

# Special Announcement

to be made.

Keep your Eye on this Space  
and your Money in your  
Pocket until you read it.

**PETER FARRELL**  
& COMPANY

## GRANITE WARE

don't matter what you want in Granite ware, phone 264-11 if you want it quick. A pleasure to show our goods.

See our New Steel Stove Pot.

Opp. Post Office **LAWLOR & CAIN** Phone 264-11  
Phone 264-11 Opp. Post Office

## MOTOR BOAT REPAIRS

Your Boat Needs Them. Let us do it. We know how.

**Wm. C. Burtt - F'ton. N. B.**  
MOTORS and ACCESSORIES

## Babcock's Corylopsis Talc. Powder

" " Perfume  
" " Sachet Powder  
" " Toilet Water

For Sale only by

**R. T. MACK** Chemist and Druggist  
386 Queen St. Fredericton, N.B.

Fine Jamaica Oranges 18c per doz; California Sunkist Oranges  
30, 35 and 50c; New Prunes 12, 15 and 17c a lb.

B. & B. Boston Coffee has no superior. Try a pound and be a regular customer.

**PARENT, BIRD & CO.**

QUEEN AND YORK STREETS.

## New Rubber Goods

Hot Water Bottles  
Fountain Syringes  
Trusses, Shoulder Braces etc.

CENTRAL  
PHARMACY

**ARTHUR J. RYAN**

Telephone 254

Charlotte Street

**J. BEBBINGTON & SON**

Florists and Growers

Roses  
Carnations  
Lily of the Valley  
Violets

Asparagus  
Smilax  
Seasonable Flowers

Established 40 years  
**FREDERICTON, N. B.**

# CITY ENGINEER'S REPORT ON STREET PAVING IN 1911

Cost of Tarvia Pavement about Half a Cent Cheaper than in 1910--Recommendation that Combined Curbing and Gutters be Laid on Newly Paved Streets

To the Chairman and Members of the and Streets Committee:

The annual report of City Engineer J. L. Feeney on the Roads and Streets is as follows:

Gentlemen:—I herewith submit for your consideration the annual report of this department in so far as lies within the jurisdiction of this office.

## REPORT ON PERMANENT

### STREETS

The past season's work on this branch of the work of the Department has seen the construction of three more blocks of Tarvia pavement. Before giving an account of the past season's operation, it might be well to bring to your attention the fact that Tarvia has at least fulfilled all that was claimed for it when it was first introduced into this city. The pavement has improved during the past year, and it should be much better next year, if we are to judge from the experience of other cities. What should be done to maintain it in its present state will be treated with further along in this report.

The work done the past season was mostly of a better quality than last year, especially on Queen Street, where a sand layer was used between the base course and the two men footing course of 1½ inch trap. The especial benefit of this sand layer is to prevent the binder from penetrating too far into the stone, it thus prevents excessive use of the binder, which is both economical and better, as it insures greatly against bleeding in the warm weather.

### AMOUNT OF PAVEMENT LAID

The amount of pavement laid during the past season was slightly in excess of that done last year. In 1910 we laid 5582 sq. yds., the past year we laid 5650 sq. yds., making a total yardage of the pavement, 11,232 sq. yds.

The amount of pavement laid by blocks is as follows:  
Queen St.-Carleton to York... 2,447 sq. yds.  
York St.-Queen to King 1,707 " "  
York St.-King to Brunswick... 1,496 " "

Total amount... 5,650 sq. yds.

### STONE

The road metal used was the same as last year, viz. 1½ in. to 2½ in. crushed trap from the vicinity of Currie Mountain. Some sand stone was used on the block between King and Brunswick Streets on York Street owing to the scarcity of trap rock. It might here be stated that the quality of Sandstone we have procured is quite good enough for most of our back streets if it is topped off with a wearing course of trap rock. This method of construction would greatly cheapen the cost of the pavement thereby making it quite within the range of the city to pave all of our streets. The stone used this year was procured by the Roads and Streets Department, to whom we are indebted for the following amount:

1,722 tons of crushed trap @ \$1.30..... \$2,238.81  
202 tons of sandstone @ 95c. 191.90  
Total..... \$2,430.71  
In 1910 we used 1,603 tons of trap rock and 130 tons of Sandstone at a cost of \$2,213.90.

