Toronto and Barrie met at Toronto, "to consider the question of the construction of the Georgian Bay Canal," when it was unanimously resolved, "That the immense trade from the North-west demands the immediate construction of a Canal between the Upper Lakes and Lake Ontario, of sufficient capacity to pass vessels of 1000 tons burthen from Lake Huron to Lake Ontario, at Toronto, or its vicinity." On the following day the committee appointed by the convention called upon Kivas Tully, Esq., Civil Engineer, Toronto, and instructed him "to complete the survey of a route for the canal from Toronto via Lake Simcoe to the Georgian Bay on Lake Huron, and to report to this Committee, with a topographical description of the country, levels, heights, sections, and approximate estimates for the construction of a canal capable of passing vessels of one thousand tons burthen; a profile of the line to be furnished with each report." The Committee also arranged that the members of the Chicago Delegation should secure the services of one of their most eminent Engineers, to go over the ground with Mr. Tully, and act with him as consulting Engineer in the progress of the survey.

Mr. Tully has just completed the survey and submitted to the Committee his report, "leaving to the Consulting Engineer, Col. R. B. Mason, of Chicago, the important task of furnishing the necessary statistical information in reference to the extent of the anticipated trade that may be relied on as the means of defraying the cost of construction."

From this report it appears that the survey has been a thorough one, there having been no less than four different routes gone over and accurately calculated. And the task to be encountered in executing this great provincial work, may now be considered as placed before the public mind in a tangible shape. Passing over many of the details and reasonings embodied in the report itself, we have selected the following extracts, which present in a condensed and definite form the nature of the work to be completed, in order to furnish adequate means of transport to the seaboard, or even across the Atlantic, for the rapidly increasing trade of the far West, by the waters of the St. Lawrence.

1st. Terminal Harbour Accommodation.—"I consider the Humber line offers the greatest advantages, and, in recommending this line, the Humber Bay would be assumed as the Southern terminal entrance of the Canal. By the construction of two piers of crib work, 2,000 feet in length, and 40 feet in width, 200 feet apart, and extending into 20 feet of water, with a depth of not less than 13 feet, at low water, inside the piers, a terminal harbor, safe, easy of access, and commodious, can be obtained at the Humber Bay. This Bay is protected from the effects of northwesterly, most easterly storms, which are the most violent on Lake Ontario, by the Peninsula, South of Toronto about 4 miles distant; but there is little or no protection from southwesterly storms, which prevail during autumn, unless when close to the entrance, which is sheltered by a projected headland to the west. The distance to the opposite shore of the Lake being only 30 miles, the force of the wave would not be such as to materially endanger the safety of a large vessel running between piers 200 feet apart, and in 20 feet of water, whilst smaller vessels of 500 tons can run into Toronto Harbor in safety, during unusually severe gales from this quarter. During the period of low water the Humber Bay, with the proposed piers, would be the only available terminal Harbor for vessels of the capacity for which the Canal is proposed to be constructed.

"Within the line of shore, after passing between the piers, the marsh is proposed to be excavated to the extent of eight acres, so as to afford sufficient accommodation for the anticipated traffic, and is capable of being enlarged if required.

For the Terminal Harbor accommodation on Lake Huron, the Nottawasaga River requires a less outlay. By the construction of piers, of the same character as those recommended for the Humber Bay, also 200 feet in length, a harbor sim-

ilar in many respects may be obtained. The mouth of the Nottawasaga River would be exposed to the northwest gales of the Georgian Bay, which are sometimes very violent in the spring and autumn, and would have a range of 100 miles to Cabot's Head.

"This would no doubt be a serious difficulty in a nautical point of view, but the risk would not be so hazardous if ordinary caution is used. Supposing a vessel to be running for the entrance of the Canal, at the mouth of the Nottawasaga River, the vessel would pass close to the Christian Islands, under the ice of which shelter could be procured until the severity of the storm had passed, when the entrance of the harbor, 20 miles distant, could be reached in safety.

"This course would not be necessary during ordinary gales, but only in case of unusually severe storms. With this exception, Nottawasaga Bay offers every facility for a suitable Terminal Harbour, the approach being marked with bold headlands, and with deep water one mile from the shore.

"For the better explanation of the capabilities of this river and the Humber as terminal harbors, I have prepared detailed charts of the same, which are herewith submitted. By reference to the chart of the Nottawasaga River, which has been drawn from actual survey, it will be noticed, that the river extends in a south-westerly direction parallel to the line of the shore for a distance nearly 3 miles, with a width varying from 220 feet to 650 feet, and an average depth of 10 feet, containing available harbor accommodation of over 150 acres at a moderate outlay for deepening and improvement, the cost of which is stated in the general estimate."

