It is recommended that the tender of F. A. Shaw, being the lowest, be accepted.

The Chief verbally reported that Callman James Brady, at present in the City Home, is still on the Pay Roll.

The following named accounts are recommended for payment:-

The following named accounts are recommended for payment:— Halifax Electric Tramway Company, Limited, light \$20.91, power \$19.15, total \$40.06; Callmen, working at fires, \$17.50; T. C. Allen & Co., stationery, \$8.50; Burns & Kelleher, castinçs, \$2.75; W. J. Butler & Co., insurance, \$10.66; The Cor-nelius Callahan Co., buttons, \$19.00; Alderman Harris and E. Condon, expenses as delegates, \$150.00; Wm. Clemens, labor, \$3.50; Cragg Bros. Co., Ltd., hardware, \$8.99 Canadian Oil Companies, Ltd., gasoline, \$9 27; James Dempster, Ltd., lumber, \$42.00; Davison, Parker Co., Ltd., lumber, \$29.13; Patrick Dowd, carriage work, \$4.90; The Halifax Herald, Ltd., advertising, \$22.99; The E. B. Eddy Co., Ltd., paper, \$4.12; Farquhar Bros., supplies, \$22.47; Frank W. Fraser, salt, \$10.00; Guidford & Sons, packing, \$4.38; C. C. Hansen, fodder, \$.50; Halifax Printing Co., printing, \$3.50; Halifax Steam Laundry, \$13.79; Kelly's Ltd., saddlery, \$26.95; The Lawrence Hardware Co. Limited, hardware, \$23.53; J. Bert Macdonald, plumbing, \$57.50; Maritime Telegraph and Telephone Co., Ltd. phones, \$19.50; Morton & Cragg, polish, \$34.00; The Maritime Paint and Varnish Co., Ltd., sponges, \$30.50; J. C. Merlin & Son, lumber, \$16.78; W. & A. Moir, machine work, \$30.95; David Roche, painting, \$38.32; William Roche, coal, \$158.41; W. & C. Silver, bunting etc., \$32.13; Stroud & Eveleigh, carriage work, \$4.20; F. A. Shaw, fodder, \$326.45; C. W. Wickwire, expert services, \$25.00; John McD. Taylor, medical supplies, \$1.00; W. A. Thompson, brooms, \$7.00; Wentzells' Ltd., soap and soda, \$10.10; Austen Bros., Seagrave ladder truck, \$2650.00. Total, \$3920.33.

M. SCANLAN, Jr., Chairman.

MOTOR FIRE ENGINE.

Elmira N. Y., September 27th, 1912.

Mr. M. Scanlan, Jr., Halifax, N. S.

Dear Sir:-Acknowledging your leettr of September 18th, beg to advise that the writer has been out of the city and therefore you have not heard from us earlier.

We will have the various figures which you desire made up within the next two or three days and will then forward same to you. We will at that time make answer fully to the various conditions covering furnishing of pumping car set forth in your letter.

FRED FISHER, Assistant Sales Manager, American-LaFrance Fire Engine Co.

Elmira, N Y., October 1st, 1912.

M. Scanlan, Jr., Esq., Chairman Board of Fire Commissioners, Halifax, N. S.

Dear Sir:-Referring again to your letter of September 18th, we herewith enclose schedule of tests which includes figures of the performance of our Type 12 car under the conditions named.

In the event of your awarding us contract for Type 12 combination pumping and hose car with chemical tank along the lines of the proposal submitted by our Mr. Meagher, we would be willing to deliver a car with the understanding that before acceptance by you it must perform the tests outlined on enclosed schedule. These tests to be made, as you suggest, under the supervision of the Board of Fire Commissioners, the Chief and Engineer of the Fire Department, and a representative from the Nova Sxotia Board of Fire Underwriters.

We further agree to have the above arrangement embodied as a part of the contract, and it is also understood that our failure to meet the test conditions outlined relieves you from the acceptance of the car, and compliance with same would mean an acceptance of the car on your part.

FRED FISHER, Asst. Sales Mamager,

Anerican-LaFrance Fire Engine Co.

PROPOSED TESTS BEFORE ACCEPTANCE OF SELECTED MACHINE.

Please fill in in the blank spaces what you will guarantee your machine to do in Halifax, N. S., on the following tests:-

Station - And						0
Pumping tests.	No. of lines	Length lines.	Size of nozzle.	Pump Pressure.	Nozzle Pressure.	Gals. Del.
(1)	1	1200 ft.	1 ″	260	72	250
(2)	2	600 ft.	1″	160	70	475
(3)	1	1000 ft.	1 1-8"	260	60	290
	2	500 ft.	1 1-8"	140	50	530
(4) (5)	2	250 ft.	1 1-8"	115	60	580
(6)	1	250 ft.	1 1-8"	195	105	380
(7)	1	1000 ft.	1 1-4"	250	41	295
(8)	1	800 ft.	1 1-4"	240	47	315
(9)	1	500 ft.	1 1-4"	230	65	370
(10)	2	300 ft.	1 1-4"	115	45	615
(11)	3	300 ft.	1"	85	50	630
(12)	1	500 ft.	1 1-2"	215	35	395
(13)	1	300 ft.	1 1-2"	185	46	450
(14)	3	300 ft.	siam.1 1-2 50 ft.	100	60	520

The hose used by the Halifax Fire Department is first quality 2 1-2" double jacket cotton rubber lined fire hose, mostly of the Paragon and Keystone brands. All tests to be from suction draughting water 15 feet.

All pump pressures to be net at the pump.

All nozzle pressures to be taken by gauge. Gallons of water discharged to be figured by Committee.

All tests to be of at least ten minutes duration.

Speed Tests.

(15) On the level 60 (17) On 10 per cent. grade 25 (16) On 5 per cent. grade 40 (18) On 15 per cent. grade 15

Miscellaneous Tests.

(19) Must stop and start with full load of equipment and men on 15% grade.

(20) Starting on high gear to test efficiency of clutch.

(21) Shall run 25 miles in one hour, the car to be inspected immediately afterwards by Fire Department Engineer and automobile expert.

(22) Cooling efficiency to be tested by running motor idle for thirty minutes.
 (23) Weight of car fully equipped carrying full quantity of 2 1-2" cotton rubber lined hose and six men. 10,000 lbs.

(24) Diameter of circle in which machine can be turned, 44 feet.
 (25) The greatest depth of snow through which machine has been or can be driven on the level.
 18" to 2 feet.

OCTOBER 10th, 4912.

The Board of Fire Commissioners reserves right to have any tests repeated or prolonged at any time before completion of all tests or to combine any two or more tests provided the combination is equivalent to Halifax service conditions.

MOTOR DRIVEN PUMPING MACHINES.

1. Your committee have made careful enquiries of the chief officials of the following fire departments:—Montreal, P. Q.; Toronto, Ont.; Windsor, Ont.; Detroit, Mich.; Highland Park, Mich.; Hamilton, Ont.; Cleveland, Ohio; Buffalo, N. Y.; Elmira, N. Y.; New York, N. Y.; Springfield, Mass; Manchester, Mass.; Marblehead, Mass.; Hull, Mass.; Boston, Mass. We have also visited the fire apparatus factories of W. E. Seagrave Co., Ltd., Walkerville, Ont.; American-laFrance Fire Engine Co., Elmira, N. Y.; The Knox Automobile Co., Springfield, Mass., and the Waterous Engine Co., Brantford, Ont.

The Tenders.

2. We have divided the tenders received by the firewards into two classes according to the character of the pumps used—whether piston or rotary gear as follows:—

	Piston.		Rotary.	
1.	Robinson\$12,150	4.	La France	\$10,800
	Robinson 11,475	5.	Simonis	. 10,000
3.	Knox 10,950	6.	Simonis	. 10,250
		7.	Simonis	10,000
		8	Webb	10 200

9. Argyll..... 5,500

Piston vs. Rotary Gear Pumps.

3 We are convinced from careful enquiries that the rotary gear pump s as efficient as, or better than, the piston pump for motor fire engines. On steam fire engines our preference would probably be for the piston pump.

fire engines our preference would probably be for the piston pump. The following reasons appeal to us in favour of the rotary pump for motor engines:—

(1) Its simplicity, there being no vacuum chambers, air chambers, valves, springs, plungers, rods etc., demanding frequent repairs, renewals and expensive overhauling.

(2) The piston plunger pump would seem to be limited as to speed.

(3) There is practically no vibration when in the operation of a rotary gear pump.

(4) The weight is some 3000 or 3500 lbs. less than a plunger pump.

(5) The operation being continuous there is no loss in efficiency. The troubles experienced with the old Silsby rotary gear pump are eliminated on a motor driven pump where steam is not used for motive force.

We made enquiries of every engineer using a rotary gear pump and all were unanimously in favour of the rotary principle in motor driven apparatus, though some of them favoured the piston pump for steam apparatus.

We also learned that several manufacturers including, the Webb and the Knox Companies, have discontinued or are about to discontinue the regular manufacturer of piston pumps fitting all engines, unless otherwise ordered, with rotary gear pumps.

The Robinson Engine.

4. Although we have made careful enquiries concerning the Robinson pumping engine, we have been forced (on account of the price exceeding the limit of \$11,500 fixed by the Council) to eliminate the first tender and also for practically the same reason, the second tender.

The Robinson engine is manufactured at St. Louis, Mo., and from enquiries made we consider it one of the best piston pumps made.

One of these pumps is in serv ce at Detroit, Mich. This engine is a piston pump machine, put into Commission Feb. 1912, replacing one three-horse steamer, one two-horse hose cart and requiring 2 men less. In the test it pumped 1082 gallons a minute. No mechanical troubles have been experienced and no difficulty with snow encountered. The machine weighs 21,120 lbs. without men. On one occasion the machine carrying 10 men was purposely stopped on a 14 per cent. grade covered with 18 or 20 inches of snow and then started again, climbing the hill without strain or difficulty. Since the installation of the machine, the district covered had been enlarged half a mile eastward and northward, and a quarter mile westward, making eight and one-quarter square miles. Two other engines in same district, one of which supports this machine. Ten men are carried on the apparatus, that is two men less than on the apparatus replaced.

Knox Engine.

5. At Springfield, Mass., we visited the plant of the Knox Automobile Co. We visited every part of the plant where we saw motor cars of every description, (pleasure, industrial, municipal, fire, etc.) in process of manufacture. This Company makes a piston pump driven by motor, the pump being somewhat similar to the Amoskeag pump, and have to date made some fourteen machines.

A pumping test was made for us at a point some distance outside the City with over 50 foot line of hydrant hose. 1 1-4" nozzle. The gauge showed a pressure of 140 lbs. and the stream was forced to a height of about 150 feet. The engine was ated as a 65 h. p. 600 gallons, 6 cylinder engine, and was in all respects a duplicate of the machine offered Halifax, and similar to one exhibited at Toronto.

At the Toronto Exhibition the Knox Company exhibited a duplicate of the motor pumping engine offered to Halifax, a 60 h. p., 6 cylinder, water cooled engine driving a 2 reciprocating piston pump of 600 gallons capacity. The machine has a hose capacity of 1200 feet and carries one chemical tank and 200 feet of chemical hose. The machine was exhibited at the Toronto Exhibition and no test or run was made with machine.

They are at the present time working to perfect a rotary gear pump and have sold one such machine.

We were informed that they were adopting this pump to reduce the weight of their car from about 13,000 to 9000 lbs.

Ahrens-Fox Machine.

6. Before leaving the subject of moton driven piston pumping engines we wish to refer to one or two other machines of that type in use in the United States. The Ahrens-Fox (piston) pump at No. 3 Fore Hall Detroit on test pumped 965 gallons from hydrant a minute, and 917 gallons from dock. It is rated as a 600 gallon machine. Its speed is 35 to 40 miles an hour and is equipped with solid tires. It carries 1500 feet of hose and has the usual equipment. It res-

ponds to about two alarms a day. It failed to respond promptly on only one occasion due to the neglect on part of one of the men in not cleaning carburetter. The delay was for only a few minutes.