### BINDER

Two applications of the binder were used as in 1910, and the material was procured at the same price, viz., \$5.25 per cask of 40 imperial gallons, landed in this city. The amount of Tarvia procured the past year was 369½ casks in addition to this amount the city had 21 casks in stock from last year. The amount actually used was 384½ casks, leaving six casks of Tarvia on hand for next year's use. Of the 385 empty casks, 340 were returned to the company for a consideration of \$77.00 of the 45 remaining empties 24 were of necessity destroyed, leaving 21 empty casks on hand.

The total cost of the Tarvia used was thus: The cost of 384½ casks, viz., \$2,018.62, less \$77.00—\$1,941.62, which is equivalent to 12.62 cents per Imperial gallon. The net cost of Tarvia in 1910 was 12.5 cents per Imperial gallon, the difference in cost is accounted for by the fact that we were able to return a smaller percentage of empty barrels than last year.

The amount of Tarvia used per sq. yd., was 2.72 Imperial gallons in 1910, which is not as it should be. The amount of Tarvia used per sq. yd., last year was by far too much, but an investigation of this matter would go to show that perhaps not more than 260 gallons were actually applied to the road, the balance was waste, and this has

got to be stopped by next season's operations. This waste has not been due to carelessness on the part of the civic employees, but due entirely to leakage from the casks on warm weather. The barrel method of applying Tarvia is now inadequate and inefficient and the city must adopt a more modern method of applying the binder and hence prevent waste. I would then strongly urge upon the Council the necessity of procuring a tank wagon for distributing the Tarvia. This could be procured at a cost not exceeding five hundred dollars. If this is not done some place for storing the Tarvia must be secured.

### SAND

As before stated, two applications of sand were used, one on the top of the base course and the other as the finishing coating. The total amount used was sixty-six (66) loads at \$1.25 per load, making a total cost of \$82.50. The amount used per one hundred square yards was 2.0 cubic yards.

### COST OF PAVEMENT

The following itemized statement shows the cost of the pavement under two headings, viz.—the cost of the Macadam Road proper and the cost of the Tarvia treatment:

### STATEMENT SHOWING COST OF MACADAM ROAD.

	Total Cost	Cost Per Sq. Yd.
1911	1910	
Broken stone, ...	\$2,430.71	43.0 39.7
Labour, ...	316.23	5.6 8.2
Teaming, ...	516.87	9.2 7.4
Rolling, ...	127.50	2.3 2.0
Engineering, etc., ...	19.26	.3 5.4
Sundries, ...	28.14	.5 .8
Total, ...	\$3,438.71	60.9 63.5

### STATEMENT SHOWING COST OF TARVIA TREATMENT.

	Total Cost	Cost Per Sq. Yd.
1911	1910	
Tarvia, ...	\$1,941.62	34.4 31.9
Labour, ...	361.35	6.4 5.7
Sand, ...	82.50	1.5 1.0
Sundries, ...	43.30	.7
Cost of plant, apparatus, etc., ...		2.4
Total, ...	\$2,428.77	43.0 41.0

Thus the total cost of the pavement was \$5,867.48, a cost per square yard of nearly \$1.04 or about one-half a cent cheaper than the work was done in 1910.

On examining the above statement we find that the following items have cost us more in 1911 than in 1910, viz.: the stone, teaming, rolling, Tarvia and the labor incidental to the application of the Tarvia and the sand. The increase in cost in most of these is quite within reason, but the fact that the haul was much shorter this year than last year should have materially lessened the cost of teaming, rather than have increased it.

