

CIVIC APPROPRIATIONS FOR MANY DEPARTMENTS PASSED BY THE COUNCIL

Commissioner Wigmore Authorized to Bring Expert Here to Inspect Water System of St. John—Police Estimates Decreased by \$8,127.

FOUR PERMANENT HOSE CART TAIL MEN FOR FIRE DEPARTMENT; MOTOR TRUCKS

Additional \$5,000 for Hydrants—Steam Fire Alarm Whistles—Ferry Appropriations, Increased Pay for Men in this Branch of Service—Public Work Appropriations Make Ample Provision for Many Improvements.

At the meeting of the city council yesterday appropriations of a number of departments were passed, and Com. Wigmore was authorized to have an expert from Boston make a report on the water service.

Civic appropriations passed yesterday were as follows:

	Limit of Expenditure	Warrant	Compared with 1913
Police	\$76,103	\$77,825	\$1,722 inc.
Fire	51,439	52,466	1,027 inc.
Lighting	32,378	38,024	5,646 inc.
Public Works	107,150	109,293	2,143 inc.
Ferry	6,000	6,120	120 inc.
Sewerage	16,000	16,320	320 inc.
Hydrants	10,000	10,000	0

In the statement submitted by Com. Agar appropriations for last year were placed at \$89,000, which would make the increase for this department rather large. He admitted, however, that this was not correct, as the appropriation of \$10,000 for King street and \$5,000 for sidewalks were not included. Last year the limit of expenditure for the public works department was \$104,235, and the amount of the warrant was \$104,235. The increase for this department is therefore a little less than \$7,000.

Police. The differences in the appropriation for the police is mainly due to the fact that last year the appropriation for the wages of 34 police officers was \$34,676, while this year the appropriation was \$35,645. Last year it was the intention to raise salaries of police officers. Com. McLellan announced that the force would be raised to the full strength it was when he came to office. Sergeants salaries this year will run to \$3,387, whereas the appropriation last year was \$7,026. The estimated revenue of the police cost is reduced from \$6,000 to \$5,000.

Fire Department. The increase in the fire department appropriations provides for the appointment of four permanent hose cart tail men at \$720 a year. They will be selected with a view to eventually forming a squad for a motor truck fire engine.

Lighting. The lighting appropriation provides for the installation of 20 new street lamps, at a cost of \$2,000.

Big Interest Charges. The big increase in the public works appropriation is made up largely of increased interest charges. Interest this year will be \$18,200, as against \$8,500 last year. \$2,000 is added for plant maintenance; \$2,000 for asphalt work; \$500 for public grounds and West Side, and \$1,000 for new machinery.

The additional \$5,000 for hydrants provides for the installation of 20 new hydrants and repairs to stop cocks.

When the police estimates were being considered, Com. Schofield asked: Suppose the local government would grant our request to remove the dead-end regarding the police force, wouldn't you want to improve it? Com. McLellan—Yes, but I'm not making provision for that this year. If such a thing should happen, we will be able to do something.

Com. McLellan moved that a bond issue of \$1,500 be made to install a steam fire alarm whistle and electric hose. This was adopted.

It is intended to place a steam whistle on the cotton factory which will give the alarm to people in the valley. If this works out satisfactorily electric horns will be placed on the Alexandra school, No. 5 Engine House and some building at Lower Cove.

Ferry Appropriations. On motion of Com. Schofield the following ferry appropriations were passed:

Rebuilding two boats	\$1,500
Hot well for Ludlow	400
Tail shaft for Carleton	800
Spare shaft	500
Docking gear	500
Increases in wages	1,200
Contingencies	1,100
Total	\$6,000

Captains and mates are to get an increase in wages of \$5.00 a month; deckhands and others of \$2.50 a month; carpenter 50 cents a day; watchman, 25 cents a day.

Ferry Traffic. Last year the ferry carried 2,400,233 passengers, against 2,177,831 in 1912, an increase of 222,402. The number of teams crossing was 120,736, against 111,394, an increase of 9,342. The receipts, including an assessment of \$7,182 was \$58,133, and the expenditures \$66,858, leaving a balance of \$1,351.

For Level Surface. A communication was received from H. C. Groat requesting permission to erect a platform so as to provide a level surface over the side walk on Union street to allow motor trucks to get down to the warehouse. The C. P. R. would do the work at its own expense.

On motion it was decided to grant the necessary permission to put the

ASSISTANCE GIVEN POOR

Reports at Monthly Meeting of St. Monica's Society Show Much Good Work Done.

The regular monthly meeting of St. Monica's Society was held last evening, there being a good attendance. Reports of the standing committees were presented, and all were of an encouraging nature. Among the reports is pleasing to note, was that of the charity committee, which was able to carry a great deal of happiness to a number of families at Christmas by the distribution of baskets containing provisions and gifts. This committee reported that it had received quite a number of applications for assistance which it was endeavoring to meet.