A considerable number of these machines have been sold all over the United States and the opinion expressed by the officials of the Detroit Fire Department and others of whom we made enquiry was that this pump is giving eminent satisfaction everywhere.

The Seagrave Companies in Columbia, Ohio, and Walkerville, Ont are about to put on the market a piston pump engine, and there are several other reliable Companies in the manufacturing field ready to take orders for motor driven pumps of the piston-cylinder type.

LaFrance.

7. At Elmira N. Y., we visited the works of the American-LaFrance Fire Engine Company. Although they did not expect us, and were not prepared to exhibit a completed pumping engine under fire fight ng conditions we had an opportunity of being present at the testing of a motor fire pump under construction. We visited every portion of the entire plant and saw all processes of manufacture from beginning to end. The knowledge acquired at this and the Knox factories will be very useful to Engineer Condon whatever mach ne is purchased.

We learned that the LaFrance peope had discarded the piston pump for motor fire emgine purposes in favor of a rotary gear pump, after two years of experimentation and that they claimed that never once had they had any complaint about its operation. Their decision was arrived at in spite of the fact that they have been successfully using a piston pump on their steam fire engines for upwards of 60 years.

In Buffalo we saw a LaFrance type - 12, 6 cylinder motor Pumping Engine of 100 h. p., 700 gallon capacity, with a speed of 60 miles an hour. This machine Apart from the hand weighs 9740 lbs. and carr es 1200 feet of hydrant hose. chemical apparatus no chemical tanks or hose are carried. The motor is water cooled. The machine was put in commission in June 1912 and responds to over one-fifth of all alarms in the City of Buffalo,—its district being the largest in the city. The engine has never failed. The hydrant pressure in the district is about 40 lbs. The engine has never failed to respond to any alarm and no mechanica trouble has been experienced whatever. The engine replaced one twohorse hose cart and a three-horse steamer, and is operated with two men less than It a recent fire which brought out every engine in the City, these two pieces. this piece of apparatus was sent back to its station to cover the whole city. The All the 10 men on engineer receives the same salary as for a steam fire engine. the machine are instructed in driving and operating.

The Assistant Chief of the Department informed us that the city is now committed to a policy of motoring the entire department. He said no difficulty whatever was experienced through snow trouble with other motor opparatus used by him.

The tires are Dayton airless.

The engineer stated that although he had had eight years experience with a piston pump, he had no hesitation whatever in approving of the rotary gear pump for motor fire engines.

We also saw a similar pumping engine at Huil, Mass. and were taken for two runs of three and five miles, developing a speed over 60 miles an hour. This machine which is a duplicate of the machine offered Halifax, is very compact, and turns in a circle of 21 feet radius.

This car s rated by the Manufacturers as a 700 gallon engine, but in the original test in March last, with 50 lbs. hydrant pressure it delivered over 800 gallons.

This engine was operated by two men in an exhibition test, with 100 feet of hose, 1 1-4" nozzle, and a splendid stream of water obtained reaching at least 150 feet in the air. The engine worked without much vibration.

We obtained full particulars of the tests made on delivery of this machine.

The Chief of Fire Department informed us that this machine had been in competition with a Webb machine, also in their department in one stream work under similar conditions but that this machine outclassed the Webb.

We also saw a similar machine at Marblehead, Mass, and had the advantage of meeting the instructor of the La France Company there.

Simonis.

8. Regarding the Simonis Engine we have been unable to obtain all the information we should want before making a recommendation. We have seen no pump in operation. The chemical has one or two features which commend themselves to us. The horse power is placed at 110 in the machine offered Ha'ifax is on an English rating and is equivalent to 72 3-5 h. p. on the A. L. A. M. rating.

an English rating and is equivalent to 72 3-5 h. p. on the A. L. A. M. rating. 9. The Webb Machine at Hyland Park, Mich., was put in commission September 18, 1911 and has never failed to respond to an alarm. It is the only piece of fire apparatus in a district of about 4 square miles. It is fitted with a rotary pump of 800 gallon capacity, driven by a 94 h. p. 4 cylinder motor.

Its experience with snow has been most severe, but entirely successful. No mechanical troubles whatever. The motors and pumps are run three and four times a day so that it will be in perfect running order. One alarm a day is the average. Nine men are usually carried on this apparatus.

10. The Argyll Machine offered Halifax is manufactured near Glasgow, Scotland. So far as we can learn there are no machines of this type in the United States or Canada. We have eliminated this machine from consideration because of its capacity, (450-500 gals. imp. 540-600 gals. wine), because a turbine is used. concerning the merits of which we have been unable to obtain the slightest information of service; because of the entire absence of any guarantees and for other reasons more or less important.

A large amount of information respecting the merits of the various machines has been obtained, but as much of this is from the chief officials of fire departments we consider it inadvisable to embody it in this report. A confidential report covering this information will be communicated to the Firewards.
 In Conclusion—The La France pumping engine seems a most strongly

12. In Conclusion—The La France pumping engine seems a most strongly built machine and specially built for fire fighting purposes. In the absence of more information respecting the English pumps, it is the only machine of the rotary gear type we can recommend.

If a piston pump is to be purchased our recommendation is that none of the present tenders be accepted but that new tenders be called for and the advertisement be inserted in fire department papers. Our reason for making this recommendation is that several of the most reliable manufacturers of motor piston pumps have not tendered, presumably through not knowing.

We would also recommend that the machine be given a series of hill climbing tests with heavy snow conditions, besides the usual long distance runs, pumping tests, etc. Before accepting any tender the proposed tests should be specified and submitted to the tenderers.

> R. V. HARRIS, E. CONDON.

REPORT NO. 2.

To the Chairman and Members of the Firewards.

In addition to the information contained in our report on motor driven pumping engines, (contained in another report) the following report may be of interest to the Council and citizens, respecting some of the fire departments visited by us.

Montreal, P. Q.-(500,000)

Montreal has at present two pieces of motor fire apparatus, and the Chief informs us that the City has embarked on a policy of complete conversion and motorization of the department.

The only piece of apparatus shown us was a La France 1200 gallon steam fire engine, drawn by a Seagrave motor driven tractor of 80 h. p. in commission four months. The Chief informed us that the apparatus had never once failed to respond to alarms which occur from two to six times a day at Central Engine House, Craig Street, in the centre of the City.

The tractor cost \$6800 and comparing the cost of maintenance the Chief stated that the four horses cost independently of the apparatus itself, \$1200 a year. The tractor was costing them at the rate of \$150 to \$200 a year for gasoline, cleaning and repairs.

He referred to three tests made with the converted apparatus.

The first was the climbing of a 14 per cent. grade, to a height of 400 feet, with a combined weight including 22 men on the apparatus of 22000 pounds. The horse power used was less than 80 and the test was performed under unusual weather conditions without strain and with apparent ease.

The second test was performed on Beaver Hall Hill (about 12 per cent. grade) after a run of ten miles, the hill being taken at a speed of 25 miles an hour, in the ntermediate gear.

In a third test the apparatus weighing about 20275 lbs. (tractor, 7275 lbs. and engine 13000 lbs.) with 2 men ran 4 1-2 miles ending with a climb up Mount Royal at an average speed of 35 miles an hour.

He estimated the life of the Seagrave tractor attached to the steam fire engine at 20 years under the conditions to which it was subject in Montreal.

The other piece of apparatus was a tractor drawn ladder truck, which on the day we visited the department was at the repair shop, for a thorough cleaning after a 15 mile suburban run the night before. The fire engine which we saw had also been at the fire.

While he had had no actual experience with snow with the two pieces of tractor apparatus, he had used an auto since April 1909, for daily use in inspecting 36 fire halls, and since then no weather conditions or snow interference had prevented him from driving the car, and he felt reasonably sure that they would have less trouble with the tractor apparatus than with the horses in heavy snow.

The motor apparatus in use in the Montreal Fire Department is fitted with solid rubber tires. No accident, no repairs.

The Chief stated that the department is now purchasing other apparatus, but had not yet purchased a motor driven fire pump. He was without sufficient data regarding such apparatus and was in favor of waiting a few years as he felt that the American pumping engines were not as perfect as they might be, although the English manufacturers were very much ahead of them in respect of pumps. He had not had any experience or made a thorough investigation respecting motor driven fire pumps.

The Chief strongly approved of the rotary and trubine pumps expressing his belief that it would eventually completely supersede the more complicated straight piston pump.

He strongly advised purchasing motor fire apparatus, stating it as his belief after extensive investigation made by him for the Montreal department, that in a few years motor apparatus would be universally used. He recommended English apparatus in preference to American apparatus as in his opinion they were more substantially built etc.

He also recommended a high horse power, more than that required for ordinary hill climbing and snow interference, as it was advisable to have some power always in reserve.

At Montreal the Chief, when in his office, is the first to receive all alarms. The alarm is recorded on a Gamewell paper strip indicator. The alarm is afterwards sounded on a gong in the fire stations through the city. As the department force is entirely permanent there is no outside or public alarm.

In Montreal the motor apparatus is not fitted with runners in winter time.

Toronto-400,000.

At Toronto we saw five pieces of motor apparatus.

The first was a Seagrave combination chemical and hose waggon, put in commission Oct 16, 1911, 6 cylinder air-cooled engine of 80 horsepower, giving a speed of 40 miles an hour. The machine carries 200 feet of chemical hose two 35 gallon tanks, 1200 feet of hydrant hose, and runs out with 5 of the 7 men at the station. There is enough room for some 12 men. Every man at the station is trained to drive and operate the machines.

The district captain stated that the machine had responded without fail to every alarm since being put in commission. Snow and ice made no difference, and reference was made to a call in a heavy snow storm in January last when the engine was driven with ease through snow 18 inches deep. There had been one accident to the engine, due to another motor car attempting to cross the path of the chemical on the way to a fire.

The Captain stated that he found the searchlight on the dashboard extremely useful at night. It not only assisted them in locating street numbers but was used for lighting up rooms in a burning building filled with smoke.

The cost of the maintenance of the machine was **much** less than horses and he had no horses at that station. The city had adopted the policy of motorizing the entire department as opportunity offered, and were buying several new pieces including a pumping engine and tractors for ladder carts. We learned that the Toronto City Council has just given two orders for duplicates of this machine.

The second piece of apparatus was a Seagrave combination chemical and hose wagon, built for the London Ont., Fire Department. As it was in most respects a duplicate of machine just described, no description is necessary.

The third piece of apparatus shown us was a Waterous gasoline pumping engine, 450 gallons capacity, drawn by horses. This machine was designed for villages and small towns. The new feature about this engine was the rotary pump, which Mr. Cameron said was recommended where there was little or no hydrant pressure.

The fourth piece of apparatus was a Simonis combination chemical and hose waggon, on exhibiton at the garage of the agents of the Company. It is a four cylinder, water cooled engine of 40 h. p. (English rating). It had been tested however up to 61.4 h. p. making 1500 revolutions a minute. It had been tested two 35 gallon chemicals with 200 feet of chemical hose. A novel feature about the chemical tanks was the power of shutting over the use of chemical and starting again at any time with the remainder, there being no waste of liquid not used as in the Halifax machine. This feature is to be found on the Simonis machine offered Halifax by Austen Bros.

The machine has a hydrant hose capacity of 1200 feet, and carries 10 or 12 men comfortably.

The equipment on this machine was in all respects the same as on the Seagrave combination.

We were taken for a three mile run on this machine. The speed developed was 45 miles an hour and the machine climbed a 15 per cent hill without the 'east strain or difficulty.

It was explained that the machine offered Halifax was equipped with hoseguides which from drawings shown us would seem to be useful for quick laying of hose.

Some fifteen Simonis-Commer motors for industrial purposes have been sold in Toronto, and a garage is maintained there with all necessary parts for repairs and replacements, parts being ordered by numbers.

Hamilton, Ont.-85,000.