2nd. Water Supply to the Canal.

"The proposed dimensions of the locks are 265 feet in length, 55 feet in width, 12 feet lift, and 12 feet on the sill.

"Two locks of these dimensions would require 350,000 cubic feet of water nearly, for each vessel passing through the Canal. If 500 vessels passed through during the day 17,500,000 cubic feet would be required, or about 12,000 cubic feet per minute, according to two experiments on the quantity of water flowing from Lake Simcoe into Lake Couchiching. At the Narrows; the quantity of water passing at this point amounted to over 100,000 cubic feet per minute, making due allowance for the friction at the bottom and sides.

"The average rain fall of the watershed of Lake Simcoe, (1200 square miles,) according to a statement procured from the Meteorological Observatory at Toronto, (see appendix B) and extending over a period of seventeen years, gives 3694 inches; and allowing for evaporation and vegetation, say 2494 inches, we have 12 inches available rain fall per square foot for the year. This would give 90,000,000 per day, or 60,000 per minute, the available supply would be greater than this judging by the experiments on the current at the Narrows, which gives over 100,000 cubic feet per minute.

According to experiments in the County of Hertford, in England, the evaporative effect was as 15 to 27, nearly or a little above 50 per cent, leaving 63 1/2 per cent additional to be consumed by vegetation. What the exact amount of loss, from this cause, cannot be ascertained; but the sum of both would hardly exceed two-thirds of the whole rain fall, which would be five times as much as would be required to pass 50 vessels of 1,000 tons each per day, as this would be the greatest number of vessels that could be passed through the Canal conveniently in fifteen hours, allowing a little over fifteen minutes for each vessel to pass through the locks. There will still be a large available water power, which, along the entire line of the Canal, after passing the summit level, will form a source of considerable future profit, by renting the same for mills and manufactories.

"Immediately after passing the summit an additional water power would be also available from the water sheds of the Humber and Nottawasaga Rivers, amounting to 30,000 cubic feet per minute respectively along the line of the Canal, based on the same calculations of an average of twelve inches per superficial foot per annum. Further evidence is hardly necessary, and from the above sources there will not only be a sufficient supply of water to feed the Canal, but a large remaining available water power, in fact an inexhaustible supply for the wants of a much more numerous population than can be anticipated at present.

"In order to store up the rain fall of the Lake Simcoe water shed, it will be necessary to construct one wasteway, and three close dams, at the branches of the River Severn, at the north-eastern extremity of Lake Couchiching, the cost of which is stated in the general estimate."

"Along the valley of the Humber there are no engineering difficulties of an extraordinary character as far as the 23rd section, at the town line of Vaughan and King, where the deep excavation through the ridges commences. This excavation extends to the 33rd section, or ten miles. The greatest depth to be excavated will be 197 7/8 feet, or 224 under 20000 feet. This will be the greatest depth from the summit. The ridges present a gradual inclination North and South; the slope, to the north being 5 1/2 miles in length, and the southern slope 4 1/2 miles; total length 10 miles. The depth of this excavation will average 90 feet, and will contain nearly 48,000,000 cubic yards, and be-

ing composed, as far as can be conjectured, of light clay and gravel, will not cost more than 25 cents per yard, making a total of \$12,000,000. From the 33rd section to the 45th, to Cook's Bay, at Lake Simcoe, the Canal would pass through the Holland River marsh, following the course of the Holland River, except at the bends of the River, which are cut off. A considerable portion of this River is of an available capacity, and would require slight alterations, averaging 150 feet in width, with a depth of water from 9 to 12 feet.

"From the 48th to the 71st section at the western extremity of Kempenfeldt Bay it will be lake navigation where there are no difficulties to be encountered. Lake Simcoe being of sufficient capacity to admit vessels of a large tonnage navigating it without any risk. At the 48th and 71st sections piers of timber crib work of a suitable character have to be constructed.

"From Section No. 1 to No. 6 there will be a deep excavation averaging 50 feet, the greatest depth at Section No. 2 being 78 feet, and containing little over 6,000,000 c. yards at 25cts. per c. yard, the total cost of which would be \$1,500,000—the material to be excavated being of the same quality as described in the deep excavation in the ridges as far as can be judged from geological data, and other indications. (See appendix C.)