The treasurer's report showed that the bridge party held on December 30 had been a great financial success. The society decided to add a new feature to its work during the winter, and every second Monday in the month a literary evening will be held, at which lectures on various subjects of a literary character will be delivered. The first literary meeting will be held on Monday, the 19th inst.

LYRIC IS OFFERING A FINE PROGRAMME

Vandeville Stars in Clever Stunts Win Rounds of Applause—Good Picture Bill.

Nothing but favorable comments were heard yesterday on the Lyric show for the first of the week, and the common comment of the patrons of the theatre was a just criticism of the bill chosen for this change.

The management presented its patrons yesterday with an all around good bill and a show featy up to the standard offered by this popular play house. In the first place the vaudeville act, featuring "The Whirlwind Cyclone" in good comedy and musical acts gave a line of entertainment rarely offered in the low price vaudeville houses, and elicited much applause from the audience.

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POLICE CHIEF'S ANSWERS TO QUESTIONS ON THE WATER SERVICE

Received by City Council Yesterday and Ordered Printed—Recommendations Made for Certain Improvements.

Chief of Police Clark submitted his annual report to the council yesterday and it was ordered printed. The report says:

The roads show the usual variety of law breaking, and while it is practically the same line year by year, yet it increases somewhat as time goes on. The general work is also increasing in the way of different calls and demands constantly coming to our notice, a large percentage of which, according to their nature, do not appear as a matter of record.

The several recommendations made in my report of last year I would re-peat, and would respectfully request manual, pension, patrol wagon housed near the central station, and a sufficient increase of the force to enable me to place two officers on each beat at night, and one at least by day; also to shorten several of the beats which are now too long to be properly patrolled.

I see no reason for changing my opinion expressed in my previous report, and now find a greater and more pressing need for the above recommendations, and would respectfully request that they be carried into effect.

The citizens are calling day and night for police protection, and I am not in a position to give them what they reasonably feel for and expect. The conditions today are as follows:

One officer on York Point beat by night and one by day; two officers on Market Square beat at night and one by day; one officer on the commercial centre, with eight banks, sometimes this beat has but one officer at night.

One officer on the street beat by night and one by day. On the street beat I have been directed by the common council to always keep two officers by night.

Such an officer on Brussels street beat by night and one by day. This is one of the largest beats in the city, extending from the corner of Waterloo and Union streets to the Marsh Bridge and taking in all the cross streets.

We have no police patrol east of Sydney street. Back shore beat is under the control of the night watchmen and Victoria beats have one officer each day and night. I have no officer to fill the position of special duty by night, and no call at the common council, as directed by the common council, I have been forced to take the above officers to fill important beats, leaving the rest of the city without a police patrol at night.

The appointment of the force is as follows: Southern Division: Twenty-eight officers, viz: Chief, deputy chief, two patrol sergeants, one court sergeant, one sergeant and sixteen patrolmen.

Northern Division: Fifteen officers, viz: Two patrol sergeants and eleven patrolmen.

Western Division: Five officers, viz: One sergeant and four patrolmen. This in my opinion is out of proportion; one of the officers could do the duty of two on St. John street (Water street so called).

During the year four officers died, four resigned, and one death, that of Charles A. Wittgren.

Received summer clothing for the entire force in August, and nineteen winter coats in November. In my opinion it would be more in keeping to have the summer uniforms delivered in May and the winter coats not later than February in each year.

The statistics for the year were also given.

Semi-Annual Meeting. Delegates from different points in the province expected in the city today to attend the semi-annual meeting of the New Brunswick Society of Domestic Sanitary and Heating Engineers.

The visiting delegates will be the guests of the St. John Master Plumbers Association at a banquet in Victoria Hotel during the evening.

Recommended Renewals. Com. Schofield has recommended the renewal of the license of the cases of the N. B. Block F. Queen's Ward, Julia Magee, \$12, formerly \$10; Lot No. 669, Queen's Ward, to Bertha B. Brundage, \$12, formerly \$10.

LAXATIVE FOR OLD PEOPLE—"CASCARETS" Salts, calomel, pills, act on the bowels like pepper acts on the nostrils.

Get a 10-cent box now. Most old people must give to the bowels some regular help else they suffer from constipation. The condition is perfectly natural. It is just as natural as it is for old people to walk slowly. For age is never so active as youth. The muscles are less elastic. And the bowels are muscles.

So all old people need Cascarets. One might as well refuse to add weak eyes with glasses as to neglect this gentle laxative. This is important at all ages, but never so much as at fifty.

Age is not a time for harsh physics. You may occasionally wish the bowels into activity. But a laxative can't be used every day. What the bowels of the old need is a gentle laxative. One that can be constantly used without harm. The only such laxative is Cascarets, and they cost only 10 cents per box on any drug store.