Hamilton has a Seagrave Combination Chemical Engine and hose car, 80 h. p., 6 cylinders, carrying two 30 gallon chemical tanks, 200 feet of chemical hose and 1200 feet of hydrant hose, speed 40 miles an hour on the level and 10 miles up 10 per cent. grade. This is a duplicate of the Toronto machine. The Chief statesthat the cost of upkeép is one third less than the horse drawn apparatus, also that the machine will plow through snow two feet deep if it has good traction.

Brantford, Ont.-25,000.

While in Brantford, Mr. Condon visited the Waterous Engine works, and familiarized himself with improvements in boiler tubing used in Waterous steam fire engines.

Windsor, Ont.-20,000.

This fire department, although small, is about to purchase a motor pumping engine, either Ahrens-Fox or Seagrave type piston pumps.

At the central engine house I saw one 75 foot Seagrave aerial for half-mile runs in business district, one 224 foot ladder truck, one chemical carrying 1000 feet of hydrant and 200 feet chemical hose. The hydrant pressure is so good that no fire engine is required.

The fire departments of Windsor, Walkerville and Sandwich have all adopted the Standard hose thread and carry adapters for the Detroit hose. The hose is air dried in summer, and a small salamander stove is used in the tower in winter. The department uses no special winter apparatus or ice wheels.

There are 22 men in the department (12 permanent and 10 call). The permanent men are all at the central house, and are paid \$64 a month. Four dollars of this is for uniforms which the men must supply themselves whenever required. The call men are paid \$100 a year. All firemen have a half day off each week and ten days holiday each year. The fire department has one spare horse for relief work and the horses are not used for anything except fire department work.

The apparatus is equipped with an ozone outfit and a smoke mask, (Servus Equipment Co., Newark, N Y.)

Calgary, Alberta, 50,000.

While at Windsor I learned that the fire department is entirely motorized at Calgary.

Quebec, P. Q., (80,000) has two Seagrave combination chemical and hose cars.

Brandon, Man., (15,000) has several pieces of motor apparatus.

Victoria, B. C., (35,000) 6 pieces.

New Westminster, B. C., (15,000) has 2 pieces.

Kamloops, B. C., 2 p'eces.

Prince Rupert, B. C., (5,000) one piece.

Ottawa, Ont., (90 000) one piec-

Fort William, (20,000) one piece.

London, Ont., (50,000) one piece.

Vancouver, B. C., (125,000)

Where there are 12 fire halls and two in course of construction. Horses are used only on the outskirts, motor apparatus in the centre of the city. This city has 13 pieces of Seagrave, 1 Webb and three La France motor driven apparatus.

In the chief's report for 1900 he recommended purchasing four auto hose wagons, (\$26,000), three automobile pumping engines (\$42,000), a fire boat (\$125,000), a water tower (\$14,000) two City service trucks (\$25,000), three automobiles for three more assistant chiefs (\$10,500), a pumping station (\$150,000), a salvage waggon (\$7,000)—all as absolutely necessary, owing to the growth of the city.

Saskatoon, Sask., 52,000.

The normal hydrant pressure is about 60 pounds and by the use of high pressure water service pumps the pressure is increased to 120 lbs. Only one steamer is used, purchased about 6 years ago.

used, purchased about 6 years ago. The City has two Seagrave motor combination chemica' and hose cars, used in the centre of the city. They have experienced no mechanical troubles with these machines and have found the cost of upkeep very much less than with horses. Saskatoon has adopted a policy of gradually motorizing the entire department.

Detroit, Mich. (500,000) is equipped with two fire boats. Pipes are laid from the fire boat docks through the central portion of the city and auxiliary hydrants erected from which additional streams can be run when the fire boats are connected.

Detroit also has five motor pumps,—two Webb, one Robinson and two Ahrens-Fox, besides other motor apparatus, and is spending \$60,000 for motor apparatus this year, towards carrying on a policy of motorizing the entire department.

Cleveland, Ohio, (550,000).

Cleveland has recently purchased a Nott motor pumping engine with chemical and hose wagon. This is the first pumping engine purchased by the city. It has not yet been put in commission. It will be the only piece of apparatus at the station where it will be placed.

The fire Chief informed me that the city was committed to motorizing the whole department as occasion required, and expressed the opinion that Halifax would make no mistake in buying motor apparatus, as he believed that within a few years every city of any importance will have adopted the policy of motorizing their departments.

Springfield, Mass., (90,000).

At Springfield we visited several fire stations and were informed that owing to the very high pressure (150 lbs.) at the hydrant they had not purchased any motor pumping engine. They have in the department five steam fire engines all of which were purchased before the introduction of motor apparatus and the installation of the high pressure water service.

Springfield has spent \$200,000 for motor apparatus and estimated that it will take an additional expenditure of \$55,000 to completely motorize the department. The motor equipment comprises 21 pieces of motor apparatus including four Knox cars for the chief assistants, two electrically propelled Seagrave aerial trucks, two electrically propelled Seagrave aerial trucks, two electrically propelled Seagrave aerial trucks, two of maintenance of the combination hose cars averaging annually 150 alarms of fire, is about \$50.00, that of ladder trucks \$200. All heavy apparatus is equipped with solid tires.

We obtained a copy of the rules of the department, which are now being revised to meet the changes consequent upon the introduction of motor apparatus.

Manchester, Mass., (3,000)

Has a Knox combination chemical and hose car in commission since September 1910—four cylinder 60 h. p. water cooled engine, weight 8100 lbs. It has responded to every alarm without fail, and drives without difficulty through snow up to its hubs. It is fitted with 40" by 6" pneumatic tires and carried five men and the driver. The department consists of one permanent and 47 call men.

New York, N. Y., (4,800,000)

Has committed itself to a policy of motorizing the department as occasion offers and is spending \$750,000 a year for five years, (or \$5,000,000) for tractors, new apparatus, etc,

This year some 28 new machines are being bought from one factory. At present there is only one motor pumping engine in the department, a Waterous (St. Paul, Minn.), six cylinder, 126 h. p. engine equipped with a 700 gallon rotary engine. The machine has been in commission about ten months. Has never failed to respond to an alarm. Work three hours at a stretch, at a fire a few days days before. The engineer on the machine said the engine had given perfect satisfaction.

New York has an equipment of ten fireboats.

Boston, Mass., (675,000)

Has in service a Knox and two La France motor combination chemical and hose cars, also one La France motor service ladder truck. All have never failed to respond.

Are spending \$65,000 this year for two motor pumping engines, four combinations, one ladder and chemical and seven chief's cars. There are no tractors in this department. The chief will ask for \$250,000 next February for new motor equipment.

The department has now 400 horses but has adopted a policy of motorizing the entire department. The delay in adopting such a policy has been due to an investigation extending over the past year and eight months, by Prof. D. L. Gallup as to the best motor apparatus manufactured.

When a fire occurs in the centre of the city the apparatus in all sections moves inward towards the centre at each alarm, replacing the apparatus called out.

Mr. Condon inspected the new repair plant.

In some of the cities we visited all traffic is compelled to pull to one side and stand still until the fire apparatus has passed.

Have by Alderman Martin -coonded by Alderman Mar

We also learned that with combination motor pumping apparatus and hose cars the usual course of action is to proceed to the fire first and start laying the hose from that point to the hydrant.

In nearly all cities we visited the chief is assisted by aides at a fire.

R. V. HARRIS, E. CONDON.

The same is considered clause by clause.

Read clause 1 recommending the acceptance of the tender of the American-LaFrance Fire Engine Company for a 700gallon motor Fire Engine, price \$10,800.

The following resolution is submitted —

That the tender of the American-LaFrance Fire Engine Company, of Elmira, N. Y., for a 700-gallon motor driven triple combination pumping engine, as per specifications, be accepted, subject to said engine successfully undergoing the tests and requirements to the satisfaction of the Committee proposed in the Company's letter to the Chairman dated Oct. 1st, 1912, attached to said specifications.

And that on final acceptance the sum of \$10,800 be borrowed from any fund or funds available for the purpose to pay for said engine, and that a further amount of \$500 or so much thereof as may be necessary be borrowed from said funds for expenses incidental to the purchase of said engine and the testing of same.

Moved by Alderman Scanlan, seconded by Alderman Gates and passed.

Clauses 2 to 15 are severally read and adopted.

Moved by Alderman Scanlan, seconded by Alderman Martin that the report as a whole be adopted and the accounts paid. Motion passed.

Read report Committee on Works re tenders for forage.

TENDERS FOR FODDER.

City Works Office, October 8th, 1912.

To the City Council:

Gentlemen:—At a meeting of the Committee on Works held on the 3rd inst., tenders (attached hereto) were received for forage from Messrs. Gunn & Co. and F. A. Shaw.

Your Committee recommend that the tender of F. A. Shaw be accepted.

F. P. BLIGH, Mayor and Chairman.

Moved by Alderman Martin, seconded by Alderman Mac-Kenzie that the report be adopted. Motion passed.

286

Read reports Committee on Works and City Engineer re Coburg Road sewer outlet.

Also read letter John W. Regan requesting information relating to the drainage of the western slope of the City.

Also read report of a Sub-Committee of the City Health Board on same subject.

COBURG ROAD SEWER OUTLET.

City Works Office, October 8th, 1912.

To the City Council:

Gentlemen:—Attached hereto is a report from the City Engineer in re temporary relief for sewage at the North-West Arm.

(a) Your Committee unanimously recommend that said report be adopted;

(b) That the City Engineer proceed at once with the construction of a temporary tank at the foot of Coburg Road;

(c) That the relief be temporary only; and

(d) That the trunk sewer be extended to Chain Rock at the earliest possible date.

F. P. BLIGH, Mayor and Chairman.

COBURG ROAD SEWER OUTLET.

City Engineer's Office, October 2nd, 1912.

His Worship the Mayor:

Sir:-I beg to report on the request of property owners on Coburg Road and Oxford Street that some temporary provision should be made to give them adequate drainage for their properties until the trunk sewer is constructed along the Arm.

I had hoped to be able to report on the whole problem by this time, but I have been unable to obtain an engineer to assist me in the work, as one member of the Works Committee insisted that such employment should not be in any way permanent. If I had been able to promise a year's, work I could have employed a man two months ago, but no good man will leave steady employment for a few days work. I hope to complete the preliminary survey in the near future, after which I shall prepare a report as rapidly as the seriousness of the problem will permit.

I can suggest no means of disposing of the drainage of the houses on Oxford Street and Coburg Road temporarily, except by discharging directly into the Arm at the foot of Coburg Road or by discharging through a sedimentation pit or tank at the same place. Such a system, I am informed, is in use by the Birchdale Hotel and the Waegwoltic Club.

The Birchdale Hotel outlet discharges at the foot of Coburg Road immediately at the St. Mary's Young Men's Club house. The Waegwoltic drain discharges somewhere at the front of their property. Mr. Bowes claims that his system stops all solids in the sewage and the discharge is clear water only. I am not sure but he used the word "clean" instead of "clear."

By actual count, the total number of people living in the houses to be drained, is eighty. Birchdale Hotel had that number living in it, I am informed, during the summer, while at the Waegwoltic hundreds of people used the sanitary conveniences at times in the day. If the system is all right for the Birchdale and the Waegwoltic, I can see no good reason why it should not be all right for people living on Coburg Road and Oxford Street, as a temporary expedient. Both the Manager of the Birchdale and the President of the Waegwoltic Club have endorsed it, and I have heard no complaint from bathers or persons frequenting the landing at the foot of Coburg Road.

The estimated cost of constructing a temporary wooden pit or tank at the foot of Coburg Road, and disposing of the drainage of the houses that may be connected, is from \$800 to \$1000. The structure would, of course, be a temporary one only, so that it might be removed as soon as the trunk sewer is constructed. Such a tank is designed to arrest the solids in the sewage and hold them in the tank until anaerobic bacteria which work without oxogen, break up the solids and decompose them into harmless sludge. Nature takes care of the process, and no chemical or other treatment is needed unless the effluent is to be discharged into drinking water, in which case it may be further purified by filtration and the application of hypochloride of calcium. Such purification, however, is not necessary, although some of those who have discussed it, have forgotten that the City does not require the water of the Arm for drinking purposes. The contention that the small quantity of sewage from a city of 80 people can pollute a large body of water like the Arm with hundreds of millions of gallons flowing up and down twice a day and changing with every tide, is simply absurd.

