

WATERWORKS

Mass Meeting in Market Hall

Almost Unanimously

Endorse the Commissioners' Report.

WORK TO PROCEED

The public meeting of the citizens called by the Mayor to consider the report of the Waterworks Commissioners, was held last night in the Market Hall. About one thousand citizens were present.

WATER COMMISSIONERS' REPORT.

To the Citizens of Charlottetown:

GENTLEMEN,—Your Water Commissioners, who were elected on the 6th of June last, received on the 14th of the same month a copy of two resolutions passed by the City Council on the previous night, prescribing the amount and character of the security they would be required to give to the city.

Immediately, on being advised of this resolution, the Commissioners, who had in the meantime been corresponding with engineers resident in Canada, and examining the reports of their chairman, proceeded to the United States and engaged an engineer to advise them generally in regard to the proposed waterworks.

These specifications, excepting one set, together with a short advertisement, and the forms of proposal, contract, and bond required in each case, were printed, and a copy of them all as approved by the Commissioners is placed herewith.

1. For coated cast iron water pipes and for special castings. 2. For laying cast iron water pipes and their appurtenances. 3. For water stop gates and hydrants. 4. For pumping machinery, boiler, &c. 5. For furnishing materials and constructing a reservoir. 6. For furnishing materials and constructing a pumping station.

Mr. Tidd arrived here on the 5th of August, and having examined the different streams and watersheds within eight miles of the city, north of the Hillsborough, recommended the Commissioners to sink test wells a few yards from the Three Mile Brook, near the Upper Malpeque Road.

On obtaining this result, the Commissioners sent for the engineer on the 21st of September, but as he was at that time detained in court, in the capacity of principal witness as an expert in a heavy water claim case in Massachusetts, he was unable to come here until the 7th of October.

Mr. Tidd, on his arrival, examined the wells and enquired particularly into the quantity of water pumped therefrom, the time it took for the wells to fill after the pumping ceased, and expressed himself as satisfied with the experiments. After his return home he forwarded the following report:—

"Hon. David Laird: "DEAR SIR,—Upon a careful examination of your proposed water supply in the valley above Crabbe's dam, it seems to me that a sufficient supply of excellent water can be collected there for the use of your city for some years yet to come.

"I have carefully examined the several tenders made for the construction of the proposed Waterworks for the City of Charlottetown, and am of the opinion that they are reasonable in amounts—in fact they are less than I had expected.

"I would say that in such a case a large amount of water can be stored in Crabbe's large

Table with 2 columns: Item, Amount. Total cost, aside from real estate, \$7,476.

The engineer being, therefore, of opinion, as also the Commissioners, that the quantity of water which can be obtained where the test wells were sunk, will be sufficient for this city for years to come, it did not seem necessary to incur the expense, at present, of bringing in the conveniently available reserve supply of water referred to in the foregoing reports.

As recommended by the Engineer, the furnishing of materials and the construction of the water works was divided into six different parts, according to a classification which would suit contractors engaged in different lines of business.

1. For coated cast iron water pipes and for special castings. 2. For laying cast iron water pipes and their appurtenances. 3. For water stop gates and hydrants. 4. For pumping machinery, boiler, &c. 5. For furnishing materials and constructing a reservoir. 6. For furnishing materials and constructing a pumping station.

These specifications, excepting one set, together with a short advertisement, and the forms of proposal, contract, and bond required in each case, were printed, and a copy of them all as approved by the Commissioners is placed herewith.

No tenders were received from a company naming a subsidy for hydrants &c., or from any one offering to construct the Waterworks on his own specifications. For the cast iron pipes and special castings, six tenders were received, two from Glasgow, Scotland, three from the United States and one from Nova Scotia.

For the reservoir, four tenders were received, two from Charlottetown and two from Nova Scotia. For the pumping station, two tenders were received, one from Charlottetown and one from Nova Scotia.

On these tenders, the Engineer reported as follows:— CHARLOTTETOWN, Dec. 5, 1887.

HON. DAVID LAIRD, Dear Sir: "I have carefully examined the several tenders made for the construction of the proposed Waterworks for the City of Charlottetown, and am of the opinion that they are reasonable in amounts—in fact they are less than I had expected.