Last year the public works department expended \$94,884 on current account.

Answers to Questions On the Water Service

Engineer Murdock Submitted Last Instalment to the Council Yesterday.

STATISTICS OF OTHER LARGE CITIES

Under Combined Service and with Greater Pressure, Nine Million Gallons per day Registered by Meters.

At yesterday's meeting of the city council Com. Wigmore presented the following report from Engineer Murdock which covers the remainder of the questions asked by Com. McLellan in regard to the water service. Other questions were replied to two weeks ago.

Ald. R. W. Wigmore, Commissioner of Water and Sewerage, City, St. John (East Side), 1913.

City Population. Pumping or Gravity. Gallons per Capita.

Providence (R. I.)	354,100	P.	65
Lowell (Mass.)	106,234	P.	51.21
New London (Conn.)	15,300	P.	134
Ottawa (Ont.)	70,000	G.	192
Wilmington (Del.)	100,930	G.	142
Wellesley (Mass.)	7,500	P.	47.2
Madison (Wis.)	25,190	G. & P.	89
Somerville (Mass.)	74,000	P.	104.6
Worcester (Mass.)	155,162	G.	67.76
Dayton, Ohio	84,000	P.	121
Springfield (Mass.)	87,500	P.	99.1
Toronto (Ont.)	425,000	G.	220
St. John (East Side), 1913	37,000	G. & P.	164
St. John (East Side), 1906	35,000	G. & P.	164

This shows that the damage feared by the writer, when the union of the services was discussed, has taken place, and it is now too late to dis-

trust the city for high and low level supplies. Some of the old pipes which were laid for low pressure water would seem to have been unable to stand under high pressure, and it is possible that waste is taking place in houses. The leaks would be hard to find as the pipes are generally underground.

Besides this a common gridiron service having been pronounced as the policy of the city, all extensions and renewals have been made with that end in view; the last improvement

recommended having been a 24-inch main from Marsh Bridge via Waterloo street, to Union street. It has also been suggested at various times, that an additional main of 36-inches diameter be laid from Little River via Loch Lomond to the city.

The pressures observed at the hydrants you refer to in your communication of Dec. 23 over a period of years, before, during and after the installation of the pump at Silver Falls, were as follows: The first pressure column being before the pump was placed, the next two during its use, and the remaining three from Lake Latimer, viz:

Location of Hydrant	Oct. 1896	Nov. 1902	Sept. 1905	Aug. 1911	Nov. 1913
Wentworth and Princess	27	27	31	26	25
Wentworth and Leinster	24	25	39	20	20
Wentworth and Orange	31	31	38	24	31
Wentworth and Coburg	46	44	45	39	40
Cliff and Coburg	33	31	34	26	29
Midway Cliff	33	32	34	26	29
Extension Hazen and Metcalf	33	31	35	27	30
Coburg and Paddock	33	31	35	27	30
Coburg and Sewell	33	31	35	27	30
Sewell and Dorchester	33	31	35	27	30
Adelaide Road, opposite Metcalf	33	31	35	27	30
Adelaide Road, opposite Victoria	33	31	35	27	30
Adelaide Road, opposite Newman	33	31	35	27	30
Douglas avenue, opposite Bentley	33	31	35	27	30
Douglas avenue, between Alexandra and Bentley	33	31	35	27	30
Low Levels	32	29	43	46	47
King and Germain, 12 in. main	34	28	44	46	47
King and Germain, 8 in. main	34	28	44	46	47
North side King Sq. between Charlotte and Sydney	23	18	40	37	36
Princess and Germain	20	22	35	36	32
Horsfield and Germain	20	22	35	36	32
King and Germain	18	20	16	28	32
Union and Dock	37 1/2	36	35	47	41
Sheriff and Brooks	32	44	45	54	41
Main and Cedar	30	15	28	41	31
Metcalf and Cunard	24	20	13	24	34

It is estimated that with such a high service as was set apart for Silver Falls pump, somewhat enlarged, making Germain street its western boundary as far south as Duke street, Square, waste and leakage being entirely stopped, the static pressure would be fully 30 pounds greater at the second and third columns of pressures.