Regarding the urgency of some provision for sewage disposal at this point, I am informed by householders that in some cases, the sewage from adjoining cesspits at times flows through the cellars. One property owner told me that his children were playing about where the sewage was flowing, and that he was obliged to send. them to the country to avoid possible illness. Surely the life of little children is of some importance, and I have no hesitation in making a choice between the possible sacrifice of the lives of children and a temporary inconvenience to those who, enjoying the privilege of draining to the Arm themselves, would deny it to their less fortunate neighbours.

I have not changed my opinion as to the desirability of discharging permanently at the foot of Coburg Road and other streets, but I had never imagined that the obstruction of the owners of the property through which the trunk sewer must pass would delay construction so long. If a further delay of two or three years is probable, then I would strongly recommend that a temporary system of disposal as suggested, be constructed at the foot of Coburg Road, to be removed as soon as the trunk sewer is constructed, and that the property owners on Coburg Road and Oxford Street be permitted to connect with this sewer, as this work must also be done before the sidewalk can be laid.

F. W. W. DOANE, City Engineer.

Halifax, October 10th, 1912.

His Worship the Mayor and Members of the City Council:

Dear Sirs:—As a citizen and large tax payer I would like to have the following information:—

The length and dimensions of the Coburg Road sewer from LeMarchant Street to the Arm; also the total cost of same per running foot.

2. The length and dimensions of the Oxford Street sewer; the total cost of same and cost per running foot.

3. The reason for building these sewers so far in advance of the construction of the proposed intercepting sewer involving a consequent loss of interest on cost of construction.

4. The reason for the extraordinary depth and consequent great cost of the Oxford Street sewer.

Kindly request that a report be prepared covering the above information and that a copy be sent to me at as early a date as possible.

JOHN W. REGAN.

Office of City Health Board. Oct. 10th. 1912.

To His Worship the Mayor and Members of City Council:

Gentlemen :- At a meeting of the Health Board held on October 4th, a Committee was appointed at the request of some of the residents in the vicinity of Coburg Road and Oxford Street, composed of the Chairman, Alderman Gough and Mr. G. A. Wootten, to investigate thesanitary conditions and drainage in that locality

This Committee having made a careful investigation into the general sanitary conditions and drainage, find that the present drainage is totally inadequate, and from a sanitary standpoint is in a most deplorable state and after considering the different methods we would strongly urge that they have proper sanitary connections into the Oxford Street sewer with as little delay as possible in order to prevent a serious outbreak of disease.

M. A. MACAULAY, P. A. GOUGH, G. A. WOOTTEN.

Moved by Alderman Martin, seconded by Alderman Hawkkins that the report of the Committee on Works be considered clause by clause.

Alderman Hattie submits the following amendment:-

Resolved, That the Halifax City Council endorse the principle that the waters of the North West Arm must not be polluted; That the report of the Board of Works respecting the North West Arm sewer

be sent back to the Board of Works for further report on the following matters:

(a) The extension of the sever to a point at or near the mouth of the Arm.
(b) The provision of temporary relief for the residents of Coburg Road and Oxford Street by some other efficient method than by connection with the sever, the Board, if necessary, to call in a sanitation expert in consultation and to have power to defray the cost thereof from the sewer account without further reference to the Council; the Council agreeing, however, that in case no other method can be found, connection with the sewer, with all possible safe-guards, must be afforded the houses where the necessity of such connection is pressing.

Further Resolved, That in order to insure all possible dispatch in the construction of a trunk sewer, surveys be completed promptly; and in view of the difficulty the Works Department experiences in getting sufficient labor, the Board of Works call for tenders, with a view to having the work done by contract.

Also resolved, that existing sources of contamination of the Arm waters be investigated and stopped by order of the City in cases where the City has control, and in cases where riparian rights exist, if possible, by cooperation.

Also resolved, That the City Council ask the Nova Scotia Legislature and the Dominion Parliament to establish a commission which shall safe-guard the North West Arm with respect to sanitation, Police protection, and beauty, with authority not only on its waters, but on both banks so far as any of these matters may be concerned.

Moved by Alderman Hattie, seconded by Alderman Scanlan.

Moved by Alderman Hoben, seconded by Alderman Keltie that citizens present at the meeting be now permitted to address the Council on this question. Motion passed.

The Council is now addressed in favor of the installation of temporary sewerage facilities down Coburg Road to empty into the Arm by Nelson B. Smith, W. Stetson Rogers, Arthur W. Redden and W. C. Harris, and against the proposition by S. W. Davidson, S. R. Cossey, W. F. O'Connor and Rod. Macdonald.

Alderman Hattie's amendment is put and lost, 4 voting for the same, and 11 against it, as follows:—

For the Amendment—

Aldermen R. V. Harris, Hattie, Scanlan, MacKenzie-4.

Against it-

Aldermen Morrow, Whitman, Connolly, Gates, Hoben, Keltie, Hawkins, Martin, J. C. Harris, Upham, Gough.-11.

The original motion that the report of the Committee on Works be considered clause by clause is put and passed.

Read clause (a) that the report of the City Engineer be adopted.

Moved by Alderman Hoben, seconded by Alderman Whitman that said clause (a) be adopted. Motion passed.

Read clause (b) that the City Engineer proceed at once with the construction of a temporary tank at the foot of Coburg Road.

290

Moved by Alderman Hoben, seconded by Alderman Hawkins that said clause be adopted. Motion passed.

Read clause (c) that the relief be temporary only.

Moved by Alderman Hoben, seconded by Alderman Hawkins that said clause be adopted. Motion passed.

Read clause (d) that the trunk sewer be extended to Chain Rock at the earliest possible date.

Moved by Alderman Hoben, seconded by Alderman Hawkins that said clause be amended to read:---

"That the trunk sewer be extended to Chain Rock 'if found necessary' at the earliest possible date," and that the clause as so amended be adopted. Motion passed. unanimously.

Moved by Alderman Hoben, seconded by Alderman Hawkins that the report as amended be adopted as a whole. Motion passed unanimously.

Moved by Alderman Martin, seconded by Alderman Hawkins that the Council do now adjourn. Motion passed.

Council adjourns 11.55 o'clock.

F. P. BLIGH, Mayor.

L. FRED. MONAGHAN, City Clerk.

EVENING SESSION.

8.10 o'clock.

Council Chamber, City Hall, October 17th, 1912.

A meeting of the City Council was held this evening. At the above named hour there were present, His Worship the Mayor and Aldermen Hattie, Martin, Upham, Hoben, J. C. Harris. Gates and Scanlan.

Moved by Alderman Upham, seconded by Alderman Martin that the time for meeting be extended until a quorum is present or until 8.30 o'clock. Motion passed.

8.20 o'clock. Roll called. Present the above named together with Aldermen R. V. Harris, Clarke, Keltie, Hawkins, MacKenzie and Gough.

The Council was summoned to proceed with business standing over and the transaction of other business.

PRESENTATION OF PAPERS.

The following named papers are submitted:-

Report Civic Improvement Committee, by Alderman Hattie, Chairman.

His Worship the Mayor submits the following named papers:

Annual Report City Treasurer, 1911-12.

Annual Report Liquor License Inspector, 1911-12.

Petition for a sewer on Lilac Street.

Letter Manufacturers' Appraisal Company, Cleveland, Ohio, re proposed lec-ture before the City Council, by E. W. Doty.

REFERENCE OF PAPERS.

Read report Committee on Civic Improvement re pavement and other improvements to streets.

REPORT CIVIC IMPROVEMENT COMMITTEE.

Committee Room, City Hall, October 15th, 1912.

To His Worship the Mayor and City Council:

Gentlemen :- The Civic Improvement Committee met this evening. Present-Aldermen Hattie (Chairman), Keltie and MacKenzie, and Messrs. Longard and Doane.

The question of street improvement was discussed and it was decided to ask the City Council to request the Works Department to prepare a scheme of improvement for the roadways in the settled portions of the City which could be overtaken in a certain number of years, so that at the end of such period all the more important streets of the City would be in good condition. This scheme would be framed to embrace, first, those streets which most need the improvement, and others in turn as the need for improvement seems relatively important. In reporting on this, the Works Department should state what period the work should cover and what sums would be required annually for carrying out improvements under this scheme.

Second—The Committee further recommend that the City Council ask the Nova Legislature for power to borrow annually a sum not exceeding \$25,000 for the purpose of laying permanent pavements. Such pavements would be laid on streets on which trams run and on other streets where the traffic and other conditions specially call for pavements of a durable nature.

In view of the prospective high tax rate next year, it is not recommended that this programme be made to entail an immediate addition to the expenditure, but assuming that the financial problem can be overcome, the programme might not need to be deferred for more than a single year. Once entered upon it would be the policy of the City to carry it out, as it now is to pave sidewalks under the permanent sidewalk act.

R. M. HATTIE, Chairman.

Referred to Committee on Works for report.

Read petition for a sewer on Lilac Street.

Referred to Committee on Works for report.

Read Annual Report City Treasurer, 1911-12.

Filed.

Read Annual Report Liquor License Inspector, 1911-12.

Filed.

CONSIDERATION OF PAPERS SUBMITTED.

Read letter Manufacturers' Appraisal Company, Cleveland, Ohio, relating to proposed lecture before the City Council by E. W. Doty, on Scientific Assessment of Real Estate.

SCIENTIFIC ASSESSMENT OF REAL ESTATE.

Cleveland, Ohio, October 14th, 1912.

Mr. L. Fred. Monaghan, City Clerk, Halifax, Nova Scotia:

Dear Sir:—Your favor of October 12th addressed to Mr. E. W. Doty, Manager of our Tax Valuation Department, is acknowledged. We are very glad to learn of your interest in knowing about scientific assessment of real estate, and will be glad to arrange for Mr. Doty to go to Halifax as soon as possible. Mr. Doty is at present engaged in a campaign for election as a member of the Ohio legislature, and consequently cannot leave here until about November 5th. I think it is safe

294

to say at this time he will be in Halifax within a week after that date, and I would suggest that you name, if possible, an exact date when it would be most convenient for Mr. Doty to reach Halifax, along about the 10th of November. He has been planning for some time to go to Boston to make a similar address before the City Council and Finance Committee, and perhaps he can go from Boston to Halifax.

Please advise us as to your wishes in this matter at your early convenience, and accept our appreciation of your kindness in appropriating \$100 to pay travelling expense. This will be accepted with the understanding that in the event of our making a proposition for the installation of the Somers System which your City will accept, this amount will be credited to whatever payment you may make under that contract.

WALTER W. POLLOCK.

Moved by Alderman Hoben, seconded by Alderman Hattie that the City Clerk inform the Manufacturers' Appraisal Company that the Council would be pleased to hear Mr. Doty at a meeting to be held for that purpose on Monday evening, November 11th next. Motion passed.

Read reports Committee on Works and City Engineer re concrete sidewalk Vernon Street, west side, between Coburg Road and Watt Street.

VERNON STREET SIDEWALK.

City Works Office, Halifax, N. S., Oct. 8th, 1912.

To the City Council:

Gentlemen:—Attached hereto is a report from the City Engineer recommending that a concrete sidewalk, curb and gutter be constructed on the west side of Vernon Street, between Coburg Road and Watt Street.

Your Committee have interviewed the property owners in favor of the sidewalk, also Mr. A. G. Johnson, who has protested against its construction, and after carefully considering the matter have decided to recommend to the Council that the report of the City Engineer be adopted and a concrete sidewalk, curb and gutter constructed on the west side of Vernon Street between Coburg Road and Watt Street.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, August 16th, 1912.