The cost of the binder and the labor entailed in the application increased 3.2 cents over the cost in 1910. This was due in a large measure to the waste of the Tarvia through leakage. By the use of the tank wagon we should reduce the cost of the work at least eight cents per square yard. This wagon, with all appliances, can be procured for less than five hundred dollars (\$500.00) so that it should pay for itself in 6,250 square yards of work, about the amount of one season's operation.

The largest saving in the work done last year was in the labor, the engineering and the superintendence, and the fact that we had no plant to buy as in 1910. If the cost of the engineering and superintendence were paid out of the account of this department and not by other departments as was done this year, the pavement would show a cost of about \$1.09 per square yard.

The following statement shows the amount expended on Tarvia up to 1912:

	1910	1911
Tarvia pavement proper, ...	\$5,884.16	
Curbing and catch basins, ...	245.26	
		\$6,079.42
Tarvia pavement, ...	\$5,867.48	
Six Casks Tarvia in stock, ...	31.50	
		\$5,898.98

The permanent street financial statement for 1911 as shown by the Auditor's Report, is as follows:

### DEBIT.

Dec. 30th, 1911.	
To gross payments as per detailed statement, ...	\$5,865.73
Cheque for R. S. Low, ...	5,099.65

## CASCARETS INSURE INSIDE CLEANLINESS

The millions of Cascaret users never have Headache, Constipation, Bili-ousness or a Sick Stomach

It is more necessary that you keep your Bowels, Liver and Stomach clean, pure and fresh than it is to keep the sewers and drainage of a large city free from obstruction.

Are you keeping clean inside with Cascarets—or merely forcing a passageway every few days with salts, cathartic pills or castor oil? This is important.

Cascarets immediately cleanse and regulate the stomach, remove the sour, undigested and fermenting food and foul gases; take the excess bile from the liver and carry out of the system the decomposed waste matter and poison in the intestines and bowels.

No odds how badly and upset you feel, a Cascaret tonight will straighten you out by morning. They work while you sleep. A 10-cent box from your druggist will keep your entire family feeling good for months. Don't forget the children—their little insides need a good, gentle cleansing, too.

### SPORTSMEN'S SHOW.

The eighteenth annual Sportsmen's Show at New York will open March 1st and continue until March 9th. The show will be held at the 9th Regt. Armory instead of Madison Square Garden. Among the Tobique guides who will attend are David Ogilvy, George Armstrong and John A. McDonald. W. Harry Allen of Penniac, will have charge of the provincial government exhibit. So far he has not been able to secure a live moose as part of the exhibit. Guide Ogilvy will take with him a set of moose horns measuring 72 inches, the largest ever obtained in this province.

### Joak's Cotton Root Compound

The great Uterine Tonic, and only safe effective Monthly Regulator on which women can depend. Sold in three degrees of strength—No. 1, \$1; No. 2, 10 degrees stronger, \$3; No. 3, for special cases, \$5 per box. Sold by all druggists, or sent prepaid on receipt of price. Free pamphlet. Address: The 3009 MEDICINE CO., TORONTO, ONT. (Formerly W. and W.)

Balance, ...	1,245.41
Credit, ...	\$15,210.79
Jan. 1st, 1911.	
By balance from 1910, ...	\$1,057.81
Bonds sold, ...	10,000.00
Empty barrels, ...	77.00
Donation government for R. S. Low, ...	2,765.56
Donation government, carried to ordinary revenue, 1910, ...	1,310.42
	\$15,210.79
By balance brought down, ...	\$4,245.41

From this statement we see that the balance on hand in the Permanent Street Account is \$4,245.41, about sufficient to complete two more short blocks of pavement, which amount is not sufficient for the present needs of the city. A further bond issue is hence necessary, or else in future the pavement must be paid for from the current revenue of the Roads and Streets Department. The latter course should now be adopted, and the policy of the department henceforth should be to do as much as the funds will permit, and do it right, even if we can do only one block yearly. The pavement we now have should be kept in its present good condition, and the remainder of the revenue should be devoted to ordinary roads and streets maintenance.