"At Section No. 8, the character of the work comprises a chain of combination locks six in number. From this Section to No. 25 there are no engineering difficulties, the Canal will follow the course of the Nottawasaga River, which, with slight improvements, can be rendered of sufficient capacity to answer the required purposes. This portion, 16 miles in length, being liable to heavy-floods in the Spring and Autumn, will require a much higher low path than usual, which will slightly increase the average cost per mile. Between the 25th and the 27th Sections, it will be necessary to cut a channel through the sand ridge which forms the south-eastern, bank of the Nottawasaga Harbor, in order to save a distance of six miles, a waste weir being constructed across the River to maintain the water at required level.

"The total quantity contained in this excavation will be over 2,000,000 c. yards, the greatest depth being 100 feet, and the average depth 50 feet; the cost of this excavation would be \$500,000.

"From the 27th to the 29th Section the work would consist of dredging the bed of the river of an average depth of 2 feet. The 29th Section reaches the Nottawasaga Bay, where a Harbor is to be constructed as before described.

"The lockage will consist of two single locks, eight double locks, three treble locks, and three quadruple locks, being thirty-nine locks, in number from Lake Ontario to Lake Simcoe, having an average lift of a little over 12 feet, and the total lockage of 470 feet.

"From Kempenfeldt Bay to Lake Huron there will be five single locks, or altogether 11 locks, with an average lift of a little under 12 feet, or 130 feet in all—making the total lockage of Route No. 1 to be 600 feet.

"In nearly every instance where combination locks have been provided, it was a matter of necessity from the nature of the surface. Though objectionable in many respects, it is of advantage in consequence of increasing the length of the levels, which on this route will vary from 1 to 16 miles, not including the long summit level of Lake Simcoe of 56 miles. The total length of this route will be 100 statute miles.

"The Canal, if constructed by this route, would cross the Great Western and Grand Trunk Railways, and the Ontario, Simcoe and Huron Railway twice. At each of these points as indicated on the map, a railway swing bridge must be constructed. Accommodation swing bridges of an ordinary character will have to be constructed at several points along the route. For crossing the deep excavation it is proposed to have four accommodation bridges 20 feet above the level of the water, with inclined approaches of 1 in 20, each bridge to be two miles apart for the entire length. The estimated cost being \$22 1/2 100 750. The length 100 miles. And the Time 53 hours.

"According to the calculations to the available water supply, it has been computed at 60,000 cubic feet per minute; this supply from the summit to the North and South would be augmented by the rain fall of the water sheds of the Humber and Nottawasaga Rivers, which is computed at 82,000 cubic feet per minute, making a total of 202,000 cubic feet per minute, or 90,000 cubic feet for the southern or Humber portion, and 112,000 for the northern or Nottawasaga water shed.

"These quantities multiplied by the height 130 feet for the northern, and 470 feet for the southern, would give the available water power of each, an unfailing source of considerable profit, being in the vicinity of a populous city, and of incalculable value for manufacturing and mechanical purposes."

ARREST OF MCKAY.

The arrest of McKay, the man who shot Constable Taylor of Bradford, when endeavoring to execute a warrant, was effected on Friday night, by Sergeant Cummins and Constable A. McDowell, of the Toronto Police. The Chief of Police having received information from a private source, in the course of the afternoon, that McKay had been seen in the city, his ingenuity was exercised to trace his whereabouts. One place was searched in the hope of finding him, but he was not there. Further inquiries, however, induced the Chief to despatch the officers named to the house of Robert Wilson, a carter, residing in Park Lane, where it was ascertained a female was staying with whom McKay was intimate. They arrived there at about half-past nine o'clock, and were admitted by Wilson himself. They asked Wilson if McKay was there, and he asserted that he was not. The officers, of course, did not rest satisfied with the answer, but proceeded to search the house. Not many minutes elapsed before their game was scented. He lay under a bed in a dark room, bedged in with a number of trunks and boxes. Sergeant Cummins instantly drew a pistol, with which he had taken the precaution to arm himself, and called upon the fellow to surrender. He instantly exclaimed, "Don't shoot me, and I will." Cummins still pointing the pistol at him, his hands were raised, and he was drawn from his place of concealment. The officers then searched the room, and close to where the man had been lying they found a six-barrelled revolver—no doubt the one with which Taylor had been shot. The prisoner was then taken to the Police Station at the City Hall. On the way there he entered freely into conversation with the officers. He told them that if he had not been taken by surprise and in the position in which he was found, by which the officers were protected by the bed, and he was prevented from the free use of his limbs, he would most certainly have shot them before he would have been taken. He related with considerable gusto an incident which occurred on the previous night. He said, after making his escape from the freight train, he made his way to Stegle's tavern on Yonge street, where he intended staying all night. After being there a short time he heard persons talking in a loud tone of voice in the adjoining room. He listened, and learned that he was the subject of the conversation,