His Worship the Mayor:

Sir:-I beg to report on the accompanying petition asking for the construction of a permanent sidewalk, curb and gutter on west side of Vernon Street between Coburg Road and Watt Street.

There is a concrete sidewalk on Coburg Road with which this sidewalk would connect. The street is built up with a nice class of residences. The estimated cost of constructing a concrete sidewalk, curb and gutter is \$1346.00. I would recommend that a concrete sidewalk, curb and gutter be constructed on the west side of Vernon Street between Coburg Road and Watt Street under the Permanent Sidewalk Act, 1906.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman Hattie that the same be adopted. Motion passed.

Read reports Committee on Works and City Engineer re concrete sidewalk Quinpool Road, south side, from Louisburg Street to M. E. Keefe's property.

QUINPOOL ROAD SIDEWALK.

City Works Office, September 20th, 1912.

To the City Council:

Gentlemen:—The Committee on Works beg to recommend to the Council for adoption the accompanying report of the City Engineer in favor of a concrete sidewalk, curb and gutter on Quinpool Road from Louisburg Street, south side, to M. E. Keefe's property.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, August 17th, 1912.

His Worship the Mayor:

Sir :-- I beg to report on the accompanying letter from Mr. M. E. Keefe.

The sidewalk on the south side of Quinpool Road, west of Louisburg Street, is at times muddy and unsatisfactory. It is not probable, however, that the owners of property west of Mr. Keefe's property are desirous of having a sidewalk laid, as they have not petitioned for it.

I would recommend, therefore, that the concrete sidewalk, curb and gutter on the south side of Quinpool Road be extended from Louisburg Street 371 feet to the west side of Mr. Keefe's property.—Estimated cost \$1063.00.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman J. C. Harris that the same be adopted. Motion passed.

Read reports Committee on Works and City Engineer re Henry Street grading.

HENRY STREET GRADING.

City Works Office, October 9th, 1912.

To the City Council:

Gentlemen:—The Committee on Works, at a meeting held this day, had under consideration the accompanying report of the City Engineer, against the grading of Henry Street, as it has not been taken over by the City.

Your Committee beg to recommend that said report be adopted.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, October 2nd, 1912.

His Worship the Mayor:

Sir:--I beg to report on the accompanying petition asking for the grading of Henry Street north of Coburg Road. The petition asks that instructions be given to grade the street and sidewalk and put gutters and curbs on it at once.

The street needs grading and there are no sidewalks, gutters or curbs. As the street has not been accepted, the grading can only be done by the property owners. The City Charter prohibits the City from expending any money on unaccepted streets. I have instructed the Asst. Street Foreman, however, to use any spare material when constructing concrete sidewalks in that neighbourhood to grade Henry Street as far as the material will go. If we should have any ashes to spare, when collecting in that neighbourhood, they will be used for that purpose, but farther than that, the law does not permit us to go.

F. W. W. DOANE, City Enginee's

Moved by Alderman Martin, seconded by Alderman J. C. Harris that the same be adopted. Motion passed.

Read reports Committee on Works and City Engineer re concrete sidewalk Creighton Street, east side, between Falkland and Cornwallis Streets.

CREIGHTON STREET SIDEWALK.

City Works Office, September 20th, 1912.

To the City Council:

Gentlemen:—Attached hereto is a report from the City Engineer in favor of a concrete sidewalk, curb and gutter on Creighton Street, from Falkland to Cornwallis Streets, east side.

Your Committee on Works beg to recommend said report for adoption.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, September 18th, 1912.

His Worship the Mayor:

Sir:-I beg to report on the accompanying petition from owners of property on the east side of Creighton Street, asking for the construction of a sidewalk between Falkland and Cornwallis Streets.

A sidewalk has been constructed already on the east side between Cogswell and Falkland Streets, and I would recommend that the sidewalk on the east side of Creighton Street between Falkland and Cornwallis Streets be placed in the Sidewalk Schedule, and that a concrete sidewalk, curb and gutter be constructed in this block. The estimated cost is \$1590.00.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman J. C. Harris that the same be adopted. Motion passed.

Read report Committee on Works recommending that the concrete sidewalk now being laid on Edward Street be extended on Jubilee Road in front of the property of W. C. Moir.

JUBILEE ROAD SIDEWALK.

City Works Office, October 8th, 1912.

To the City Council:

Gentlemen:—The Committee on Works beg to recommend that the concrete sidewalk now being laid on Edward Street, from Coburg Road to Jubilee Road, be extended on Jubilee Road in front of the property of Mr. W. C. Moir, as requested in letter attached hereto.

F. P. BLIGH, Mayor and Chairman.

Halifax, N. S., October 3rd, 1912.

The Chairman Board of Works, City:

Dear Sir:-I hereby make request that the permanent sidewalk now being laid on Edward Street from Coburg Road to Jubilee Road be extended on Jubilee Road in front of my property.

W. C. MOIR.

Moved by Alderman Martin, seconded by Alderman R. V. Harris that the report be adopted. Motion passed.

Read reports Committee on Works and City Engineer in favor of a concrete sidewalk Quinpool Road, north side, from Robie Street to Parker Street, and on Parker Street, east side, from Quinpool Road to the south side of F. J. Kelly's property.

PARKER STREET AND QUINPOOL ROAD SIDEWALK.

City Works Office, September 20th, 1912.

To the City Council:

Gentlemen:—The Committee on Works, at a meeting held on the 20th inst., decided to recommend to the Council for adoption the accompanying report of the City Engineer in favor of a concrete sidewalk, curb and gutter on the north side of Quinpool Road, from the Robie Street sidewalk to Parker Street, and on the east side of Parker Street from Quinpool Road north to the south side of F. J. Kelly's property.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, August 17th, 1912.

His Worship the Mayor:

Sir:--I beg to report on the accompanying petitions for and against concrete sidewalks on Quinpool Road and Parker Street.

The petitioners for the sidewalk represent about 125 feet on Quinpool Road and 264 feet on Parker Street. The total frontage of Parker Street is 570 feet, and I understand the remainder of the property owners are opposed to the construction

of the sidewalk. As those petitioning for the sidewalk own property adjoining, I would recommend that a concrete sidewalk, curb and gutter be constructed on the north side of Quinpool Road from the Robie Street sidewalk to Parker Street and on the east side of Parker Street from Quinpool Road north to the south side of F. J. Kelly's property. This will make a continuous sidewalk connected with one already laid. The estimated cost is \$1,810.00

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman Gates that the reports be amended to include paving the east sidewalk of Parker Street to the north side of the property of F. J. Kelly, and that the reports as so amended be adopted. Motion passed.

Read reports Committee on Works and City Engineer re concrete s'dewalk on the east side of Barrington Street, from Jacob Street to Cornwallis Street.

BARRINGTON STREET SIDEWALK.

City Works Office, September 20th, 1912.

To the City Council:

Gentlemen:--The Committee on Works beg to recommend for adoption the accompanying report of the City Engineer in favor of a concrete sidewalk on the east side of Barrington Street from Jacob to Cornwallis Streets.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, September 18th, 1912.

His Worship the Mayor:

Sir:---I beg to report in accordance with the accompanying resolution of Council.

The sidewalk on the east side of Barrington Street from Jacob to Cornwallis Street was laid in tar concrete and is going to pieces badly. As this is the main street of the City, it is desirable to lay a better sidewalk.

The estimated cost is \$3432.00, and I would recommend that a concrete sidewalk be constructed on the east side of Barrington Street from Jacob to Cornwallis Street.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman J. C. Harrs that the same be adopted. Motion passed.

Read reports Committee on Works and City Engineer re standardization of the width of Chebucto Road at the property of H. S. Tremaine.

CHEBUCTO ROAD WIDENING.

City Works Office, October 8th, 1912.

To the City Council:

Gentlemen:-Attached hereto is a report from the City Engineer in re Chebucto Road widening.

Your Committee on Works beg to recommend that the same be adopted, and that the Mayor and City Clerk be authorized to sign a deed to Mr. H. S. Tremaine conveying to him certain land in exchange for land shown on plan which is now a part of his property.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, September 27th, 1912.

His Worship the Mayor:

Sir:—Mr. H. S. Tremaine owns a property on the north side of Chebucto Road, immediately east of the City property near the Arm. Mr. Tremaine's property encroaches on the road and makes it very narrow at that point. The City property runs to a point as shown on the accompanying plan and Mr. Tremaine has offered to deed the land required on the front of his property to widen the street to the official line, provided the City will transfer to him the same area from the east corner of the City property.

The proposal seems to be fair and mutually advantageous. I would therefore recommend that the Mayor and City Clerk be authorized to sign a deed to Mr. Tremaine, of the property shown on the plan, enclosed by red lines, on condition that Mr. Tremaine will give the City a clear title to the land enclosed by the blue lines, which is now a part of his property.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman J. C. Harris that the same be adopted. Motion passed.

Read reports Committee on Works and City Engineer in favor of a reduction in the water meter bill of A. D. MacDonald, No. 83 1-2 Coburg Road.

A. D. MCDONALD, No. 83 1-2 COBURG ROAD-WATER METER BILL.

City Works Office, October 9th, 1912.

To the City Council:

Gentlemen:—The Committee on Works beg to recommend to the Council for adoption the accompanying report of the City Engineer in favor of a reduction in the water meter bill of A. D. McDonald, No 83¹/₂ Coburg Road.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, October 2nd, 1912.

His Worship the Mayor:

Sir:--I beg to report on the accompanying communication from Mr. A. D. McDonald, asking for a rebate in the amount charged him for water during the last six months.

Mr. McDonald states that the meter was not read in June, that his tenant called his attention to the waste of water about the first of that month and he had a leaking water closet valve repaired at once. The enclosed bill shows his statement to be correct. I believe from Mr. McDonald's statement that he has endeavoured to use ordinary care and precaution, but he has evidently been misled by a mistake in the notice of reading left with him in May. A cipher has been left off, making it appear 2900 gallons instead of 29,000.

Under the circumstances, I would recommend that the bill for the last six months be averaged at 1100 gallons a month, which is the reading for August.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman J. C. Harris that the same be adopted. Motion passed.

Read reports Committee on Works and City Engineer re public convenience stations.

PUBLIC CONVENIENCES.

City Works Office, October 8th, 1912.

To the City Council:

Gentlemen:--The Committee on Works beg to forward to the City Council for its information the attached report of the City Engineer in re Public Conveniences.

F. P. BLIGH, Mayor and Chairman.

Office of the City Health Board, June 1st, 1912.

To the Chairman and other members of Committee on Works:

Gentlemen:—At a meeting of the City Health Board held on Thursday last, the great need of public urinals was freely commented upon and it was resolved to bring the matter to the notice of the Committee on Works and urge the importance of its immediate consideration.

I am instructed, in accordance therewith, to ask your Board to proceed with the erection of at least four urinals for public use, in such places as the need may be felt the greatest.

I am also directed to call your attention to the offensive condition of the Duffus Street gutter and to request, that orders be given to have the same continually flushed, during the summer months, from the hydrant at the top of the Street.

The dump on Stanley Street is in a very offensive and unsightly condition and this Board would recommend, that some action be immediately taken by your Committee, to put it in a good sanitary condition.

JOHN A. WATTERS, Secretary, C. H. B.

City Engineer's Office, September 27th, 1912.

His Worship the Mayor:

Sir:—I beg to report on the accompanying communication from the City Health Board, asking the Works Committee to erect at least four urinals for public use in such places as the need may be felt the greatest.

During our recent trip to Windsor, Ontario to attend the convention of the Union of Canadian Municipalities, the Mayor and myself made a careful examination and enquiry into matters connected with markets and public convenience stations, especially in the larger cities visited. It is almost an invariable custom in cities to place the public conveniences underground, in charge of an attendant, as city authorities endeavour to locate them in the midst of the heaviest traffic.