### REPORT ON ROADS AND STREETS

Owing to the fact that this special branch of the department is not controlled by this office, I am unable to present to you a thorough report of the past year's work, but shall only submit a reference of that portion of the season's work of which the chairman of the Roads and Streets Committee took active charge in conjunction with this office, viz., the work of grading and cleaning the gutters of the roads by means of the road plough.

The work was done almost entirely under the supervision of the chairman of the committee, who took much of his time to see that the work was properly done. This consisted chiefly of properly grading the gutters and hauling away the excess material. It is not to be expected that this method is the very best one in city street making, but there can be no doubt but that it was the best under the circumstances; moreover, it is the opinion of the department that some of this work will have to be done yearly until all the streets (Continued on page six.)

### TOO LATE FOR CLASSIFICATION

### FOR SALE

FOR SALE—Two lots of land in St. Mary's. 80 ft. front, 260 ft. length house on one of the lots, containing three rooms. JAMES McCRAE, 118, Feb. 24—441, wll.

## A Great Snap in GREY COTTON Sold only by the Web.

LOT No. 1	A nice fine quality Grey Cotton free from specks, even good round thread. 34 in. wide (about 42 yds. in web)..... 7c. yd.
LOT No. 2	Extra fine quality excellent for Pillow Cotton ect., when bleached out would be equal to a 12c. cotton. 34 in. (about 45 yds. in web)..... 8c. yd.
LOT No. 3	Excellent quality pure Grey Cotton splendid for sheeting ect. No specks and a good strong even thread Full yard wide (by the web)..... 9c. yd.

**TENNANT and HOLDER**  
THE BEST PLACE TO BUY DRESS GOODS.

## PURE OLIVE OIL

Our Sales of Olive Oil are constantly increasing. As a food and a medicine it is readily welcomed and assimilated by delicate stomachs. From infancy to old age Pure Olive may be beneficially taken. Ours is absolutely pure.

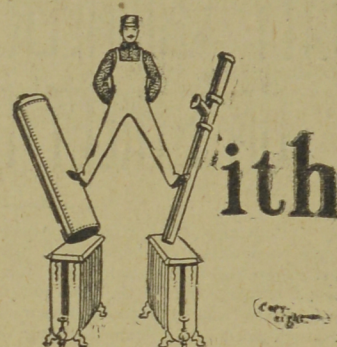
**C. Fred. Chestnut** The Quality Drug Store

## Good Plumbing to Begin

and your household troubles are reduced to a minimum for the whole year.

Cheap plumbing is generally poor plumbing, and stands in constant need of repairs.

Like to have householders and others test our work. New work done by our workmen will be long before it needs repair work will almost make new plumbing of the old.



**D. J. SHEA,**

HEATING AND PLUMBING

## NEW PRINTS

8 cents a yard.

CASHMERETTE in all Colors.

Only 12 cents a yard.

**A. A. BELMORE, 408 Queen St.**

## COUCHES

... in our ...

## FEBRUARY FURNITURE SALE

- 1 only RUG COUCH, slightly damaged. Regular price \$16.00 Now, ..... \$7.00
- 1 only COUCH upholstered in Green Velour, a little faded. Regular price \$11.50. Now, ..... \$7.00
- 1 only COUCH, upholstered in Red Velour. Regular price \$13.00 Now, ..... \$9.00
- 1 only COUCH, with back upholstered in imitation leather. Regular price \$7.00. Now, ..... \$5.25

Ask to see our \$5.25 COUCH, upholstered in Velour, assorted colors.

**LEMONT & SONS Ltd.**

## Fancy Tunis Dates

Coleman's Special high grade

## BAKING POWDER

Strongest on the market.

Sold in 6 and 9 ounce and 1 lb tins at  
10c, 15c, and 25c.

**G. T. Whelpley**

508 Queen St. - FREDERICTON, N. B.