The fire draught under such conditions, taken by six lines of 2 1/2 inch rubber hose, each line being 150 feet long, attached in pairs to three different nearby hydrants and playing their jets through 1 1/2 inch smooth nozzles would lower the pressure by an average of about 20 pounds, and while one stream used singly at Centenary church, for instance, would wash the roof, six streams going simultaneously would only reach the eaves. The calculations are as follows:

Location of Hydrant	Pressure in lbs. per sq. inch	Imp. Gals. per Minute	Height in feet
1. Corner Wentworth and Princess	26	158	38
2. Corner Wentworth and Leinster	42	173	44
3. Corner Wentworth and Orange	42	173	44
4. Corner Cliff and Coburg	42	173	44
5. Corner Cliff street	42	173	44
6. Corner Hazen and Metcalf	43	175	45
7. Corner Coburg and Paddock	42	173	44
8. Corner Coburg and Sewell	42	173	44
9. Corner Sewell and Dorchester	43	175	45
10. Corner Adelaide and Metcalf	58	192	58
11. Corner Adelaide and Victoria	59	200	59
12. Corner Adelaide and Newman	52	177	46
13. Corner Douglas Avenue and Bentley	45	160	38
14. Corner Douglas Avenue and Alexandra	45	160	38
15. Douglas Avenue between Bentley and Alexandra	51	188	51
16. Corner King and Germain, N. E. corner	70	222	70
17. Corner King and Germain, S. E. corner	70	222	70
18. North side King Square	65	211	65
19. Corner Princess and Germain	60	203	61
20. Corner Horsfield and Charlotte	55	197	55
21. Corner Union and Dock	37	158	37
22. Corner Sheriff and Brooks	38	160	38
23. Corner Main and Cedar	30	144	32
24. Corner Metcalf and Cunard (add to high)	58	192	58

The foregoing table is prepared from an exhaustive series of experiments made at Springfield (Mass.), as published by George A. Ellis, civil engineer, in the year 1878. Here it is shown that a volume of 200 imperial gallons per minute passing through rubber hose and a 1 1/2 inch smooth nozzle would create an effective pressure of 27 pounds per square inch at the nozzle, and the pressures required at the hydrant or engine under different conditions would be as follows, viz:

With 100 feet of hose 48 pounds per square inch at hydrant.

With 200 feet of hose 68 pounds per square inch at hydrant.

With 300 feet of hose 89 pounds per square inch at hydrant.

With 400 feet of hose 109 pounds per square inch at hydrant.

With 500 feet of hose 129 pounds per square inch at hydrant.

In all such cases the jet would throw

question I beg to state: Some years ago, and until the year 1906, when our water supply was taken from Little River reservoir with the city divided into two districts, viz., a high service assisted by a power pump at Silver Falls, and a low service supplied by gravitation, the consumption registered by the Venturi meters was as follows, viz:

High service 1,562,000 gallons per day
Low service 3,324,000 gallons per day
Total 5,386,000 gallons per day

Now that the services are combined and under the greater pressure due to Lake Latimer head, the same metres register a total consumption of 8,400,000 gallons per twenty-four hours.

There is reason, however, to believe that these instruments register too much, as they were not made for so high a pressure and such large volume as flow at times, and that the correct registration would be 8,234,000 gallons. This, for a population of say 37,000, would mean about 220 gallons per capita in that part of the city supplied from Loch Lomond.

Following is a short list of cities, the populations and the quantities of water consumed per capita:

City	Population	Pumping or Gravity	Gallons per Capita
Providence (R. I.)	354,100	P.	65
Lowell (Mass.)	106,234	P.	51.21
New London (Conn.)	15,300	P.	134
Ottawa (Ont.)	70,000	G.	192
Wilmington (Del.)	100,930	G.	142
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St. John (East Side), 1913	37,000	G. & P.	164
St. John (East Side), 1906	35,000	G. & P.	164

As already stated earlier in this communication, a discussion of the question now is merely academic, as the policy laid down by the city government on the installation of the Lake Latimer system was to have one undivided common service, and until the subscriber was relieved of the management of the works, this policy was loyally adhered to and all new pipes placed accordingly.

A question not listed in those proposed me, but to which attention has been called as having been among those asked in common council, is "Since the new system has been installed, what number and sizes of pipes convey the water from Little River to the Marsh Bridge?" I beg to state: There has been no change in the main pipe between Little River and Marsh Bridge since the new system was installed. There are one twelve inch and two twenty-four inch leading from Little River to the city line at the One Mile House and another to the Marsh Bridge are one twenty-four and one thirty-six.

Replying to your supplementary question of January 6th, I beg to state: The draft from Lake Latimer as registered by the apparatus placed there by the designing engineers has appeared for some years to be excessive. During this matter was reported to yourself and an examination recommended. This took place on November 8th last with the result that an iron bucket was found to have been carried by the current to the measuring office in the gate well of Lake Latimer, thus causing a greater head than was justifiable. When the obstruction was removed the head showed a much less flow than before. In addition the office was enlarged so that measuring can be made more accurately, as the water in the well is less disturbed. Therefore the measurements since that date have been considered reliable and those before excessive.

On taking simultaneous observations on the wood waste pipe with the pitometers one at each side of Little River in the Arthur's farm, and then transposing the instruments several times on the 8th,