In Toronto there is such a station in the middle of the street in front of the Post Office. In Detroit, there is a similar station at the intersection of the most important business streets. In addition to that portion of the station which is free to the public, lavatories are provided with additional conveniences, for the use of which a small charge is made. In these cities, even in the parks and suburbs, it is unusual to find'a urinal only. The civic authorities claim that it costs no more to lookmafter a complete convenience station than in does to look after an open public urinal on the surface. They claim that it is impossible to keep such places clean, and that as it is impossible to prevent them from freezing in the winter, they can only be used in the summer season. For these reasons, especially, they have abandoned their use in the business and residential part of the City.

Conditions in Halifax would be similar. Some years ago there was such a convenience at the old Market building. It could never be kept in a creditable condition unless an attendant were present during the 24 hours of the day; it had to be boarded up in the winter as it was necessary to turn off the water to prevent it from freezing. The odor from it was always objectionable to pedestrians and others having business in the neighbourhood. The use of such a structure at the Gardens is more satisfactory because there are other conveniences on the grounds, and it is used only in the summer season. There are no suitable places in the protions of the City where such conveniences are needed, for the erection of public urinals on the surface. There are a number of places, however, where a station could be built under ground. At the site of the old Police Station, such a structure do at present, it would be a great convenience. When the market building is erected on Brunswick Street, there will be sanitary conveniences in connection with it.

Last year I reported to the Council after preparing a plan for a public convenience station under the Parade immediately south of the Police stable. This location was adopted not only because it is central and on the principal business street where most strangers pass, but because the cost of operation would be less. It could be heated from the City Hall system and the part of the station intended for males could be superintended by the driver of the Police Patrol. The estimated cost of constructing a double station for the accomodation of males and females was \$10,025.

The estimated cost of providing accommodation for males only was \$6700. There is no appropriation from which money could be taken to supply funds to comply with the request of the Health Board even if it were considered desirable to do so.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman Gates that the same be received and a copy forwarded to the City Health Board for their information. Motion passed.

Read reports Committee on Works and City Engineer recommending the demolition of the derelict building, No. 187 Upper Water Street.

DERELICT BUILDING-NO. 187 UPPER WATER STREET.

City Works Office, October 9th, 1912.

To the City Council:

Gentlemen:—Attached hereto is a report from the City Engineer in favor of demolishing the old building No. 187 Upper Water Street, as it is considered dangerous from a fire point of view.

Your Committee on Works beg to recommend that said report be adopted.

F. P. BLIGH, Mayor and Chairman.

City Engineer's Office, October 2nd, 1912.

His Worship the Mayor:

Sir:--I beg to report on the accompanying communication to the City Council, respecting the condition of a building on Upper Water Street.

The structure is an old dwelling house which is now abandoned. The doors and windows have been boarded up, so that I could not inspect the interior. The Insurance company states that the place is open to anyone that may happen along, and is well stocked with old rubbish and other inflammable material likely to produce a blaze and burn down the neighbourhood.

If their statement is correct the owner can be compelled to demolish the building. When I visited it, however, it was not open, and could not be entered unless broken into.

F. W. W. DOANE, City Engineer.

Moved by Alderman Martin, seconded by Alderman J. C. Harris that the same be adopted. Motion passed.

Read letter Civic Improvement League requesting the City Council to reconsider its recent decision regarding the Dartmouth Ferry Dock on the Halifax side of the Harbor.

DARTMOUTH FERRY TERMINAL.

The Civic Improvement League, September 28th, 1912.

To His Worship Mayor Bligh, City Hall:

Your Worship:—At a Public Meeting of the Civic Improvement League held at the Technical College last evening, the following resolution was adopted, which I have been instructed to forward to you with the request that you kindly have it read at the next meeting of the City Council.

"Resolved, that the City Council be asked to reconsider its decision regarding the improvement of the Ferry Dock on the Halifax side of the Harbor."

> Moved by G. A. Redmond, Seconded by R. H. Murray.

Thanking you in anticipation of your kind attention to this matter, which we trust will receive proper consideration from your honourable body, and thanking you for your presence at the league meeting, which I assure you was appreciated, I beg to remain,

The Civic Improvement League, E. J. KELLY, Secretary.

Moved by Alderman Gates, seconded by Alderman Keltie that the rules of Council be suspended and that this subject be now re-opened for further consideration by the Council. Motion passed unanimously.

Moved by Alderman Martin, seconded by Alderman R. V. Harris that as this Council has now by unanimous consent decided to further consider the matter of better terminal facilities for the Dartmouth Ferry on the Halifax side of the Harbor, that the whole matter be again referred to the Committee on Works for further report.

Moved by Alderman Hawkins, seconded by Alderman R. V. Harris that Colonel I. W. Vidito and R. H. Murray be permitted to address the Council on this matter. Motion passed.

The Council is now addressed by Colonel Vidito and R. H. Murray, who urged that this matter be promptly dealt with by the Council.

Alderman Martin's motion that the matter be referred to the Committee on Works is put and passed unanimously.

Read report Civic Improvement Committee on various matters.

REPORT CIVIC IMPROVEMENT COMMITTEE.

Committee Room, City Hall, Oct. 7th, 1912.

To His Worship the Mayor and City Council:

Gentlemen:-The Committee on Improvements met this evening, there being present Aldermen Hattie, (Chairman), MacKenzie, and Clarke, and Messrs. Kelly and Sexton.

First-The extension of South Brunswick Street.

At the City Council meeting of March 25th, 1912, His Worship the Mayor appointed a committee consisting of Aldermen Martin, Hoben and Shaffner, to take in hand the matter of extending South Brunswick Street to Spring Garden Road. As this was shortly before the Civic Elections, the Committee had no opportunity to get the matter very far advanced, and when the present Committee on Improvements was appointed, the understanding was that it should take up this work. At this evening's meeting the Chairman reported having had two conferences with General Drury and having gone into the recent history of negotiations respecting

this matter. The conclusions your Committee have arrived at after considering the data are that it will be necessary for the City, through His Worship the Mayor, to once more open up negotiations with the Militia Council at Ottawa. The Military authorities have a standing order that no property must be parted with except for compensation. Besides, the proposed improvement would involve the demolition or partial demolition, of certain buildings. The question would therefore appear to embrace two chief pointe: (1) Whether arrangements can be made by the military authorities that will meet their needs as well as the present accommodations provided at R. E. Park, and (2) The amount of money that would be required to compensate the military authorities for the land that would be taken and to build new buildings in lieu of those that would be destroyed.

In 1906 and 1907 (See minutes of Council Dec. 19,1905, page 215) when the matter was last under negotiation, ex-Mayor MacIlreith had arrived at a basis of agreement with the authorities of that day. A new brick building, then about to be erected, was planned to occupy a site that would not come in the way of the improvement, and the consent of Colonel Connors, commanding the Engineers at that time; of Sir Charles Parsons, then the General in command of the Garrison; of Sir Frederick Borden, Minister of Militia and Defence, and of the Imperial auth-orities, had been obtained. The basis of agreement arrived at was that the con-ditions of transfer of the land required for the extension through the South Barracks would be the same as for the Fuel Yard, similar occupation dispensed with at South Barracks to be provided by the City (see minutes of Council, March 7, 1907, page 310). In the legislation of 1907 (see minutes of Council, April 30, 1907, page 371) "the City is empowered to give a building in exchange for the Fuel Yard property and also the extension of Brunswick Street." In the tenders for loan of 1907, the schedule contains the item of \$12,000 bracketed with "Fuel Yard and extensions South Brunswick Street." (See minutes of council May 16, 1907, page 16). The South Brunswick Street." (See minutes of council May 16, 1907, page 16). The sum of \$10,000 was intended for the Fuel Yard and \$2,000 on account of the extension scheme, but as it was afterwards found necessary to increase the Fuel Yard appropriation to \$12,000, a resolution of council was passed, (see minutes of council April 9, 1908) to get Legislation enabling the City to use the full amount of \$12,000 for this purpose and the addition of a clause empowering the City to borrow for the extension of South Brunswick Street a sum not exceeding \$2,000. Four years have elapsed since the matter was dropped, though on one or two occasions since there has been some correspondence relative to this matter, the results of which we are not able to present on account of the absence of ex-Alderman Wilson from the City. If we hope to get this scheme under way before the present Council goes out of office, the Secretary of the Militia Council, Ottawa, should be communicated with as soon as possible, especially in view of the fact that further legislation may possibly be necessary. It seems to us proper and expedient that His Worship the Mayor should open negotiations on behalf of the City and the Committee would recommend that the Council ask His Worship to do this.

While submitting this report the Committee urge the necessity of the proposed extension. The need has been felt for very many years, and is accentuated by the fact that the new Market Building is to be placed on Brunswick Street. We submit that the opening of Brunswick Street into Spring Garden Road would, by increasing traffic along Brunswick Street, greatly tend to improve the general character of property in the central part of the City.

For the future information of Aldermen who may not be fully familiar with the former proposal it may be said that it was intended to provide barracks and parade grounds for the Royal Engineers at the Lumber Yard. The sum of \$2,000 mentioned above had no connection with this reconstruction work, but was to be applied to land damages and construction work involved in the extension. Whatever expense would have been involved in reconstruction and properly chargeable to the City would have had to be provided for in further legislation.

Second-Ornamental Street Lighting.

Your Committee commend this matter to the consideration of the City Council. In upwards of three hundred cities and towns in Canada and the United States the lighting of streets by means of Tungsten lamps mounted on ornamental standards has been adopted. Many members of the Council are familiar with the system in actual operation and others know something of its efficiency and aesthetic value from literature which has been secured and distributed to them by this Committee. As a new lighting contract is to be made very soon, your Committee feel that this system ought to be investigated. A large percentage of the places having the system are smaller than Halifax, many are about the same size, the minority are larger. If the system is feasible in these cities it ought to be feasible here and it would be desirable to get specific information as to the cost of installation on Granville Street, from Buckingham to Prince; on George Street, from Barrington to Bedford Row; on Barrington Street from Morris to Buckingham, and on Gottingen, from Cogswell to Gerrish. These are important business streets and we believe the merchants would be glad to co-operate on account of the value of good street lighting as a stimulus to business. This is the principle on which it is carried out in many cities where this system is in use. The merchants participate in the cost both of installation and maintenance, though the practice varies in different cities' The procedure should be for the Council to get a report on (1) the cost of installation and (2) the cost of maintenance (including electric current and all incidentals) and then submit a proposition to the merchants on the streets mentioned to see if an arrangement cannot be arrived at. At the same time the lighting of residental streets in this manner should be investigated. Coupled with this matter would be the question of under-ground wiring and a report on this matter in relation to the four streets specified above should also be secured.

Third-Bill Board Ordinance.

A clause in the Act to Amend the Law Relating to the City of Halifax passed at the last session of the Nova Scotia Legislature, gave the City Council power to adopt an ordinance for the regulation of Bill boards (Chapter 82, 2 Geo. V, page 359, section 6). Your Committee recommend that an ordinance be adopted and herewith submit a draft for the consideration of the Council.

R. M. HATTIE, Chairman Civic Improvement Comm.

The same is considered item by item.

Read recommendation 1 re extension of South Brunswick Street.

Moved by Alderman Hoben, seconded by Alderman Martin that this item be adopted with the amendment that the Committee on Works be substituted for His Worship the Mayor in connection with the re-opening of negotiations between the City and the Militia Council at Ottawa. Motion passed.

Read recommendation 2 re ornamental street lighting.

Moved by Alderman Martin, seconded by Alderman Hoben that this matter be referred to the City Electrician for report. Motion passed. Read item 3 re Bill Board Ordinance covering Draft Ordinance.

Moved by Alderman R. V. Harris, seconded by Alderman Hawkins that this matter be referred to the Committee on Laws and Privileges for report. Motion passed.

QUESTIONS BY MEMBERS.

Alderman R. V. Harris asked if the Memorial Tower in the Fleming Park, North West Arm, is at the present time open to the public.

His Worship the Mayor answered that the Tower is now closed because of lack of funds to keep it open.

Alderman Clarke asked if any improvement could be made to the sidewalk on the south side of South Street, between South Park Street and Queen Street.

Alderman R. V. Harris asked if the holes in Green Street could not be filled up.