In addition to the above sum, to be included in contracts, the Engineer estimates that \$2,400 will be required for the reservoir, and for special castings around the Reservoir, Pumping Station, &c.

In comparing the above estimated total cost of Waterworks for the city with that of any other scheme proposed, three considerations must be borne in mind: 1. Length of Pipe in the City. The five engineers have decided that 85 hydrants are now necessary for fire purposes, and to distribute this properly over the city a greater length

of pipe will require to be laid down than was shown in either Mr. Murdoch's plan or those accompanying the offer of the company represented by Mr. Turnbull. Mr. Murdoch estimated 63,350 lineal feet of pipe for the distributing service, whereas the plans now submitted show about 68,465 lineal feet within the city, or an increase of nearly a mile.

2. Size of Street Pipe. Mr. Tidd's specifications show a total length of about 154 miles of pipe, of which a little over 13 miles are within the city. An increase in the size and weight of the pipe will, therefore, make a material difference in the cost.

Table with 3 columns: Feet, Tons, Amount. Total 68,465 feet, 1,166 tons, \$1,166.

The mains in the country, consisting of about 12,767 feet, are also 14 inch. The difference between the two plans of city distribution in length and weight of pipes may be best understood by stating that Mr. Murdoch estimated 596 tons of pipe for the city, while Mr. Tidd's estimate is about 1,166 tons, or 260 tons more, representing at present prices over \$9,140.

3. Increase of duty. In the statement of the foregoing amounts of tenders all duties are included. Since Mr. Murdoch's report, or since the passing of the Dominion tariff on iron this year, the duty on straight pipe has more than doubled. Last year the duty on this pipe was 25 per cent, now it is 52 per cent Canadian ton, or \$13.44 on the ton of 2240 lbs.

This places straight pipe, at present prices in Glasgow, under a duty of about 63.49 per cent. The total duty on straight pipe and special castings, as included in the tenders submitted, amounts to \$23,495.87, being an increase of \$13,989.06 over what it would have been last year.

In regard to the pure quality of the water at the proposed source of supply, there can scarcely be two opinions. The water springs up from a depth of twenty feet below the surface, at a place remote from barnyards, cess-pools, or other present or future probable causes of contamination.

WATER ANALYSES. No. 1. No. 2. Residue on Evaporation (total), 8.82 8.54 Loss on Ignition, 2.38 2.31 Fixed Matter, 6.44 6.23 Ammonia—Free, .0139 .0014 Albuminoid, .0122 .0025 Chlorine, 0.87 0.67 Nitrogen as Nitric and Nitrites, 0.091 0.018 Nitrites, Present Trace Hardness, equivalent to carbonate of lime, 6.70 6.70 T. M. DROWN.

S. Dana Hayes, State Assayer and Chemist for Massachusetts, who made the analysis in 1872, of the specimens sent that year from Winter River, Spring Park and the city pump near the old post office, said the water of the latter was very bad because it contained an uncommonly large proportion of nitrates or saltpetre, which indicated the presence of decaying animal matter, such as are found in drains and cesspools, one of the most dangerous contaminations formed in any water.

The greatest exception that can be taken to the water is its hardness, but this is common to all water in this Province, owing to the red sandstone formation of the Island. Even in respect to hardness, however, the water in the Three Mile Valley shows well.

There are 6.70 grains equivalent to carbonate of lime in the big well water. Mr. Murdoch's report shows that a water whose permanent hardness does not rise above six degrees of Clark's scale, is taken conventionally as a soft water.

DAVID LAIRD, Chairman. JOHN KELLY, ALEX. MCKINNON, Water Commissioners OFFICE, Dec. 6, 1887.

Chas. Palmer, Esq., then said the Commissioners had done their duty very well, but the report did not give the several tenders which had been sent in. Alex. McKinnon, Esq., said it would not do to name those who tendered for the work, but he would assure the meeting that no favoritism was shown. Henry Davison, Esq., thought the

amount estimated for special castings, &c., was large, and wished to know why tenders were not asked for that part of the work.

Hon. D. Laird explained that more than half the amount would be for engineering and inspection. Some special castings would be required around the reservoir, which could not be included in the contract, as it was not known how many were necessary.

Mr. L. H. Davies said the meeting had only one thing to do: to decide whether the Commissioners shall be instructed to go on with the work or not.

John Kelly, Esq., said, in reply to Mr. D. Laird, that one man had sent in a tender for the whole work, but the lowest tender for each section was the one accepted.

D. Davies, Esq., thought the estimated amount for land damages was too small. J. P. Tanton, Esq., was pleased to think we were to get a much better quality of water than would have been obtained by any scheme proposed in Mr. Murdoch's report.

Resolved, That this meeting, having heard the report of the Water Commissioners on the Tenders which they deem the most favorable of all those received by them, for the several divisions of the Waterworks of this city as set forth in the specifications submitted with their report, hereby approve of the contracts being entered into as recommended by the Commissioners.

Chas. Palmer, Esq., thought it was the duty of the citizens to vote for the resolution, we could get no more information on the subject.

Hon. D. Laird said that would be a matter for future consideration. It depended on how many persons would take water into their houses.

Alex. McKinnon, Esq., said the vote to-night would fix the destiny of Waterworks for the city for some time to come. The works would be first-class in every respect.

Resolved, That the report of the Water Commissioners be published for the information of the public, before any definite vote be taken in reference to the introduction of water into the city, and that this meeting be adjourned for one month for that purpose.

JUST OPENED, AT THE NEW VARIETY STORE.

A LARGE assortment of Goods, suitable for Xmas and New Years Presents. Below we enumerate a few of the many articles in store:— Ladies Dressing Cases, Dominoes, Ladies Companions, Checker Boards, Ladies Pinch Purses, Scissors, Hair Oil, Card Cases, Mirrors, Inkstands, Autograph Albums, Toy Pianos, Picture Frames, Vases, Children's Tea Sets, Soaps (fancy), Perfumery, Unbreakable Dolls, Knives, Writing Paper, Toy Pistols, Pens, Envelopes, Transparent Slates, Ink, Pencils, Jack-in-the-Box, Biscuit Jars, Lady-in-Box, Mouth Organs, China Cups & Saucers, Cigar Cases, Toy Confectionery, Picture Blocks, Nuts, Lace, Raisins, Whisks, Apples, Tin Buckets, Jew's Harps, Masks, Brooches, Tin Pints, Toothbrushes, Blacking.

Thousands of Xmas and New Years Cards nice and cheap, and a host of things for the festive season, too numerous to mention.

Now is your time to secure Bargains for Xmas and New Year's Presents, at prices that have never before been offered to the public.

Don't forget the place: THE NEW VARIETY STORE, North Side Queen Street, opposite Post Office next door to W. P. Colwell's Crockeryware Store.

NOTICE. I HAVE to request that all my accounts must be settled before the 1st of January. If not they will be placed in a lawyer's hands for collection. J. C. SPRAGUE.

BEER BROS.

Good Goods, Latest Styles, Lowest Prices.

BEER BROS.

Bargains in Every Department.

Ch'town, Dec. 8, 1887.

NEW STORE. NEW GOODS.

STEWART & GATES beg to inform their friends, and all who will favor them with their patronage, that they have opened a New Grocery Store, in the premises formerly known as "the Seven Cent Store," where they are prepared to give as good value for your money as any house in the trade.

We import direct, and pay cash, and as our expenses are light, we are in a position to do as we say.

FLOUR, Choice Brands. TEA, Very Choice. SUGAR, All Qualities.

BEST AMERICAN KEROSENE OIL, Very Cheap; a large assortment of General Groceries which we will Sell Very Low.

Give us a call and see if we do not mean what we say. Goods delivered to any part of the city.

J. STEWART, A. GATES.

Dec. 2, 1887—tu th fri sat

BEST VALUE IN

D-R-Y G-O-O-D-S

AT

Perkins & Sterns.

Ch'town, Nov. 30, 1887.

FUR GOODS

Ladies' Astracan Jackets, Dolmanetts, Muffs, in Seal, Beaver, Persian Lamb, Astracan, Nutria, &c., Fur Collars, and Fur Cuffs, Ladies' Caps, Finest Quality, Lowest Prices.

Men's Driving Collars, Fur Gloves, Fur Caps, and a lot of Gray and Black Sleigh Robes, Very Cheap.

LOW PRICES

A Large STOCK.

STANLEY BROTHERS, BROWN'S BLOCK.

Ch'town, Nov. 30, 1887.—wed & wky