Alderman Martin asked if the City Engineer had made any progress with temporary sewerage facilities on Coburg Road and Oxford Street.

Alderman R. V. Harris asked for a report on the present situation relating to the electric lighting contract.

Alderman Martin asked if the City Engineer has made arrangements for the engaging of an Assistant Engineer as instructed by this Council.

The City Engineer replied that he has made arrangements and the gentleman employed will shortly commence his duties.

Alderman Clarke asked that the City Engineer report on the matter of the laying out of Connaught Avenue.

Alderman Hawkins asked what is being done in the matter of opening the lane running between Yukon Street and Quinpool Road.

Alderman Hoben, Chairman of the special Committee on this matter, reported that the Committee is using due diligence in endeavoring to have the conditions satisfactorily remedied. Alderman Hattie asked if some improvement could not be made to Bell Street, and if it could not be paved with blocks.

Alderman R. V. Harris asked what progress was being made by the Works Department in connection with proposed improvements at the City Prison.

MOTIONS BY MEMBERS.

Alderman Martin submits the following resolution:-

Resolved, That street lights be placed in Ward 5 as follows:-

Davison Street, about midway between West and Charles Streets; Charles Street Extension: one at the corner of Creighton Street and one at the corner of Gottingen Street.

Moved by Alderman J. C. Harris, seconded by Alderman Martin and referred to the Committee on Works for report.

His Worship the Mayor informed the Council that the Moral Reform Association had waited upon the Police Committee and asked that additional lights be placed in the red light district.

Alderman Hattie submits the following resolution:-

Resolved, That the Minister of Railways be communicated with at once regarding the difficulty which cabmen and truckmen experience on the street grade at North Street Station, to ascertain whether information can be had which will guide the Council in deciding what action should be taken in the matter of the petition for a new street designed to overcome the grade.

Moved by Alderman Hattie, seconded by Alderman Gates and referred to the Committee on Works for report.

Alderman Keltie submits the following resolution:-

Resolved, That the Building Insector report on the condition of building on property south side of Cornwallis Street, west of Brunswick Street.

Moved by Alderman Keltie, seconded by Alderman Martin and passed.

ORDER OF THE DAY.

Moved by Alderman R. V. Harris, seconded by Alderman Martin that No. 2 on the Order of the Day be now taken up. Motion passed.

Read No. 2 viz., An Ordinance re persons walking upon sodded sidewalks. Read a first and second time September 5th, 1912.

AN ORDINANCE TO AMEND ORDINANCE No. 4 "OF STREETS."

Ordinance Number 4 "of Streets" is hereby amended by adding the following section, to be read as immediately following Section 29:---

29A—Where any sidewalk has been partly covered with sod by the City no person shall walk upon the part of the sidewalk so covered.

The said Ordinance is now read a third time.

Moved by Alderman R. V. Harris, seconded by Alderman Martin that said Ordinance be now adopted and forwarded to the Governor-in-Council for approval. Motion passed.

Moved by Alderman Clarke, seconded by Alderman Martin that the Council do now adjourn. Motion passed.

Council adjourns 10.20 o'clock.

L. FRED. MONAGHAN, City Clerk.

F. P. BLIGH, Mayor.

EVENING SESSION.

8.10 o'clock.

Council Chamber, City Hall, November 7th, 1912.

A meeting of the City Council was held this evening. At the above named hour there were present His Worship the Mayor' and Aldermen Whitman, R. V. Harris, Morrow, Connolly, Gates, Hattie, Scanlan, Clarke, Dennis, Hoben, Hines, Keltie, Martin, Hawkins, J. C. Harris, Upham and Gough.

The Council was summoned to proceed with business stand ing over and the transaction of other business.

PRESENTATION OF PAPERS.

Report Civic Improvement Board by Alderman Hattie, Chairman. Offer Trustees of Sinking Funds to loan the City \$11,300 for a motor fire engine, by Alderman Hoben, Chairman Finance Committee. Report Laws and Privileges Committee by Alderman Whitman, Chairman. Report Library Commission by Alderman Clarke, Chairman. Report Finance Committee by Alderman Hoben, Chairman. Report Committee of Fire Wards by Alderman Scanlan, Chairman. Reports (2) Charities Committee by Alderman Gates, Chairman.

Report City Prison Committee by Alderman R. V. Harris, Chairman.

His Worship the Mayor submits the following named papers:-

Report Police Committee.

Report City Health Board.

Annual Report City Clerk, 1911-12.

Letter Manufacturers' Appraisal Co. re proposed lecture by E. W. Doty on Real Estate Assessment.

Letter Union of Electrical Workers re suggested amendments to Electric Wiring Ordinance.

Dartmouth Ferry dock.

Tramway Company poles.

Accounts.

Larch Street sewer.

Lilac Street sewer.

Longard Road sewer.

Old building Cornwallis Street.

Vernon Street sidewalk.

North Street grade.

Civic Improvement Committee's recommendations.

George Street Sidewalk.

Acadia Sugar Refinery water lots.

REFERENCE OF PAPERS.

Read letter Union of Electrical Workers re suggested amendments to Electric Wiring Ordinance.

Referred to Committee on Laws and Privileges for report.

Read letter Manufacturers' Appraisal Company re proposed lecture before the Council by E. W Doty on Real Estate Assessment.

REAL ESTATE ASSESSMENT.

Cleveland, Ohio, October 25th, 1912.

Mr. L. Fred. Monaghan, City Clerk:

Dear Sir:-Upon my return from a western trip I find your favor of October 18th appointing Monday, November 11th, as the date for the proposed address by Mr. Doty on the subject of scientific assessment of real estate.

In reply I will say that Mr. Doty will plan to be in Halifax on the day suggested, and I wish to express my appreciation of the opportunity extended to us to explain the utility of the Somers Unit System of Realty Valuation, as a means of equalizing real porperty assessments. Mr. Doty will take advantage of this trip to fill a longplanned arrangement to discuss the Somers System with the Mayor and City officials of Boston. His Boston address will be delivered on Friday, November 8th.

WALTER W. POLLOCK, President and General Manager of the Manufacturers' Appraisal Company.

Filed.

Read Annual Report City Clerk, 1911-12. Filed.

CONSIDERATION OF PAPERS SUBMITTED.

Read report City Prison Committee on various matters.

REPORT CITY PRISON COMMITTEE.

Committee Room, City Prison, November 4th, 1912.

To His Worship the Mayor and City-Council:

Gentlemen:—Your Committee on City Prison beg to report that at a meeting held at the Prison this day, there being present Aldermen R. V. Harris, (Chairman), Hines, J. C. Harris and Gough, the semi-annual inspection of the Prison, as required by the Ordinance, was made. The Prison and out buildings were found clean, tidy and in order. Preparations are being made to instal the new heating and plumbing systems. The Chairman was authorized to have the electric light fittings dismantled by the late Governor, replaced; and to take tenders for four suits uniforms and three overcoats for Governor and underkeepers; six years have elapsed since overcoats were furnished before. The following accounts amounting to 157.95 were examined, found correct and recommended for payment:—

Halifax Electric Tram Co., Ltd., light, \$2.00; Telephone service Oct. 1912, \$4.50; C. H. Jordan, horseshoeing, \$2.15; Wm. Taylor & Co., boots, \$18.50; W. I. Hubley & Co., oats, etc., \$70.54; Evans & Co., hardware, \$5.55; W. A. Maling & Co., oxheads, \$11.50; E. W. Crease & Son, groceries, \$26.00; J. J. Scriven & Son, bread, \$14.53; G. H. Durling et al, labor, \$2.68. Total, \$157.95.

Your Committee further recommend that the recommendations contained in the report of the Chairman on his recent visit to various Canadian and American Prisons, submitted to the City Council on 10th October last, be adopted, without prejudice to the City's ownership of the Prison.

The monthly report of the Governor was submitted and filed.

REGINALD V. HARRIS, Chairman.

Moved by Alderman R. V. Harris, seconded by Alderman Hines that the report be adopted and the accounts paid. Motion passed.

Read report City Health Board covering accounts.

CITY HEALTH BOARD ACCOUNTS.

Halifax, N. S., November 5th, 1912.

To His Worship the Mayor and Members of the City Council:

Gentlemen:—The City Health Board beg to recommend the payment of the following accounts, which were passed by the Board at a meeting held on Thursday last:—

Maritime Telephone Co., phones month of Sept., \$12.87; Blackadar Bros., advertising, \$9.00; Hillis & Sons, repairs smoke machine, \$3.67; R E. Ward, work at Infectious Hospital, \$85.00; A. &.W Mackinlay, printing, \$3.50; J. F. Dempster, board of patients, \$222.31. Total, \$336.35.

JOHN A. WATTERS, Secretary.

Moved by Alderman Gough, seconded by Alderman Martin that the report be adopted and the accounts paid. Motion passed.

Read report Police Committee covering accounts.

NOVEMBER 7th, 1912.

POLICE DEPARTMENT ACCOUNTS.

Mayor's Office, Nov. 4th, 1912.

To the City Council:

Gentlemen:-The Police Committee beg to recommend for payment the following accounts:-

Blackadar Bros., advertising, \$13.05; Clayton & Sons, two ulsters, \$27.00; Fire Department, three months' feed etc., patrolhorse, \$37.50; J. A. Rudland, Registration fee motor cycle, \$2.50; Colwell Bros., Ltd., fifty police caps, \$144.50; Kline & Mullins, cap and badge, \$5.25; Maritime Telegraph and Telephone Co., Ltd., service September and October, \$23.34; Total, \$253.14.

F. P. BLIGH, Mayor and Chairman.

Moved by Alderman Hines, seconded by Alderman Martin that the report be adopted and the accounts paid. Motion passed.

Read report Charities Committee for October.

REPORT CHARITIES COMMITTEE FOR OCTOBER.

Halifax, Nov. 6th, 1912.

His Worship the Mayor and Members of the City Council:

Gentlemen:-The Charities Committee met this day and beg to submit the following report. Members present-The Chairman, Aldermen Morrow, Scanlan, Martin and Upham.

The Superintendent's report for October 1912 shows that during the month there were 30 persons admitted into the City Home, 34 discharged and 5 died. Of the number admitted 4 were chargeable to the Province and 26 to the City. The total number of inmates Oct. 31st, was 288, made up of 173 men, 110 women and 5 children. On the same date last year there were 180 men and 133 women, a total of 313. During the month there were 2 persons admitted into the Nova Scotia Hospital chargeable to the City and 1 discharged.

The following accounts are recommended for payment:—Wentzells, Ltd., \$532.47; W. A. Maling & Co., \$356.49; Smith & Proctor, \$117.98; J. M. Currie, \$70.50; A. Wilson & Co., \$37.75; Fleischmann & Co., \$4.20; J. & M. Murphy, Ltd., 92.85; J. S. Cashen & Son, \$40.89; H. D. MacKenzie Co., \$158.45; Halifax Electric Tram Co., Ltd., \$33.10; T. C. Allen & Co., \$6.03; Maritime Telegraph & Telephone Co., \$7.50; C. E. Puttner, \$50.00; Blackadar Bros., \$7.06; Herald Publishing Co., \$12.12; Longuard Bros., \$397.00; Geo. E. Smith & Co., \$3.25; Banks & Williams, \$29.16; Black & Flinn, \$9.45; The Robt Taylor Co., Ltd., \$23.40; Baldwin & Co., \$2.20; J. McD. Taylor, \$1.00; Nickerson & Hart \$14.18; Robinson Ltd., \$2.41; Kelly Ltd., \$1.00; S. Chittick & Son, \$20.00; B. J. Mulcahy, \$299.89; Salaries, \$839.83; N. S. Hospital, \$1921.16; Total, \$5091.32

H. E. GATES, Chairman.

Moved by Alderman Gates, seconded by Alderman J. C. Harris that the report be adopted and the accounts paid. Motion passed.

NOVEMBER 7th, 1912.

Read report Charities Committee re tenders for supplies for the City Home. CITY HOME TENDERS.

Halifax, Oct., 25th, 1912.

His Worship the Mayor and Members of the City Council:

Gentlemen:-The Charities Committee met this day and beg to submit the following report. Members present-The Chairman, Aldermen Upham, Keltie and Morrow.

The meeting was called to open Tenders for supplies to City Home for one year from November 1st 1912, and the following tenders are recommended for acceptance.

Groceries	Wentzell, Ltd.
Pork, half quantity required	
Pork, half quantity required	
Meats	W. A. Maling & Co.
Butter	
Fresh Fish	A. Wilson & Son.
Flour	Gunn & Co., Ltd.
Forage	F. W. Fraser.
Dry Goods	J. & M. Murphy, Ltd.
Leather	A. Fordham & Co.

H. E. GATES, Chairman.

Moved by Alderman Gates, seconded by Alderman Martin that the report be adopted. Motion passed.

Read report Committee on Works covering accounts.

WORKS DEPARTMENT ACCOUNTS.

City Works Office, November 7th, 1912.

To the City Council:

Gentlemen:-The Committee on Works beg to recommend to the Council for payment accounts amounting to \$13,687.66, chargeable to the following services-

Water Maintenance							5 504 34
Teams and Stables							243.25
Streets							
Sewerage							5881.85
Permanent Sidewalks.				• •			567.50
City Property					•		144.53
ruel, City Hall		• •			•		57.00
Cunard Street Widening							38.06
Insurance		• •		•			29.50
Internal Health							3.90
New Workshops							12.39
Lighting City Hall							69.20
Street Lighting							1879.33
Telephones	 •			•			56.38
Total						-	13 687 60

F. P. BLIGH, Mayor and Chairman.

Moved by Alderman Martin, seconded by Alderman Dennis that the report be adopted and the accounts paid. Motion passed.

Read report Committee of Fire Wards on various matters and accounts.

REPORT COMMITTEE OF FIRE WARDS.

Committee Room, City Hall, Nov. 5th, 1912.

His Worship the Mayor and City Council:

Gentlemen:-The Committee of Fire Wards met this day at 4 o'clock. Present Aldermen Scanlan, (Chairman), Harris, MacKenzie and Hines.

Your Committee beg to report and recommend as follows:-

1. The contract for the supply of about 3500 bushesl of oats for the Fire Department horses specifies, "Oats to weigh not less than 34 pounds to the measured bushel." In filling the last order for 24 bushels the contractor delivered 816 lbs., but the grain only measured 21 bushels. The Committee, being of opinion that the City receives the value of 24 bushels in the better quality of the 816 lbs., recommend that the contractor be permitted to continue on the present basis so long as the goods supplied are satisfactory to the Chief.

2. William Keating, Callman, reported by the Chief at the October meeting for absence from third alarm of fire, Box 4, September 27th, is excused, as is also Arthur Squires, Callman on No. 4. Engine, reported for absence from Annual Inspection.

3. It is recommended that William Schon be permitted to instal a fire alarm box in Ungar's Laundry building, Argyle Street, to connect with the City service at his own expense; the cost is about \$145.

4. In connection with the new motor fire engine about to be procured, and in consequence of communications with the contractors, it is recommended that a repeating gong be used on her instead of a bell; that electricity be used for lighting instead of gas, (additional cost \$100); that the hose body be divided longitudinally; that a basket be provided instead of a reel for chemical hose; that the rubber tires to be used be such as the contractors themselves recommend; and that tenders be invited for the supply of two 10-ft. pieces of $2\frac{1}{2}$ " suction hose. The Committee have decided to name this apparatus "Patricia," after H. R. H. Princess Patricia, who recently visited Halifax in company with her father, H. R. H. Duke of Connaught, Governor General of Canada.

5. A pair of horses was purchased to-day for \$590.

6. Your Committee has received an account from the City Collector for cost, \$203.58 plus interest \$46.82, \$250.40, for concrete sidewalk in front of the Bedford Row Fire Station. As the Fire Department has no appropriation out of which to pay this account, the bill is submitted to the Council for its information.

7. The Committee had before them a letter from the Nova Scotia Fire Insurance Company suggesting that in view of the recent announcement respecting railway and steamship terminals for this City, the so called "brick district" should be extended to include the entire peninsula on which the City stands, or at least that the majority of citizens should agree to the western boundary of the district

316

being set at Robie and Windsor Streets and their extensions south and north respectively, from Point Pleasant to Richmond. This matter is under consideration by a Sub-Committee of the Board.

8. Thomas Hencher, Callman on No. 4 Engine, injured at Fire, August 17th, reported for duty October 27th.

9. William Connors, Callman on No. 1 Engine, injured at Fire, September 27th, reported for duty October 28th.

10. Thomas Healey, Callman, and George McGuire, Permanent, reported sick, have not yet reported for duty.

11. William Broderick, Callman on No. 4 Engine, had his foot badly sprained at Fire, Box 36, October 11th, and has not yet reported for duty.

12. William Brunt, District Chief, asks to have his leave of absence extended. Granted.

13. J. J. Morrow and Joseph Power, Callmen, asked for three months' leave of absence. Approved.

14. T. V. Helpford and Patrick Hickey have resigned. Ernest Isnor and W. A. Smith, Supernumeraries, have resigned. Resignations accepted.

 The Committee have given to the City Prison Commissioners:
300 feet 2 1-2" Rubber Hose 90.00
1 Plug Wrench, \$1.50, 1 Torch, \$1.50
2 Belts and Spanners, \$1.50 3.00

16: The Committee recommend that William McDonald, Acting-Supernumerary, be appointed to the Call Force, vice George Saunders, appointed Acting Driver.

17. Also that Theodore Moller be appointed a Supernumerary.

18. The following named accounts are recommended for payment; .

T. C. Allen & Co., stationery, \$.90; H. B. Smith, telegrams, \$4.39; James Roue, distilled water, \$1.50; Farquhar Bros., supplies, \$14.30; Maritime Telegraph and Telephone Co., Ltd., phones, \$73.75; Hillside stables, one pair horses, \$590.00; Halifax Electric Tramway Co., Ltd., light (\$24.71), power (\$13.82), \$38.53; Cragg Bros., Co., Ltd., hardware, \$10.90; Neil Fox, saddlery, \$18.00; William Roche, coal, \$368.45; Melvin & Co., hardware, \$1.20; Morton & Cragg, electric lamps, \$8.75; Kelly's Ltd., saddlery, \$7.38; Stroud & Eveleigh, carriage work, \$1.85; F. A. Shaw, fodder, \$452.95; Lawrence Hardware Co., Ltd., hardware, \$23.30; A. J. McNutt, carriage work, \$110.00; Canadian Consolidated Rubber Co., Ltd., packing, \$11.50; James Dempster, Ltd., lumber, \$11.00; Robert Merlin, lumber, \$1.08; J. C. Merlin & Son, lumber, \$4.15; W. H. Isnor & Sons, repairs, \$.35; F. P. Farquharson, Pitner lights, \$5.10; M. L. M. Buskins, chinmey sweeping, \$14.50; William J. Butler & Co., insurance, \$4.70; Wm. Stairs, Son & Morrow, Ltd., hardware, \$3.70; Hillis & Sons, Limited, engine tracks, \$13.70; Burns & Kelleher, repairs & hardware, \$1.35; Canadian Oil Companies, Ltd., gasoline, \$16.80; Callmen, working at fires, \$7.20; Patrick Dowd, carriage work, \$45.90; J. H. Fenton, wood, \$6.00; Wentzells, Ltd., soap, etc., \$5.50; National Drug & Chemical Co., Ltd., drugs, \$5.75. Total, \$1926.47.

M. SCANLAN, Jr., Chairman.

NOVEMBER 7th, 1912.

The same is considered clause by clause and the various clauses thereof severally adopted.

Moved by Alderman Scanlan, seconded by Alderman R. V. Harris that the report as a whole be adopted and the accounts paid. Motion passed.

Read offer Trustees of Sinking Funds to loan the City \$11,300 for a motor fire engine.

LOAN FOR MOTOR FIRE APPARATUS.

Office of City Treasurer, November 5th, 1912.

His Worship the Mayor and City Council:

Gentlemen:—I am instructed by the Trustees of the Sinking Funds to offer to buy the City stock on debentures of the Consolidated Fund 1905, at a price equal to 93.32 per cent. of par thereof to an amount sufficient to produce the sum of \$11,300the same to be applied to purchase the fire engine under authority of Chapter \$1, Acts of 1912, interest to be at the rate of 4 per cent. per annum and the principal to be repayable on the 1st day of July 1945.

W. L. BROWN, City Treasurer.

The following resolution is submitted:

Whereas, The sum of \$11,300 will be required for the purchase of the fire engine;

And Whereas, The Trustees of the Sinking Funds have offered to lend the said sum on the terms set forth in their letter of November 6th;

Therefore Resolved, That the offer of the Trustees of the Sinking Funds be accepted, and the City Treasurer be and is hereby instructed to issue debentures or stock or both of the City of Halifax Consolidated Fund 1905, to the par value of 12,100, the said debentures or stock to bear interest at the rate of 4 per cent. per annum, and the principal to be repayable on the 1st of July, 1945, under authority of Chapter 81, Acts of 1912.

Moved by Alderman Hoben, seconded by Alderman R. V. Harris and passed unanimously.

Read report Finance Committee on various matters.

REPORT FINANCE COMMITTEE.

Committee Room, City Hall, October 30th, 1912.

To His Worship the Mayor and City Council:

Gentlemen:—Your Committee on Finance beg to report that a meeting held this day, there being present Aldermen Hoben, (Acting-Chairman), R. V. Harris, Scanlan and J. C. Harris, the Committee had again under consideration the accounts of the Halifax Industrial School and St. Patricks' Home for maintenance of neglected and dependent children. Mr. R. H. Murray, Secretary S. P. C., Mr. A. E. Blios, Superintendent of Neglected and Dependent Children, the City Solicitor and the City Auditor were present to confer with the Committee on this subject.

The City Solicitor informed the Committee that there was no appropriation in the Civic Estimates for this service, and no authority in the City Charter to make such appropriation.

It was decided that a conference be arranged with the Premier, His Honor Judge Wallace, Mr. Blois, Mr. Murray, the Chairman of the Finance Committee, the City Solicitor and the City Auditor with a view of providing legislation which will enable the City to meet this obligation and be satisfactory to all parties concerned.

The Chairman informed the Committee that Mr. E. W. Doty would arrive in Halifax on or about the 10th of November, and address the City Council on the 11th November and a public meeting on the 12th November, on the subject of scientific appraisal of land and buildings for assessment purposes.

The Chairman was authorized to make the necessary arrangements for the public meeting, by securing a hall and advertising the same.

Your Committee further report that they had under consideration the matter referred to them by the City Council on September 5th last, in reference to the exemption from taxation of the property of the Provincial and Federal Governments.

It is recommended that in view of the large amount of property involved, and the urgent need of enlargement of the civic revenue to meet the urgent demands of the public for increased expenditure, that this whole matter be taken up by His Worship the Mayor and the Finance Committee and pressed upon the attention of the Provincial and the Federal Governments for their favorable consideration.

C. R. HOBEN, Chairman.

The same is considered clause by clause and the various clauses thereof severally adopted.

Moved by Alderman Hoben, seconded by Alderman R. V. Harris that the report as a whole be adopted. Motion passed.

Read report Library Comission on various matters.

REPORT CITIZENS' FREE LIBRARY COMMISSION.

Committee Room, City Hall, Nov. 6th, 1912.

To His Worship the Mayor and City Council:

Gentlemen:—The Library Commission beg to report that at a meeting held... this day, there being present Aldermen Clarke, (Chairman), Hattie and MacKenzie, a request from the City Prison Committee for any disused books to form a nucleus of a Library for the Prison was read. The Chairman was authorized to arrange with the Librarian what books could be disposed of in this way.

The following accounts amounting to \$16.07 were examined found correct and recommended for payment, viz: