

CITY OF PORTLAND
OREGON

MAYOR'S MESSAGE

AND

ANNUAL REPORTS

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914



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mission of Public Docks:
Report not included herein. Copies may be obtained from the Commission of Public Docks, 502 Worcester Building.

ELECTIVE OFFICERS

	Time expires
Commissioner of Public Safety...Mayor H. R. Albee...	July 1, 1917
Commissioner of Public Utilities..Will H. Daly.....	July 1, 1917
Commissioner of Public Works...R. G. Dieck.....	July 1, 1917
Commissioner of Finance.....C. A. Bigelow.....	July 1, 1919
Commissioner of Public Affairs...{ Wm. L. Brewster....	July 1, 1915
{ George L. Baker....	July 1, 1919
Auditor .....A. L. Barbur.....	July 1, 1919

Meetings of Council are held Wednesday of each week at 10. A. M.

CIVIL SERVICE BOARD

George W. Caldwell, Chairman
John F. Logan
A. E. Clark

COMMISSION OF PUBLIC DOCKS

F. W. Mulkey, Chairman
C. B. Moores
Ben Selling
Dan Kelleher
John H. Burgard

MAYORS OF PORTLAND FROM 1851 TO 1914.

Name.	Elected.
Hugh D. O'Bryant.....	April 7, 1851
A. C. Bonnell.....	April 5, 1852
Simon B. Marye.....	November 13, 1852
Josiah Failing.....	April 4, 1853
W. S. Ladd.....	March 15, 1854
George W. Vaughn.....	April 2, 1855
James O'Neill.....	April 7, 1856
James O'Neill.....	April 6, 1857
W. S. Ladd.....	November 4, 1857
A. M. Starr.....	April 5, 1858
S. J. McCormick.....	April 4, 1859
G. Collier Robbins.....	April 2, 1860
J. M. Breck.....	April 1, 1861
W. H. Farrar.....	April 7, 1862
David Logan.....	April 6, 1863
Henry Failing.....	April 4, 1864
Henry Failing.....	June 19, 1865
T. J. Holmes.....	November 26, 1866
T. J. Holmes.....	June 18, 1867
Aaron E. Wait.....	July 24, 1867
J. A. Chapman.....	July 31, 1867
Hamilton Boyd.....	June 16, 1868
B. Goldsmith.....	June 21, 1869
P. Wasserman.....	June 20, 1871
Henry Failing.....	June 16, 1873
J. A. Chapman.....	June 21, 1875
W. S. Newbury.....	June 18, 1877
D. P. Thompson.....	June 16, 1879
D. P. Thompson.....	June 20, 1881
J. A. Chapman.....	June 19, 1882
John Gates.....	June 15, 1885
Van B. DeLashmutt.....	May 2, 1888
Van B. DeLashmutt.....	June 18, 1888
W. S. Mason.....	June 15, 1891
George P. Frank.....	June 4, 1894
Sylvester Pennoyer.....	June 1, 1896
W. S. Mason.....	June 6, 1898
W. A. Storey.....	May 16, 1899
Henry S. Rowe.....	June 4, 1900
George H. Williams.....	June 2, 1902
Harry Lane.....	June 5, 1905
Harry Lane.....	June 3, 1907
Joseph Simon.....	June 7, 1909
A. G. Rushlight.....	June 5, 1911
H. R. Albee.....	June 2, 1913

MAYOR'S MESSAGE

To the Honorable Members of the City Council:

Herewith is submitted for your information in accordance with the provisions of the Charter, my second annual message for the year ending November 30, 1914, and the Bureau reports of the Department of Public Safety, coupled with certain recommendations which it seems to me are worthy of your consideration, although it may not be possible to adopt same all or in part until the next session of the budget committee, should you decide to do so. Attached to this message is a copy of the budget adopted for the ensuing year.

The financial condition of the city is excellent. Through the exercise of careful administration of departmental affairs, with the co-operation of the various chiefs of bureaus and divisions, it was possible to effect economies in maintenance and operation so that a reduction in the tax levy from 7.7 mills to 7.5 mills was made for the ensuing year, thereby making a considerable saving to the taxpayers, without crippling the efficiency of the service. This was done, too, despite the fact that the people voted prohibition during the year and there was a resultant loss in license fees.

With commission government working more smoothly as time goes by, it is my firm belief that the people of Portland are to be congratulated upon having adopted it, and with careful management it no doubt will continue to be worthy of their approval at the polls scarcely eighteen months ago.

During the year, numerous inquiries have reached this office from all over the United States, seeking information as to the facts with regard to commission government, and in a number of instances word has come back that information forwarded to certain cities has helped to bring about the adoption of new charters under more progressive lines.

In our own city, it seems to me, there are hopeful signs that municipal government, at least, is receiving much attention and one of the best indications of this is the fact that in a number of our public schools, classes have been held and the subject given special attention by teachers and pupils, sometimes illustrated by charts. In this excellent work, which I hope will constantly increase until every citizen of Portland shall have much more intimate knowledge of the governmental workings than they now have, the principals of these schools have lent their hearty approval and in some cases have initiated the feature.

Time was, not so very long ago, that municipal business was supposed to be left to the elective and appointive officers, and it seemed to be deemed unnecessary that the citizen should be concerned about it, except perhaps, at tax-paying time. This, however, is a day of enlightenment and under commission government, it is my earnest hope that the affairs of the public shall be understood by the people. Lack of adequate information frequently brings about friction, turmoil and therefore loss of time and money.

The business of the city is the business of the people; the Council is the public's board of directors. The closer into touch we may come to the citizens, the better will be their understanding of our purposes in the administration of their affairs and in the expenditure of their funds while the sacred trust imposed upon us shall continue. Knowledge of the inside workings of the Council, and illuminating information of what is being done at the City Hall and why, will work to the betterment of all concerned.

To the end that there may be a means of disseminating general official information to the public, and of thereby bringing the people into closer touch with City affairs, I recommend that the Council authorize the enlargement of the present Health Bulletin to include news of other departmental activities.

During the year there have been no changes of note in the personnel of the City's chief officers. The membership of the Commission of Public Docks remains the same, Honorable Ben Selling and C. B. Moores having been reappointed by me; the membership of the Civil Service Board is unchanged; I appointed as a board of motion picture censors, Mrs. Elmer B. Colwell, Mrs. Millie R. Trumbull, Mrs. A. C. Newill, Mrs. Sol Hart and Mrs. A. M. Gray.

Relative to the work of the Commission of Public Docks, I wish to call attention to its great importance to this port. From a commercial standpoint, it cannot be too strongly urged that all possible assistance be given the members in their efforts to make Portland Harbor equal to any. Without adequate docking facilities, the city cannot hope to compete with others and will be compelled thereby to lose prestige and a great opportunity. Whenever it becomes necessary for additional funds with which to work out ample plans to handle the enormous trade that will be ours only if we are prepared to care for it, I trust that they will be forthcoming. Economically and efficiently expended, they will return to the people many fold the sums put into the investment.

In my opinion, there should be a very careful checking over of the efficiency system by the Council, with a view to ascertaining its merits and its faults, so that should it be deemed wise, such changes as may be found necessary to make it workable and uniform in every department, may be decided upon. The plan, while having its good points, is imperfect and it seems to me should have the attention of the Commission and receive whatever amendments are necessary to make it a means of correctly keeping the records of municipal employes, or should be abolished.

The Civil Service Board and the Council should, it seems to me, join in an effort to eliminate as much as may be found desirable in order to make more simple and workable the system of efficiency records, as well as to eliminate as much as possible all features that interfere with rapid dispatch of the public business. There should, I feel, be as few classifications as it is possible to make, thus doing away with many examinations now held under existing conditions. I recommend that this subject receive the careful consideration of the Council.

A matter which is of more than departmental importance is that of the public morals; it concerns every resident of the city and even more than that. During the year an aggressive campaign was

carried on against immoral establishments, such as saloons, grills and so-called hotels, the proprietors of which were found to be constant violators of the laws. I take this opportunity with pleasure to thank the members of the Council for unanimously backing this work to the limit, it being possible in the circumstances to permanently close a list of very objectionable places. Several resorts which had flourished here for many years are now dark as a result of the determined efforts of the police, reinforced by the Council.

In this connection, I wish to speak of another subject, also of great general importance. It is concerning the proposed detention home for unfortunate women. Modern methods must be brought into requisition in this regard if we are ever to make any real progress toward the elimination of the social evil in our city.

Last year the project received the endorsement of the Council to the extent of an appropriation of \$15,000 and out of that sum \$8000 was expended for a site, near the County Farm, in Multnomah County, within sufficiently reasonable distance of Portland as to make it desirable for the purpose.

At the present time, the city has nothing to offer women taken into custody by the police one way or another, save and except the jail or a fine or both; neither of which, as I see it, works a lasting good. With a properly equipped home and farm, however, there will be something worth while to hold out to them as an inducement to better lives and if it proves possible to save but one out of thousands that may be sent there through the coming years, it will have been justified. This is a work that should have the hearty approval and co-operation of all. It is planned to provide enough work for the inmates to keep them busily occupied in ways that will be beneficial to them and that will fit them to become useful members of society.

Closely allied to this subject is that of handling the criminal and non-criminal male element, with which every large city must cope. Especially in the winter does this become a grave problem. To jail these men is but to give them a treat, in most instances, for then they are cared for perhaps better than outside, with but little or no labor to as much as repay the city for their keep. The city owns no rockpile, neither has it any other means of employing the class referred to, and it would seem to me to be an opportune time for the Council to consider a method for so doing and in this connection, it may be added that in some places work-houses have been provided and have proved of great benefit to communities in ridding them of the idle and vicious and even bringing in revenue over and above operating expenses. I see no reason why this might not be applied to Portland.

One of the most important features of administering the public business is to constantly guard the welfare of the people against the vicious elements and also to protect the youth against the pitfalls and snares that otherwise surely will be laid; not only should the city provide means of taking care of the criminal or criminally inclined, but it occurs to me, it should furnish those means necessary to prevent perversion of the boy and girl, such as ample parks and playgrounds for the communities of our population. One dollar expended for a place of amusement or recreation for children, is

MAYOR'S MESSAGE

worth \$100 put into reform schools, jails and penitentiaries. It is true these cost some money, but to my mind they are investments of the first class, and should be made in sufficient amount as to make it impossible for anyone to charge the municipality with neglect in this regard. We have made an excellent start and should continue the course to perfection.

With a perfected system of preventive plans, plus an adequate corrective course such as mentioned, Portland would be able to handle in an able manner all of the problems arising in this regard in a thoroughly modern manner, to the everlasting credit of the city and the benefit of her citizens, big and little.

Yours very truly,

H. R. ALBEE, Mayor.

ANNUAL REPORT
OF THE
DEPARTMENT OF
PUBLIC SAFETY

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

DEPARTMENT OF PUBLIC SAFETY

H. R. ALBEE
COMMISSIONER

BUREAU OF FIRE—

B. F. DOWELL, Chief
JAY W. STEVENS, Fire Marshal

BUREAU OF POLICE—

JOHN CLARK, Chief

BUREAU OF HEALTH—

M. B. MARCELLUS, M. D., Health Officer

MUNICIPAL COURT—

JOHN H. STEVENSON, Judge

POUND BUREAU—

BOYD R. WELCH, Poundmaster

HARBOR PATROL—

JACOB SPEIER, Harbormaster

BOARD OF MOTION PICTURE CENSORS—

MRS. E. B. COLWELL, Secretary

BUREAU OF FIRE

Hon. H. R. Albee, Mayor and Commissioner of Public Safety:

I respectfully submit this report of the operation and maintenance of the Bureau of Fire for the year ending November 30th, 1914, together with my recommendations for the year 1915.

The brief financial report I am submitting herewith shows the total expenditures for the Bureau to have been \$567,861.80. This is considerably less than the expenditures for the last fiscal year and I feel that it is evidence of the economical basis on which the Bureau is run.

I would like also to call your special attention to the exhibit of losses and other figures relative to the fires for the period covered by this report. The fire loss, which has been steadily growing for the last few years, has, during this period, reached the amazing amount of \$1,762,493.46, this amount being double the loss of any previous year in the city's history. In spite of the fact that new apparatus has been put in service, better equipment added and the fire fighting force increased until the Bureau of Fire is more efficient than ever, the fire loss reached about \$6.67 per capita, proving that no matter how efficient the fire fighting force may be and how well equipped, no material reduction in fire losses can be expected until the citizens begin to feel their own responsibility and give us their aid by preventing fires. The average annual per capita fire loss of many of the foreign cities is about 30 cents and when one compares this to our \$6.67, the carelessness of our citizens with fire is shown us in no uncertain light. The need of a fire prevention movement has been very definitely demonstrated and the efforts of this Bureau will be strongly exerted towards the establishment of a fire prevention Bureau for the carrying on of any campaign of education that will tend to reduce the fire losses.

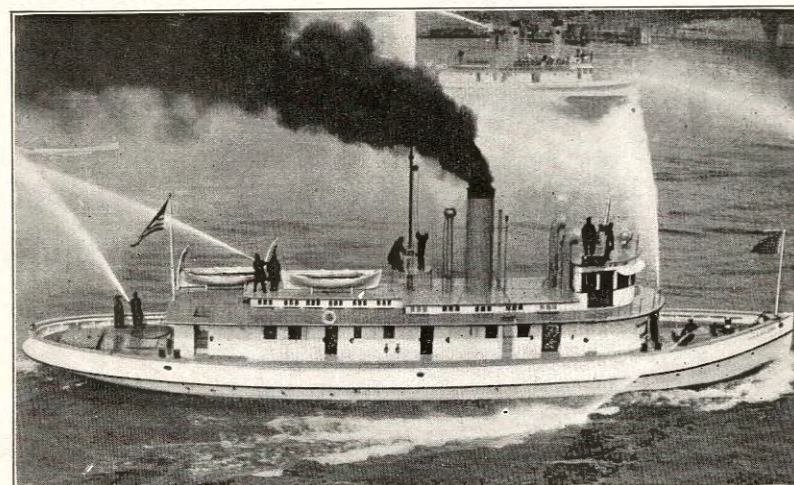
A little start was made along the line of education for fire prevention in the way of fire prevention exhibits, one of which was presented at the Portland 1914 conference at Reed College in the early summer, and another at the Manufacturers and Land Products Show at the Armory in October. Much attention was paid to both of these exhibits by the public and we have every reason to feel that they proved the value of such efforts to educate for fire prevention.

Among improvements to be noted are the addition of a Christie Front Drive Tractor which was attached to an extra first-class engine and placed in service at Engine Co. No. 1; the installation of six street semaphores to aid in clearing streets for the passage of fire apparatus; and the installation of a number of fire alarm boxes. The dock for the fireboat David Campbell at the foot of East Washington street was remodeled and the municipal shop was also given quarters on this dock. Fireboat George H. Williams was completely overhauled and will be a valuable addition to our waterfront fire fighting equipment.

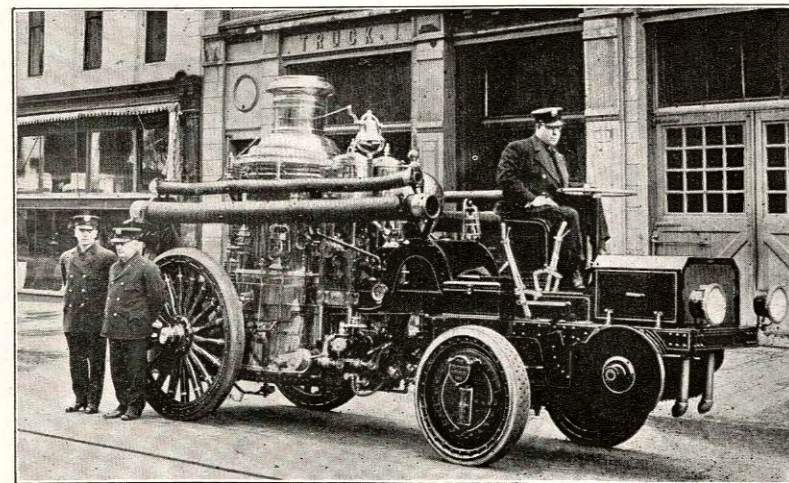
There were several requests in the 1915 budget of this Bureau that

deserve mention. At least ten horses are needed to replace crippled and disabled ones now in service; auto apparatus should be provided for Truck Companies No. 2, 5, and Chemical 3, as well as an auto tender for the fireboat George H. Williams; front drive tractors should also be attached to Engine 2, 3, 5, 24, and Truck 3. There are too, a number of fire houses that are very much dilapidated and should be rebuilt. Engine 6, Engine 20, Engine 5, Engine 1 and Truck 1 being most in need of such improvement. A new station should also be established at Woodstock. The putting in service of the George H. Williams will necessitate the purchasing of a site and the building of a fire station for this company. A volunteer house is much needed at Fulton. We are finding more and more the need of some adequate place for drilling the firemen and as proper training cannot be given without a drill-tower, I want to urge upon you the necessity of providing this for us.

In closing, I want to extend to you my most sincere thanks for the many courtesies and the support you have extended to me and to the members of the Bureau of Fire during the year 1914. We have appreciated all the support you have given us and trust that the service of all of us during the coming year may be such as to deserve the continuance of your support.



FIRE BOAT GEO. H. WILLIAMS RECENTLY COMPLETELY OVERHAULED AND EQUIPPED FOR SERVICE



FRONT DRIVE TRACTOR ATTACHED TO EXTRA FIRST SIZE ENGINE STATIONED AT ENGINE CO. NO. 1 FOURTH AND YAMHILL

EXPENDITURES AND FINANCIAL STATEMENT

	Total Appropriations Including Transfers, Credits, etc.	Total Incumbrance.	Unincumbered Balance.
Personal Service.....	\$ 469,599.11	\$ 457,334.69	\$ 12,264.42
Supplies.....	40,409.84	34,122.36	6,287.48
Material.....	6,268.41	4,169.43	2,098.98
Equipment.....	47,872.10	11,856.82	36,015.28
Construction and extension.....	15,000.00		15,000.00
General repairs.....	51,028.46	48,605.46	2,423.00
Transportation and communica- tion.....	8,224.31	7,553.64	670.67
Contingencies.....	3,157.36	3,102.50	54.86
Fixed charges.....	1,227.73	1,116.97	160.76
Totals.....	\$ 642,837.32	\$ 567,861.87	\$ 74,975.45

SUMMARY OF ORGANIZATION, EQUIPMENT, ETC., OF BUREAU OF
FIRE FOR YEAR ENDING NOVEMBER 30, 1914

Chief Engineer.....	1	Machinist	1
Assistant Chief Engineer.....	1	Instrument maker.....	1
Battalion Chiefs	3	Blacksmith	1
Chief Clerk.....	1	Plumber	1
Clerks	2	Supply Driver.....	1
Auto Mechanician.....	1	Fire Boat Master.....	1
Fire Escape Inspector.....	1	Fire Boat Pilot.....	1
Relief Engineers.....	2	Fire Boat Engineers.....	4
Superintendent of Fire Alarm Tele- graph	1	Captains	34
Chief Operator.....	1	Lieutenants	41
Operators	5	Steamer Engineers.....	19
Linemen	3	Stokers, Truckmen, Hosemen and Pipemen	253
Master Mechanic.....	1		
Hydrantmen	2	Total.....	383

EQUIPMENT

Fire Boats	2	Hydrants	4,847
Auto apparatus	23 pieces	Cisterns	81
Horse drawn apparatus..	42 pieces	Fire Alarm boxes.....	296
Horse drawn apparatus in reserve	1 piece	Six Auxiliary Volunteer Fire Companies with 6 reels and 5700 feet of hose.	
One hundred and five horses.			
Hose	84,825 feet		

EXHIBIT OF LOSSES, VALUE OF PROPERTY, INSURANCE INVOLVED, INSURANCE PAID, ETC. FISCAL YEAR OF 1914

MONTH.	Value Involved in Fires.		Loss.		Loss in Which Fire Did Originate.		Loss in Which Fire Did Not Originate.	
	Building.	Contents.	Building.	Contents.	Building.	Contents.	Building.	Contents.
	\$	\$	\$	\$	\$	\$	\$	\$
December	275,275.00	439,385.00	15,770.35	11,102.87	15,770.35	11,102.87		
January	254,580.00	451,900.00	37,238.43	90,118.18	37,238.43	90,118.18		
February	207,720.00	103,925.00	27,379.40	27,379.40	27,379.40	27,379.40		
March	1,259,645.00	768,043.24	227,224.01	50,756.50	104,840.01	375,168.50	55.00	100.00
April	200,475.00	80,200.00	16,335.98	21,634.01	12,098.48	11,339.01	129,372.80	135,588.00
May	1,035,103.60	234,865.00	41,687.20	15,773.88	12,098.48	9,647.33	4,227.50	10,295.00
June	280,559.65	335,481.00	71,156.70	116,200.60	65,054.91	6,101.79	17,356.09	6,132.35
July	731,620.00	404,469.32	177,018.04	189,234.69	156,165.09	110,344.00	6,101.79	5,856.54
August	597,217.00	272,274.00	38,894.58	27,955.98	34,693.82	174,614.77	20,852.95	14,619.92
September	760,510.00	233,931.40	26,184.85	9,789.93	25,459.85	9,644.33	4,200.76	3,909.50
October	320,658.00	81,350.00	11,813.66	39,092.29	11,813.66	39,092.29	725.00	145.00
November	256,055.00	58,510.00	15,076.15	12,107.45	14,758.95	11,407.45	317.20	700.00
Totals	\$6,229,418.25	\$3,484,333.96	\$691,341.79	\$1,071,151.67	\$514,992.70	\$893,715.36	\$176,419.09	\$177,436.31

EXHIBIT OF LOSSES, VALUE OF PROPERTY, INSURANCE INVOLVED, INSURANCE PAID, ETC. FISCAL YEAR OF 1914—Continued

MONTH.	Insured For.		Insurance Paid.		Confined to Building in Which It Started.		Confined to Floor in Which It Started.		Extended to Adjoining Building.		Extended Beyond Adjoining Building.		Extinguished by Water.		Extinguished by Chemical.	
	Building.	Contents.	Building.	Contents.	Building.	Contents.	Building.	Contents.	Building.	Contents.	Building.	Contents.	Building.	Contents.	Building.	Contents.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
December	198,850.00	322,000.00	15,070.35	8,987.87	49	29	29	29	2	2			29	19		
January	174,200.00	339,550.00	34,635.43	86,029.18	41	41	26	26	2	2			28	17		
February	118,300.00	71,690.00	8,179.76	23,632.49	34	34	25	25	2	2			23	18		
March	1,000,360.85	603,426.30	237,479.83	454,043.94	67	67	40	40	3	3	1	1	62	24		
April	191,475.00	50,675.00	13,004.48	19,983.10	41	41	24	24	1	1			37	20		
May	432,303.60	147,050.00	33,982.20	9,802.68	55	55	36	36	2	2			52	28		
June	211,732.50	199,783.00	68,325.05	34,266.60	55	55	36	36	5	5	2	2	48	22		
July	559,210.00	331,947.60	146,046.01	175,605.47	43	43	20	20	1	1			102	18		
August	415,608.77	206,519.88	32,384.63	21,242.35	37	37	31	31	2	2			104	33		
September	429,850.00	168,850.00	24,382.83	8,074.35	30	30	17	17	6	6			30	15		
October	228,280.00	62,850.00	9,290.66	20,413.49	37	37	19	19					29	13		
November	173,891.70	37,850.00	14,576.06	14,572.45	44	44	27	27	4	4			35	15		
Totals	\$4,125,341.42	\$2,541,401.78	\$637,557.31	\$832,604.60	573	573	323	323	32	32	7	7	579	242		

BUREAU OF FIRE

FIRE LOSSES, 1904 TO 1914, INCLUSIVE

In 1904 total losses amounted to	\$ 414,899.89
In 1905 total losses amounted to	860,420.14
In 1906 total losses amounted to	503,911.39
In 1907 total losses amounted to	424,183.44
In 1908 total losses amounted to	795,755.91
In 1909 total losses amounted to	614,409.27
In 1910 total losses amounted to	904,947.49
In 1911 total losses amounted to	824,667.65
In 1912 total losses amounted to	809,983.46
In 1913 total losses for eleven months ending Nov. 30 amounted to	907,532.87
Year ending Nov. 30, 1914, losses amounted to	1,762,493.46

CAUSE OF FIRES AND ALARMS

Acid	1	Lamp explosion	8
Accident	6	Leaking gas	7
Back-fire	18	Matches	33
Back draught	9	Matches—children	14
Bonfires	18	Overheated kiln	1
Burning brush	54	Overheated furnace	14
Burning flue	414	Overheated flue	2
Burning grass	176	Outside city limits	9
Burning grease	11	Overheated film	2
Carelessness	18	Overheated smoke house	3
Chemical explosions	2	Overheated gas plate	4
Cigarettes	12	Overheated stove pipe	14
Cigars	23	Overheated stove	41
Coal oil explosions	7	Overturned stove	1
Candles	2	Overturned lamp	8
Defective furnace	7	Pitch pot	7
Defective flue	52	Rubbish	9
Defective fireplace	11	Smoking stove	3
Defective gas pipe	1	Smoke	9
Defective wiring	24	Slacking lime	1
Defective stove pipe	3	Smoking in bed	7
Escaping steam	8	Smoking furnace	11
Electric wires	17	Smoldering fire	56
Electric iron	10	Sparks	49
False alarms	187	Sparks, chimney	71
Friction	4	Sparks, furnace	2
Fumigating	5	Sparks, locomotive	2
Fuel oil explosion	2	Sparks, fireplace	1
Gas explosion	1	Spontaneous combustion	27
Gas stove	6	Supposed incendiary	14
Gasoline explosion	19	Torch	1
Gasoline	14	Trolley broken	3
Gas jet	1	Turpentine	1
Hot ashes	21	Unknown	246
Hot journal	1		
Incendiary	8	Total	1854

NUMBER OF ALARMS BY MONTHS

December	150	June	138
January	120	July	228
February	145	August	277
March	174	September	124
April	128	October	94
May	134	November	148

Total number of Alarms for year ending November 30th, 1914, 1855.

REPORT OF SUPERINTENDENT OF FIRE ALARM TELEGRAPH DIVISION

The operation of the outside circuits including overhead and underground was very satisfactory, very little line trouble on overhead wires was experienced. The central office equipment operated perfectly.

During the year the installation of a substation and battery room has begun and the necessary batteries and motor-generator machines have been purchased and installed but the changes in the overhead lines have not yet been completed. This battery room and equipment will take care of all circuits and Fire Alarm boxes north of Sullivan Gulch and will eliminate the possibility of an interruption of service in that it does away with the necessity of all these circuits crossing the river in our submarine cable to the West Side central office.

The following Fire Alarm boxes were installed during the year:

Box 153—12th and Columbia St.	Box 458—E. 42nd and Gladstone
Box 165—19th and Morrison St.	Box 459—E. 41st and Holgate St.
Box 185—31st and Vaughn	Box 462—64th and Foster road
Box 186—Rugby and Franklin	Box 463—64th and 50th Ave. S. E.
Box 189—32nd and Serpentine	Box 464—62nd and Foster road
Box 195—16th and Davenport	Box 465—58th and Foster road
Box 196—26th and Ella St.	Box 467—52nd and Foster road
Box 265—E. 3rd and Hawthorne	Box 468—45th Ave. and 59th St.
Box 287—E. 7th & Hawthorne	Box 469—45th Ave. and 52nd St.
Box 375—E. 14th and Holman	Box 471—67th and Division
Box 376—E. 10th and Ainsworth St.	Box 472—60th and Division
Box 454—41st and E. Sherman St.	

Out of the appropriation of \$5000.00 for the installation of semaphores, seven were purchased and six were installed at a cost of about \$1500.00. They have been in operation for several months and have worked satisfactorily and I consider them a great help in clearing the streets for the apparatus in passing their locations. As the unexpended balance reverts back to the general fund, I would recommend that sufficient appropriation be made the coming year for the purchase of seven more.

Owing to the new extensions on the Fire Alarm system and the increased amount of work accumulating it will be necessary to have additional permanent help also in the central office operating room on account of the yearly vacations and days off for operators. A detail from the fire companies has been necessary. To obviate this necessity for a detail and the time required for the training of an operator to be efficient in the manipulation of central office equipment, I would recommend the appointment of an additional permanent operator and lineman be made the ensuing year.

I would also recommend the purchase of twenty-five fire alarm boxes for installation the coming year.

We have on hand fifty fire alarm boxes of a type made some years ago that could be overhauled and with the addition of some new parts and some shop work, made into the most modern type of succession box. I would recommend that sufficient funds be made available for this change.

Very respectfully,

B. F. DOWELL,
Chief Engineer.

BUREAU OF POLICE.

Hon. H. R. Albee, Mayor and Commissioner, Department of Public Safety, Portland, Oregon.

Dear Sir: I have the honor to submit herewith my second annual report for the fiscal year ending November 30th, 1914.

It is gratifying to note the increase in the volume of work accomplished by this Bureau, taking into consideration that the numerical strength of the force is practically the same as it has been for a number of years.

The Officers do commendable work and the Captains are to be complimented on their discipline and tact in handling their men. Taken as a whole, a more intelligent, gentlemanly force of men cannot be found. The Detectives are men of long experience and have performed valiant work in the past year. It is through their tireless efforts that we have been able to make so good a showing in the capturing of criminals. They are hard workers and are always ready and willing to be called for duty at all times.

The Detective and Women's Protective Divisions have separate reports attached and each has done excellent work, as their reports will show.

All Divisions of this Bureau are now located in the new Municipal Police Headquarters, located at Second and Oak streets, which greatly increases the efficiency of all concerned. Our new building is complete in every respect, well furnished and equipped with every modern convenience. Our jail, which has just been completed, is the best on the Pacific Coast.

During the past year we have compiled a new Police Manual or Rules and Regulations which, though similar to the old Manual, has been brought up-to-date and is complete in every detail.

Considerable motor equipment has been added which is a wonderful help, considering the steady growth of the city. A White seven-passenger type touring car, used by the Chief and for emergency work; a Federal type patrol wagon, which was badly needed, five old motorcycles were replaced with new ones and a Ford five-passenger type touring car was added for exclusive use in the Women's Protective Division.

We take this means of thanking the Honorable Mayor and the Commissioners for their just consideration of our needs and requirements and the hearty co-operation that is given us at all times, which greatly facilitates the work at hand.

Attached hereto and made a part of this report, are statistical figures and reports showing the strength of the force, appropriations and expenses and work accomplished in the different divisions of the Bureau of Police of the Department of Public Safety.

Very truly yours,

JOHN CLARK,
Chief of Police.

IN MEMORIAM

RICHARD W. BARTER

Appointed September 15, 1892.

Died January 3, 1914.

ALBERT W. MOE

Appointed March 12, 1912.

Accidentally killed January 9, 1914.

CLIFTON H. KING

Appointed August 14, 1894.

Died March 10, 1914.

JAMES R. WHITE

Appointed March 13, 1910.

Run over by an auto truck and killed
while on duty November 17, 1914.

NUMERICAL STRENGTH OF THE FORCE

Total number employees, 1913....	298	License Inspector	1
Total number of employees, 1914..	304	Stenographer	1
Appointed, regular.....	30	Stenographer	1
Appointed, temporary.....	6	Detective Sergeants	6
		Detectives	21
Total	36	Sergeants of Police.....	14
Dismissed	21	Patrolmen	232
Resigned	5	Chauffeur	1
Died	4	Engineers Harbor Patrol.....	3
		Grappler Harbor Patrol.....	1
Total	30	Engineers City Jail.....	3
Chief of Police.....	1	Janitors City Jail.....	3
Captain of Detectives.....	1	Elevatormen City Jail.....	3
Captain of Police.....	1	Temporary Employees—	
Captains of Police.....	2	Sergeants (from rank of Patrol-	2
Matrons	2	men)	1
Supt. Women's Protective Division.	1	Patrolman	1
Assistant Supt. Women's Protective		Chief Clerk.....	1
Division	1	Assistant in Women's Protective Di-	1
Captain Harbor Patrol.....	1	vision	1
		Elevatorman, City Jail.....	1

MOTOR EQUIPMENT IN THE BUREAU

1 Pope-Hartford, 1912 Model Patrol Car.
 1 Federal, 1½-ton 1914 Model Patrol Car.
 1 Pope-Hartford, 1913 Model seven-passenger Touring Car.
 1 White 1913 Model seven-passenger Touring Car.
 6 Indian, 1913 Model Motorcycles.
 1 Harley-Davidson, 1914 Model Motorcycle.
 1 Ford, 1914 Model five-passenger Touring Car for exclusive use
 in the Women's Protective Division.
 12 Horses used by the Mounted Squad.

1914 Yearly Costs.		Appropriated for 1915.
Personal service	\$356,460.36	\$388,620.00
Materials and supplies.....	12,625.47	16,350.00
Equipment	7,372.89	2,641.00
Operating motor vehicles (including Harbor Patrol)	4,174.13	4,000.00
Repairing motor vehicles.....	2,297.57	2,350.00
Miscellaneous repair and janitorial service.....	739.47	680.00
Care of horses.....	3,521.56	3,500.00
Telephone and telegraph.....	1,524.15	1,700.00
Contingencies	1,569.51	2,400.00
Construction and extension (Detention Home).....	19,500.00	25,000.00
Totals.....	\$409,785.11	\$447,251.00

WOMEN'S PROTECTIVE DIVISION

This Division has been located just one year at Police Headquarters. Heretofore offices have been maintained outside the regular Bureau of Police. We have found that being located here has interfered to some extent with our protective and preventive work, as it has identified us more closely with the Bureau of Police.

It is difficult to impress upon the minds of the public that this Division carries two separate and distinct lines of work. First, the Protective and Preventive branch, for which the service was

organized; second, the Municipal Court Probation and Parole Branch. The girls coming under the protective division are not in any way associated with the court cases. They never see women who are incarcerated, their records are confidential and are kept in separate files.

The girls' detention room is a sleeping apartment connected with our offices. It is prettily furnished, and we have found it very convenient for the detaining of young girls until we can communicate with their parents or send them to the Juvenile Court.

During the year 1914 we have handled the cases of 731 new girls, which is the largest number the division has ever dealt with in one year. One hundred and fifty-five girls have been given after-care, 2,432 persons have come to the office for interviews, and we have made 604 special investigations, not including ordinary cases. The number of runaway or missing girls has greatly increased, being 111 in 1914 as compared with 75 the previous year. There have been 53 sick girls and 24 insane. One hundred and thirty-four cases have been sent to institutions, which includes hospitals, rescue homes, and state and county institutions. We have furnished 143 lodgings and 469 meals.

Under the Probation and Parole branch, we receive the women's docket every morning and attend those cases in court where we feel that we can be helpful, giving after care in these cases also. We have handled 266 court cases this year, as compared with 95 the previous year, and we have had on parole 61 girls, as compared with 17 in 1913, thus showing greater efficiency under the Morals Court plan.

The incidental expenses of the Division have amounted to \$484.29.

MRS. LOLA G. BALDWIN,
Supt. Women's Protective Division.

DETECTIVE DIVISION

SUMMARIZED MONTHLY STATEMENT OF CASES INVESTIGATED AND CLEARED UP DURING THE YEAR ENDING NOVEMBER 30, 1914

Cases	DECEMBER, 1913	Reported	Missing persons located	
Larceny cases	395			26
Larceny from person	15			584
Larceny by bailee	1			
Larceny by embezzlement	1			
Bad check cases	29			
Vagrancy	82			
Obtaining money by false pretense	1			
Hold-up	10			
Forgery	1			
Attempted arson	1			
Bunco cases	1			
Murder	2			
Suicides investigated	2			
Assault with deadly weapon	4			
Fugitives returned	3			
Fugitives arrested for outside	2			
Violating pawnshop ordinance	1			
Morphine and cocaine cases	7			
Larceny cases			362	
Larceny from person			16	
Larceny by bailee			8	
Larceny by embezzlement			1	
Bad check cases			16	
Vagrancy			36	
Obtaining money by false pretense			2	
Holdup cases			6	
Forgery			5	
Bunco cases			4	
Murders			2	
Suicides investigated			1	
Assault with deadly weapon			4	
Fugitives arrested for outside			5	
Fugitives returned here			4	

BUREAU OF POLICE

Pickpocket cases	2	Forgery	1
Assault with intent to kill	2	Vagrancy	5
Bigamy	1	Holdup cases	2
Fatal accidents	1	Pickpocket cases	1
Missing persons located	32	Bunco cases	4
	507	Obtaining money by false pret.	3

FEBRUARY, 1914

Larceny	311	Burglary	31
Larceny from person	17	Threat to kill	3
Larceny by bailee	6	Assault with dangerous weapon	2
Bad check cases	7	Runaways apprehended	5
Vagrancy	25	Selling liquor to minors	1
Safe cases	4	Defrauding an innkeeper	1
Holdup cases	5	Missing persons located	29
Obtaining money by false pret.	3		246
Forgery	1		

JUNE, 1914

Larceny	423	Larceny	138
Bunco cases	3	Larceny from person	4
Assault with deadly weapon	2	Larceny by bailee	2
Threat to kill	1	Bad check cases	5
Murder	1	Forgery cases	3
Contributing delinquent minor	1	Vagrancy	21
Fugitives arrested for outside	9	Holdups	4
Fugitives returned here	4	Pickpocket cases	5
Pickpocket cases	2	Pickpockets arrested	2
Suicides investigated	2	Bunco cases	8
Missing people located	19	Bunco men arrested	5
	423	Burglary	34

MARCH, 1914

Larceny	256	Threat to kill	1
Larceny from person	16	Assault with dangerous weapon	3
Larceny by bailee	1	Extortion cases	5
Larceny by embezzlement	2	Fugitives arrested for outside	5
Bad check cases	24	Fugitives returned here	6
Vagrancy	38	Missing persons located	25
Obtaining money by false pret.	2		272
Holdup cases	2		
Forgery	1		

JULY, 1914

Larceny	396	Larceny	169
Bunco cases	3	Larceny from person	4
Assault and robbery	3	Larceny by bailee	2
Threat to kill	1	Bad check cases	20
Assault and robbery	2	Vagrancy	79
Receiving stolen goods	6	Holdup cases	5
Interfering with officer	2	Burglaries	10
Burglars arrested	3	Threat to kill	3
Cocaine in possession	1	Assault and robbery	2
Pawnbrokers, no license	3	Receiving stolen goods	6
Carrying concealed weapons	3	Interfering with officer	2
Obtaining money by false pret.	4	Burglars arrested	3
Attempted safe robbery	1	Cocaine in possession	1
Fugitives returned	1	Pawnbrokers, no license	3
Missing persons located	24	Carrying concealed weapons	3

APRIL, 1914

Larceny	197	Obtaining money by false pret.	2
Larceny from person	8	Forgery	3
Larceny by bailee	3	Bunco cases	3
Bad check cases	15	Assault and robbery	7
Vagrancy	71	Threat to kill	1
Safe cases	3	Fugitives arrested for outside	3
Holdup cases	3	Pickpocket cases	4
Obtaining money by false pret.	2	Runaways apprehended for out.	4
Forgery	3	Missing persons located	25
Bunco cases	3		353

MAY, 1914

Larceny	147	Larceny	197
Larceny from person	6	Larceny from person	4
Bad check cases	6	Bad checks	11
		Vagrancy	20
		Holdups	4
		Burglaries	22
		Safe burglaries	1
		Threat to kill	4
		Peddling morphine and cocaine	2
		Morphine and cocaine in possession	6
		Runaways apprehended	2
		Assault with deadly weapon	3
		Carrying concealed weapons	2

TABULATION OF BERTILLON AND FINGER PRINT RECORDS

Value of stolen property recovered during year.....	\$35,993.65
Missing persons located during year.....	322
Foreign criminal circulars indexed and filed approximately.....	2500

ARRESTS MADE

Accepting earnings of a prostitute	9	After hours	376
Automobile no light	95	Adultery	14
Automobile muffler open	99	Assault and battery	319
Automobile exceeding speed limit	253	Assault with a dangerous weapon	3
Automobile no license	66	Assault with intent to kill	4
Automobile on sidewalk	3	Assault armed with dangerous weapon	3
Allow minor in saloon	3	Assault and rob, armed with dangerous weapon	15
Arson	1	Burglary	82
Allow minor in poolroom	7	Burlar tools in possession	1
Allow chickens to run at large	11	Bench warrants	3
Allow stock to run at large	6	Bigamy	1
Attempt suicide	15	Bribery	
Attempt to commit robbery	1		
Attempt to commit rape	2		

Contempt of court.....	2	Obstruct street, no red light.....	58
Cruelty to animals.....	45	Obtaining money, false pretense..	1
Carrying concealed weapon.....	77	Obtaining goods, false pretense..	29
Cocaine in possession.....	4	Opium in possession.....	48
Conduct business no license.....	35	Peddling, no license.....	3
Conduct bawdy house.....	59	Place wife in house of prostitution	17
Conduct disorderly house.....	7	Prisoners en route.....	3
Conduct lottery game.....	60	Polygamy.....	6
Conduct opium joint.....	12	Pool room open after 1 o'clock	1
Conduct gambling game.....	91	A. M.	73
Contributing to delinquency of		Perjury.....	2
minor.....	35	Pool room open after hours.....	2
Commit nuisance.....	2	Point gun at another.....	1
Chauffeur no license.....	4	Reckless driving.....	3
Common prostitute.....	1	Ride bicycle on sidewalk.....	16
Drunkenness.....	6906	Ride motorcycle on sidewalk.....	3
Drunk and disorderly.....	485	Ride bicycle, no light.....	5
Disorderly conduct.....	890	Resisting an officer.....	13
Disorderly by fighting.....	167	Rape.....	12
Destruction of personal property..	4	Runaway children.....	2
Defrading an innkeeper.....	55	Refuse to move on.....	5
Discharging firearms in city limits	17	Sell short weights and measures..	65
Dangerous assault.....	16	Sell liquor, no license.....	22
Demented.....	109	Sell impure foods.....	45
Deserters.....	5	Sell liquor on Sunday.....	30
Expectorate on sidewalk.....	4	Sell cigarettes to a minor.....	11
Eng She in possession.....	15	Sell liquor to a minor.....	5
Extortion.....	2	Sell liquor persons already intoxi-	1
Fugitives from justice.....	81	cated.....	17
Frequent opium joint.....	45	Sell lottery tickets.....	10
Forgery.....	54	Smoke opium.....	214
Gambling and visiting gambling		Sell morphine, no prescription.....	4
house.....	155	Sick and destitute.....	7
Held as witness.....	245	Scavenger wagon, no license.....	25
Held for investigation.....	454	Scavenger wagon, leaking.....	5
Highway robbery.....	8	Safe keeping.....	34
Indecent act.....	10	Sodomy.....	6
Indecent and immoral act.....	158	Soliciting for prostitution.....	2
Indecent exposure.....	24	Sell tobacco to a minor.....	7
Insane.....	2	Seduction.....	1
Illegal election practice.....	7	Stolen goods in possession.....	37
Impersonate an officer.....	8	Saloon open after 1 o'clock A. M. .	106
Interfere with an officer.....	20	Sturdy beggars.....	2
Inmate of a bawdy house.....	22	Threat to commit murder.....	74
Junk dealer, no license.....	4	Trespass.....	81
Keep dog, no license.....	187	Threaten to kill.....	37
Knowingly utter a forged check..	3	Throw rubbish in street.....	6
Leave team untied.....	30	Use profane language.....	3319
Lottery tickets in possession.....	44	Vagrancy.....	317
Larceny.....	502	Violate city ordinance.....	5
Larceny in a store.....	23	Violate pawn brokers ordinance..	13
Larceny from the person.....	37	Vicious dog at large.....	42
Larceny in a dwelling.....	37	Visit bawdy house.....	45
Larceny by bailee.....	44	Visit lottery game.....	668
Larceny by embezzlement.....	11	Visit gambling game.....	20
Lewd cohabitation.....	33	Violate mashers ordinance.....	221
Lost children brought to the station	99	Violate vehicle ordinance.....	26
Injured persons assisted.....	151	Violate bill posters ordinance.....	351
Murder.....	8	Violate traffic ordinance.....	114
Manslaughter.....	1	Violate building ordinance.....	2
Minor in a saloon.....	4	Violate child labor law.....	1
Motorcycle speeding.....	84	White beating.....	17
Motorcycle, no light.....	10	White slavery.....	66
Minor in a pool room.....	26	Minor, cigarette in possession.....	25
Morphine in possession.....	27	Held for Juvenile Court.....	3
Mayhem.....	2	Violate parole.....	2
Non-support.....	1	Aid prisoner to escape.....	1
Obscene pictures in possession.....	6	Wearing emblem unlawfully.....	1
Obscene literature in possession..	2	Kidnapping.....	29
Obstruct street car traffic.....	5	Held for U. S. authorities.....	
Obstruct sidewalk.....	20	MISCELLANEOUS.....	
Obstruct street.....	20	Autos reported stolen.....	37

DEPARTMENT OF PUBLIC SAFETY

Auto reported stolen and found	264	Municipal court receipts.....\$37,950.25
Ambulance calls	277	Board of prisoners, City Jail.. 4,912.44
Accidents	811	
Dead bodies	271	
Dead animals	1110	
Defective lamps, arc.....	1812	
Fire alarms given.....	639	
Injured persons assisted.....	771	
Lost children reported.....	1248	
Nuisance notices served.....	1237	
Prisoners sent to Linnton quarry	623	
Sidewalks reported for repair.....	737	
Street obstruction reported...	1361	
Motorcycle calls	2141	
Suicides reported	78	
Water running to waste.....	662	
Wagon calls	10,254	

SUMMARY

Number of officers belonging to station	304
Number of arrests.....	22188
Number of males.....	17643
Number of foreigners.....	9394
Number of females.....	1374
Number of officers absent from duty	311
(1112 days)	
Number of minors (males).....	1091
Number of minors (females)...	129
Males provided with lodgings..	3176
Females provided with lodgings.	1

BUREAU OF HEALTH

To the Honorable Mayor and Commissioner of Public Safety:

Dear Sir: Some very interesting work was done by the Bureau of Health during the year 1914. Many campaigns for improvement of health conditions were inaugurated and splendid results realized. I beg to submit the following report of the various activities of this Bureau, giving statements on the various lines of work and a number of tables of statistics compiled in such form as to make ready comparisons between conditions as they exist now and last year.

MORTALITY

Taking from the city's mortality table the figures show that the crude mortality rate from all causes for 1910 was 11.2 per 1000, while for 1913 it was only 9.5 per 1000. The death rate from scarlet fever was .01 per hundred thousand for the former year and .003 for the latter. For typhoid fever .02 and .007. In nearly all the communicable diseases there is a decrease in mortality.

In comparing the infant death rate for 1910 with that for 1914, a reduction is shown, .07 per hundred thousand for the former year and .05 for the latter.

MEDICAL INSPECTION OF SCHOOLS

This work, as regards the prevention of contagious diseases, has gone along very well, considering the limited number of workers allowed by the city, (four physicians on part time and one nurse on whole time), and the large number of school children registered during the year, over 30,000 in the public schools and about 2,500 in the parochial and private schools.

The minor contagions, as ringworm, impetigo, "itch" and "pink eye" have practically disappeared from our schools, these being common six years ago. The number of cases of vermin has markedly decreased in the past six years.

The major contagions are harder to handle than in former years, due, I believe, to the "movie habit," and yet the percentage has decreased.

In regard to children with physical or mental defects, it is impossible for the present force to give this important branch of our work the attention needed. I believe that about 40 per cent of our children have some physical defect, which can be corrected. This will give us between 13,000 and 14,000 children having some defect, including those with defective teeth.

To do this work properly takes time. Besides the time taken to go over each child there will be about 14,000 notices to parents to make out, and if one only writes in the child's name, the name of the school, the date and the defect, it piles up an immense amount of clerical work, even without keeping a record. One of the faults of our present system is the lack of records.

In addition to this, home calls should be made in a large number of cases. This work is largely educational and some parents rather resent such instruction. A personal call from the nurse usually puts them right. A great many of these people are unable to pay

for the necessary medical care and for these, provision should be made.

For the improvement of the service I have the following recommendations to make:

1. The number of inspectors should be increased to eight.
2. The number of nurses should also be increased to eight.
3. One inspector to be appointed Chief Inspector, and have immediate supervision of the school work.
4. The Chief Inspector to be employed for the entire year on full time.
5. One nurse to be employed the entire year.
6. Seven inspectors and seven nurses to be employed only during the school year.
7. The Chief Inspector to inspect the parochial, private and summer vacation schools, and to have immediate charge of the records.

SCHOOL NURSE

The duties of the school nurse consist in visiting the schools, making superficial inspections and interviewing the pupils reported by the medical inspectors; in following up at home those cases which do not receive prompt attention. If the neglect is through inability in the home to provide such treatment, the nurse, if possible, arranges for necessary treatment and if advisable to accompany the child to the Dispensary, Hospital or office for treatment:

Number of pupils examined.....	14,894
Visits to homes of pupils.....	595
Number of visits to schools.....	346
Number of pupils referred to specialists.....	188
Pupils taken to Dispensary.....	46
Number of cases reported to charity associations.....	91
Juvenile court cases.....	2

SCHOOL INSPECTION FOR THE YEAR 1914

Examined.....	153,056	Orthopedic defects.....	32
Scarlet fever.....	6	Pediculosis.....	532
Smallpox.....	9	Skin diseases—contagious.....	369
Tuberculosis.....	2	Skin diseases—non-contagious.....	223
Measles.....	13	Vaccinations.....	387
Chickenpox.....	103	House calls.....	362
Mumps.....	2	Cultures.....	11,171
Whooping cough.....	1	Goitre.....	40
Tonsils and Adenoids.....	3,785	Malnutrition.....	28
Defective vision.....	281	Enlarged glands.....	11
Defective hearing.....	73	Conjunctivitis.....	46
Defective teeth.....	10,955	Paralysis.....	12
Defective mentality.....	26	Miscellaneous.....	21

DENTAL CLINIC

The dental clinic has done excellent work in caring for the school children of the poor in the city. The work is materially increasing, which will necessitate a larger force in the future, as the present one day a week is insufficient to care for the increasing demand.

Three hundred and ten children were treated. The work done embraced mostly filling, extracting and cleaning of the teeth. Instructions in the care of the teeth were given. The number of cases treated has increased fully 25 per cent over last year. We are making appointments five or six weeks ahead.

There has been some undue advantage taken of the free dental

work this year by people who could afford to pay for the services, but this has been eliminated as far as possible. This could be entirely overcome by further care on the part of the principals of the schools when they issue permits to the children. If one-half day for six days of the week could be devoted to the clinic it would be advantageous, and would only increase the expense to possibly a little more than double the present amount.

This clinic has done a great deal for some of the suffering poor children of Portland during the past year; some remarkable improvements have been observed in many of the patients. Attached herewith is a tabulation of the work done.

DECEMBER, 1913, TO DECEMBER, 1914

Number of patients.....	568	Number of treatments.....	142
Number of fillings.....	821	Number of cleanings.....	80
Number of extractions.....	289	Number of new nerve canals filled	13

QUARANTINE SUBDIVISION

A comparison of the contagious reports for the quarantinable cases shows a marked decrease of all the contagious diseases with the exception of diphtheria. The increase in this one disease I am sure is not due to any lack of effort on our part. We were compelled to combat two near-epidemics in the schools, namely: Vernon and Montavilla. In the Vernon district the first information we had of the disease was the report of a death in the family of one of the children attending school.

The school was immediately closed and cultures taken from every child. After a report of the cultures was received, thorough fumigation was resorted to and no cases have been reported from this district for the last two months. In the Montavilla district a malignant type of the disease occurred. A throat culture was taken from every pupil in the school, over 700 in number and the school closed for fumigation, which consisted of the sprinkling of a 40 per cent solution of formaldehyde over the floors, the school being kept closed for three days. The result of the analysis showed nine children as being diphtheria carriers, which were quarantined, until two successive negative cultures were obtained. Of the nine cases mentioned above only one active clinical case developed in the different households. In this district we also ordered the closing of the moving-picture houses, which had a tendency, I am sure, of preventing the contagion from spreading among the younger children.

A comparison of the scarlet fever cases shows a decrease of 201. The quarantine for scarlet fever has been approximately six weeks unless complicated by middle-ear disease or other complication. We have always theorized that the desquamation from scarlet fever was the cause of the contagion, but experience has proven quite conclusively that this is an error.

We have had considerable trouble during the past year with sporadic cases of smallpox, with no definite source of contagion. While the number of cases in comparison with last year was less, still we were always on the alert. In one of the private schools in the Peninsula district over which we have had no control fifteen cases of a mild form developed, and on inspection of the pupils made at the time, two active cases in the pustular stage were found.

The authorities at the school did everything in their power to help us to the extent that every pupil attending this school was vaccinated and the school fumigated. We were able to keep this disease confined where it originated, not allowing it to spread to the public schools.

During the past year 240 cases of tuberculosis were reported to this bureau and 173 houses fumigated for the same disease. I think that we are doing much better work in the handling of this disease than previously, which is due to several things, namely: the placarding of the house by the undertaker when a case dies from tuberculosis; this sign is not allowed to be removed without permission of the Health Bureau, also the enforcement of the city ordinance which compels people to notify this bureau when a case is moved from one place to another.

TABULATED REPORT OF QUARANTINE DIVISION

Diphtheria quarantined.....	199	Fumigations for smallpox—	
Diphtheria released.....	182	Houses	165
Scarlet fever quarantined.....	157	Rooms	887
Scarlet fever released.....	160	Fumigations for tuberculosis—	
Smallpox quarantined.....	130	Houses	173
Smallpox released.....	148	Rooms	845
Fumigations for diphtheria—		Ambulance calls.....	165
Houses	193	Visits	2,741
Rooms	1,284	Cultures	1,503
Fumigations for scarlet fever—		Antitoxin administered.....	298
Houses	194	Vaccinations	658
Rooms	1,215	Physical examinations.....	3,245

TUBERCULOSIS

This work is sadly neglected in Portland. Only one nurse is employed by the city for this important activity. The medical profession should aid the Bureau of Health by cautioning their tubercular patients about handling food stuffs and take the greatest care in issuing certificates of health to all such employees as well as those suffering from other contagious and infectious diseases.

It seemed advisable to make separate reports of the clinic and the entire tuberculosis work done. The clinic patients are not "carried" on the office records unless they are positive cases or need to be kept under observation. About two-thirds of our patients have the clinic physician, the remainder coming from other sources. The clinic report represents work done only by Miss Kenney who is employed by the City of Portland, and under the direction of the Bureau of Health. The other includes Miss Kenny's entire work (both dispensary and non-dispensary) together with that of other nurses on the staff of the Visiting Nurse Association, Miss Kenny having made 1312 out of the total 1619 visits.

The work of the nurse would be aided both from an educational as well as a sanitary viewpoint, if the ordinance No. 19468 sent to reported cases had an amendment to include the rules against the employment of tuberculosis persons in kitchens, meat shops, bakeries or any place where food-stuffs are handled. Also against the employment of the same as barbers, porters, chambermaids or any employment bringing tuberculous persons in contact with the public.

Having the nurse handle tubercular cases directly under the supervision of the Bureau of Health has been of great assistance

to the work, and the suggestions here given we believe would help still further along the line of prevention and general sanitation.

SUMMARY OF TUBERCULOSIS WORK FROM DECEMBER, 1913, TO DECEMBER, 1914

Number patients Dec. 1, 1913....	45	Other care.....	29
Number new patients admitted during year.....	228	Not tuberculous.....	15
Total number patients.....	275	Untraced	11
Number nursing and advisory visits	1,287	Died	17
Number miscellaneous visits.....	301	Left city.....	18
Number of office visits.....	31	Unimproved	7
Total number visits.....	1,619	Dispensaries	2
Disposition of patients—		Discharged self.....	1
Improved	8	Total number patients discharged	211
Hospitals	5	Remaining under care December 1, 1914.....	62
Sanatoria—		Number quarts milk furnished patients	2,935
State Sanatorium.....	58	Number dozens eggs furnished patients	361
Troutdale	36		
Open Air.....	4		

PORTLAND FREE DISPENSARY—TUBERCULOSIS DIVISION REPORT FROM DECEMBER, 1913, TO DECEMBER, 1914

Number cases under observation Dec. 1, 1913.....	41	Open Air.....	1
Number new cases admitted during year.....	220	Left city.....	19
Number old cases readmitted during year.....	14	Other care.....	17
Total number patients treated... ..	275	Improved	1
Total number visits to clinic by all patients.....	1,353	Non-attendance	29
Total number serum treatments	957	Discharged self.....	1
Total number patients discharged	215	Number patients remaining under care Dec. 1, 1914.....	62
Untraced	17	Number nurses' visits in homes—	
Not Tuberculous.....	63	Primary	66
Hospitals	7	Secondary	557
State Sanatorium.....	35	Total	623
Troutdale	23	Number quarts milk furnished patients	1,872
		Number dozens eggs furnished patients	180

LABORATORIES

Gradually the laboratories are becoming properly equipped, so that in the very near future they will be the best and most efficient laboratories in the Pacific Northwest.

Early in the year an effort was made to combine these laboratories with the one utilized by the State Board of Health, but it was unsuccessful. It is to be hoped that this may be done in the very near future and thereby eliminate duplication of work as well as reduce expenses materially.

The major routine work of the laboratory has been diphtheria cultures and bacteriological analyses of milk.

Of diphtheria cultures, there were 458 positive and 1,563 negative. The blood serum tubes were all prepared in the laboratory, numbering 3,000. It is customary to make direct smears of most of the suspicious new cases, so that antitoxin may be administered as early as possible. This is to be highly recommended, for many positive diagnoses are possible twelve hours earlier than by incubation. Negative direct smears are not dependable.

This city, as well as others, is confronted with the problem of how best to control and eradicate the Kleb-Loeffler bacilli from the throats of diphtheria carriers and convalescent cases. We have

tried spraying and swabbing with various antiseptics with unfavorable results. Spraying the throat with antitoxin seems the most effective, but of minor value if not used frequently, because it so quickly becomes diluted with secretions of the mouth and throat, that only the organisms on the surface are affected, and it cannot penetrate to those deeper in the membrane.

Two thousand six hundred and sixty-seven samples of milk were analyzed. In all cases there were duplicate plates, making a total of 5,334 plate cultures made. The milk is of such purity as to not require the 1 to 1,000 dilution. This is the result of the educational campaign with the producers.

It is to be deplored that in the examination of sputum for tubercle bacilli during the month of October, there were eleven positive out of a total of twenty-seven, about 67 per cent, and for the year there was 37 per cent positive in a total of 287. A large percentage of the specimens was collected by the visiting nurse, and these were mostly transient patients.

The analyses of water have been limited owing to our jurisdiction extending only to the city limits, and as the city is furnished with the purest of water, but few analyses are necessary. It will be noticed in the attached table that in a total of sixty-one samples, there were forty-two colon bacilli positive. These samples came mostly from the wells of dairies supplying milk to the city and were of animal contamination. The milk subdivision is constantly guarding against the use of contaminated water where milk is produced.

The City has a new jail with white enamelled walls, new, clean mattresses and is in a very sanitary condition. This jail should be provided with a sterilizer for sterilizing the clothing of the inmates as they enter. This laboratory has designed one to be heated by steam pipes that would kill all the vermin, eggs and pathogenic bacteria that the clothes may contain. It is so arranged as to hold several mattresses, or suits of clothes. These would be sterilized in a few minutes without injuring the fabric. It is to be hoped the sterilizer will be installed before the jail becomes infected with vermin.

A tabulated report of the work of the laboratory.

REPORT OF CITY BACTERIOLOGIST

Diphtheria cultures, positive.....	458	Water, colon bacilli, negative....	19
Diphtheria cultures, negative....	1,563	Rabies, positive.....	6
Sputum examinations, tubercle bacillus, positive.....	76	Rabies, negative.....	2
Sputum examinations, tubercle bacillus, negative.....	211	Milk examinations, bacterial counts	2,667
Widal test, positive.....	10	Miscellaneous examinations.....	307
Widal test, negative.....	46	Rats, for Bubonic Plague.....	41
Water, colon bacilli, positive.....	42	Books, etc., fumigated.....	150
		Total	5,598

CITY PHYSICIAN

The scope of the duties of the Health Bureau has been enlarged as follows:

A physical examination and report on all firemen, who are off duty from illness or injury, is now required. This has entailed considerable extra work and will mean a great deal more in the future, as most of the calls must be made at the residence of the



SECTION OF BACTERIOLOGICAL LABORATORY, BUREAU OF HEALTH, ROOM 307, CITY HALL

firemen and a great many of them are in the outlying districts. We have also been requested by the Municipal Court, during the past year, to handle and treat, with the idea of permanent cure, morphine cases which are under the jurisdiction of the court. Some of these have been treated at the Emergency Hospital, while others, especially cases of women, have been treated in the private hospitals. All such patients treated in the private hospitals have been compelled to make arrangements for the hospital expense before treatment is instituted so that there has been no extra expense to the City.

Cases treated in the Emergency Hospital for the last six months (records of the preceding months are incomplete) show an average of 66 patients per month, with an average of 73 hospital days for each month. The most of these were emergency cases, such as scalp wounds, knife wounds and fractures, but a good many were chronic cases that were kept in the hospital only until arrangements could be made for sending them to the Multnomah Hospital or the County Farm. A few were so serious that it was necessary to transfer them to one of the private hospitals.

In the private hospitals, where the more serious of the cases were sent, the number of patients treated was 262, an average of 22 per month; the total number of hospital days was 3,246, or an average of $270\frac{1}{2}$ per month.

DIVISION OF SANITATION

I think I am justified in making the statement that more has been done to improve the sanitary condition of the City of Portland during the past year than ever before in the history of the City.

We have followed the plan of rigidly enforcing the ordinances as we have them at present, rather than asking for new laws, and with a few exceptions I find the present ordinances are generally sufficient if properly enforced. I further take pride in the fact that we have accomplished our purpose with a minimum of arrests and a maximum of convictions, considering the large number of inspections and adjustments made, adjustments meaning "a get-together meeting" of the distributor and purchaser, when in dispute. We find on many occasions the difficulty is the result of a misunderstanding. If the distributor is at fault the inspector insists on the return of the purchase money with a warning as to the consequences, and that a recurrence will be followed by arrest; they have learned that we make no threats which are not fulfilled. The plan has made a great many friends for the bureau among the merchants as well as the general public, also creating a spirit of co-operation with the merchants which facilitated our getting results.

It will be noted there were over 11,000 inspections in this division, exclusive of the inspection of dairies. Over 300 barns were remodeled to conform with ordinance requiring concrete floors and proper drainage to a sewer or cesspool, air-tight manure boxes, etc. Enforcing this ordinance will most certainly improve the appearance and sanitation of these undesirable fly-breeding stables. It is now the exception to be confronted with a disagreeable barn odor on passing by or entering them.

Our present system of private parties collecting the city's garbage has the objectionable feature in that the collection is neglected in the outlying districts, where it is unprofitable because of the distance

DEPARTMENT OF PUBLIC SAFETY

to the incinerator. This, of course, places the responsibility with the property owner or tenant and encourages the dumping of cans, ashes, etc., in the vacant lots; in fact, "eternal vigilance is the price of peace," with each inspector in his particular district. Municipal garbage collection will correct this evil to a great extent, but in the meantime a few arrests from time to time by the police while on duty would materially assist. With proper municipal collection we should congratulate ourselves upon the fact that Portland has no alleys to become littered with unsightly garbage cans and makeshift boxes.

VENTILATION

This is a very important branch which in the past has been neglected, especially in old buildings used for stores, bakeries, theatres, schools, etc., and without a doubt has a great influence on the health and welfare of the occupants. One inspector has been assigned to ventilation. He has been supplied with the necessary apparatus for testing air for carbon dioxide, circulation, etc. Contractors and builders are recognizing the value of co-operation on this subject and are asking for suggestions and criticisms of their systems of ventilation. The inspector is at present testing the air of the different high school rooms with a view of reporting the result to the school board.

MARKETS

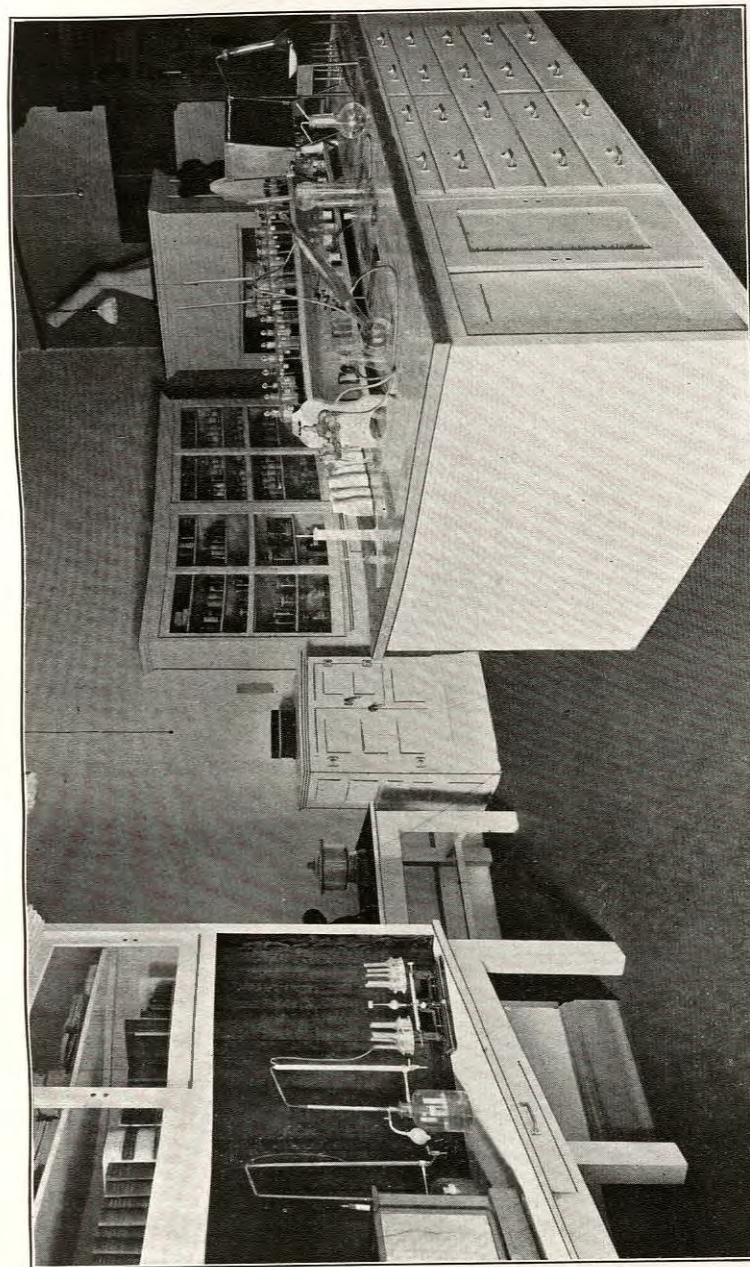
Market inspection, which includes bakeries, restaurants, meat markets and commission houses has been well handled by our present force. Nearly 30,000 inspections were made; over 400,000 pounds of foodstuffs were condemned as unfit for food.

BAKERIES

The new plan of scoring bakeries by placing those who comply with certain requirements designated on cards and posted in every bakery is meeting a disagreeable situation by minimizing friction, not only between the bakers and this division, but between the bakers themselves. By complying with all these rules the name of the bakery is placed in a "White list" which is published from time to time. It has the added advantage of placing all on an equal footing whether large or small and does not place a premium as under the old scoring system on expensive machinery and equipment. It also places the bakers in a more receptive mood for instruction as to how and where to make improvements.

RESTAURANTS

This is a part of our work which I think we can improve upon. We need some system of scoring as we are using with the bakeries. Restaurants of the second-class need as stringent inspection as any other business under our jurisdiction. The danger of ptomaine poisoning must be continually guarded against by examining their stock of meat and their method of handling it. We could very conveniently utilize the services of one of the other inspectors, at least part of the time, on restaurant work. It would be of great assistance to us if restaurants were required to apply for a permit or license from the Bureau of Health. In this way we could inspect their prospective locations and if unfit as places to prepare food-



CHEMICAL LABORATORY OF THE HEALTH BUREAU WHERE MORE THAN 2500 SAMPLES HAVE BEEN TESTED IN THE LAST YEAR

stuffs the permit would be refused until the requirements would be complied with. This would place the responsibility where it belongs, with the landlord. Many times the restaurant man with his small capital is unable to make improvements and on taking possession has already signed the usual lease agreeing to make any repairs necessary at his own expense.

COMMISSION HOUSES

I am greatly pleased with the work of Market Inspector Melton in the commission district; this district seems best handled by one man. He becomes thoroughly acquainted with the personality of the different dealers and in that way soon knows which ones are most likely to evade the market laws. Naturally during the summer months our troubles begin on Front street and it requires constant vigilance to prevent over-ripe and spoiled fruit and vegetables getting to peddlers and into the hands of the retail trade. Peddlers give us more trouble than the whole commission house district. Several have been convicted and fined during the past month.

Following is the tabulated report from December, 1913, to December, 1914:

SANITARY INSPECTIONS

Inspections	11,795	Stagnant pools oiled.....	86
Complaints	4,781	Toilets filled or moved.....	164
Notices served.....	6,178	Stores, restaurants and bakeries	
Abatements	4,040	inspected	1,792
Garbage cans ordered.....	626	Ventilation, old and new build-	
Buildings closed.....	168	ings	271
Buildings razed.....	102	Buildings condemned.....	76
Referred to other bureaus.....	61	Manure and rubbish, cubic yards	3,864

MARKET INSPECTIONS

Inspections made.....	29,522	Abatements	1,903
Notices given.....	5,529	Prosecutions	66
Complaints	3,260	Convictions	56

CONDEMNED

Peaches and pears, boxes.....	3,791	Candy	6,970
Meat and poultry, lbs.....	21,778	Fish	61,884
Fruit and berries.....	70,288	Vegetables	247,226

DAIRY AND MILK INSPECTION

Some rapid strides have been made in this very important branch of the work, due largely to the increased force of instructor-inspectors and veterinarians. The general sanitation about the larger majority of our dairies is most commendable. It is with the producer where our work first begins. That this is a very important part of the milk inspection and demands capable men to do the work is conceded by all.

By giving proper instructions and seeing that they are complied with has been and will be the means of getting a better milk supply. Many new dairy barns and milk houses have been erected according to plans which we have drawn. We have on hand blue-prints of barns which are often called for. The cows are attended to better than formerly. It is seldom we find any manure on them as they are regularly curried and brushed. In the majority of cases all refuse from the stable is hauled out on to the land every day.

DEPARTMENT OF PUBLIC SAFETY

Our Washington shippers have not been inspected as often as they should have been, but we have prevailed upon Dr. Graves, Dairy and Food Commissioner, of that state to help and he has sent his deputies into the field and good results have been obtained from their work.

The small top milking pail is being used more all the time, still it is hard to convince the shipper that it is better, but think it is due to the extra expense.

Boilers and sterilizers have been installed, more especially by the dairymen that deliver their own milk, (as well as all milk plants), and this is one of the reasons for such a low bacterial count.

TUBERCULIN TESTING OF DAIRY COWS

This part of our work has been better taken care of this year than last as another veterinarian has been added to our force. Still we are absolutely unable to test all the cows once a year as required by ordinance; consequently, it is deemed advisable to test, for the raw dairy producers once a year and then look closely after the pasteurization. By doing this we feel that the majority of the milk delivered to the consumers is safe.

Since the State and County partially compensate the dairyman for the loss of his cows, we have no further trouble in enforcing this part of the ordinance. We have applications on file that will keep us busy for many months.

Part of the time of one of the veterinarians is occupied in holding post mortem examinations when the reactors are slaughtered—since our meat ordinance has been placed in cold storage with the Supreme Court. Practically all reactors are slaughtered soon after being tested.

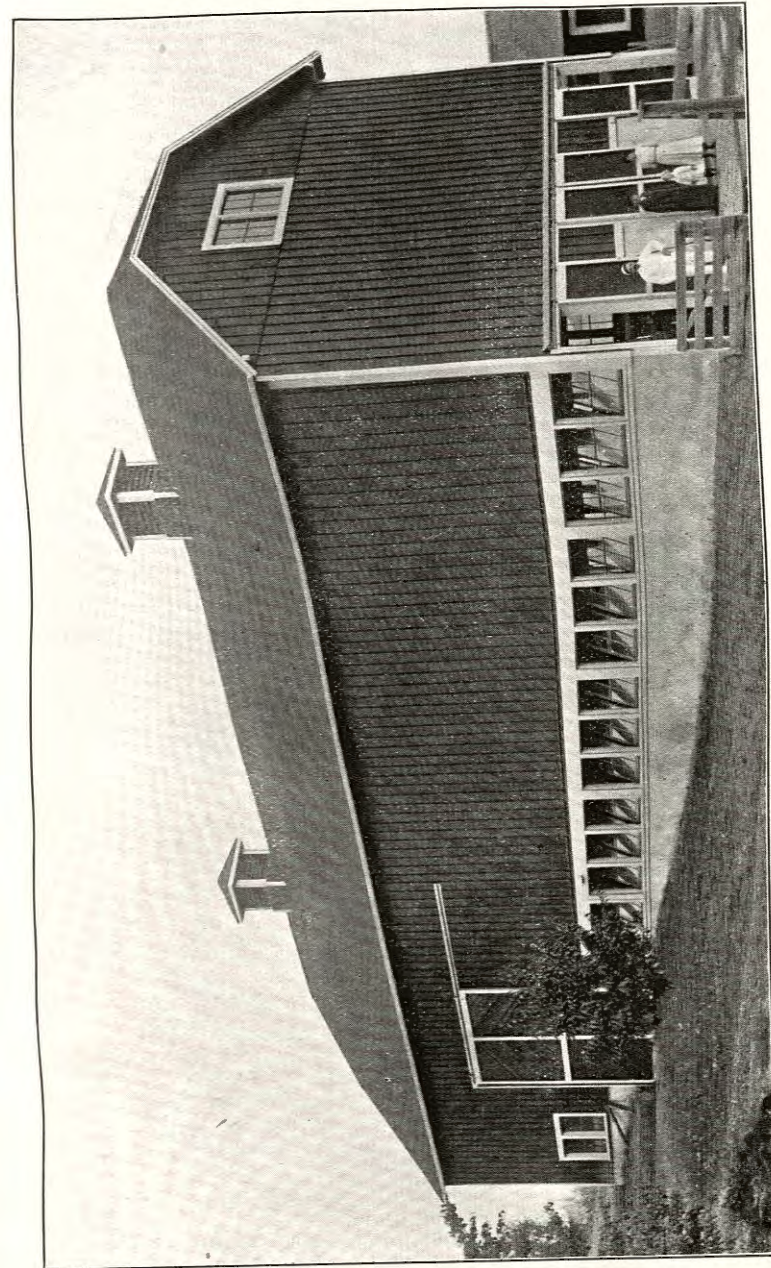
MILK ANALYSIS

No preservatives or added chemicals were found in any of the samples. There were a few samples of watered milk, but a warning served to stop this adulteration. In a few cases samples of dairy milk showed a fat below the minimum of the ordinance, but this proved to be the result of not mixing the milk properly. The percentage of samples below the standard is very low. The average butter fat and solids of the samples from wagons was very high as an average for any city.

The samples of milk from restaurants indicate that the quality of milk in these places is far below that of the milk delivered to homes. All the restaurants and hotels have not been sampled as often as they will be the coming year. Many of these places that serve skimmed milk have signs up in compliance with the ordinance. Yet an average butter fat of 3.4 per cent and an average solids-not-fat of 8.6 per cent is just within the law and much below the average market milk. With the additional equipment that has been ordered for the laboratory we will be able to handle many more samples.

BACTERIOLOGICAL ANALYSIS

The uncleanly methods and habits of the milk producers in the past has called for a rigid inspection of the purity and cleanliness of their product. The method now universally adopted is to make a periodical bacterial analysis of the milk. This consists of making



TYPE OF BARN BROUGHT ABOUT BY INSPECTION

plate cultures in duplicate of each sample of milk to determine the number of bacteria per cent which not only gives the number of organisms present, but also the varieties indicating the presence of foreign matter in the milk such as litter and manure. The work has been cooperative with a view to its being educational. When a producer continually has a high count an inspector is sent to investigate conditions at the dairy to try and ascertain the cause, invariably resulting in the revelation of some simple cause of contamination.

RAW DAIRY MILK

The greater portion of our raw dairy milk is delivered by the producers who beyond a question of a doubt are putting out a magnificent product, which is rich in butter fat and with an exceptionally low bacterial count, which shows that they are keeping foreign matter out, and cooling properly.

PASTEURIZED MILK

The system of pasteurization in Portland has passed the primitive stage, as we have only one plant that still uses the flash system. We have four (4) plants that pasteurize in the bottle and from their low bacterial count shows us that milk pasteurized that way must be absolutely safe. Our large plants use the holding system where the milk is heated from 140 to 145 degrees F. and held for 30 minutes.

They are paying more strict attention to pasteurization than formerly as their bacterial counts this year have been much lower and more regular than ever before. There are still some small milk depots that pasteurize in 10 gallon cans, in which if properly attended to good work can be done, but do not altogether approve of this method as the milk is more liable to meet with contamination in cooling and bottling.

MILK CONTESTS

During the year we have held three (3) milk contests under the direct supervision of F. H. Bothell, Western Dairy Investigation, U. S. Department of Agriculture. In the first contest held March 8th we sampled 91 dealers; June 20 contest, 117, and December 1st contest, 128. Below find tabulation of ratings:

March contest had.....	9 in the 90's	11 in the 70's
	44 in the 80's	5 in the 60's
	21 in the 70's	2 in the 50's
	5 in the 60's	39 in the 90's
	10 in the 50's	81 in the 80's
	2 in the 40's	6 in the 70's
June contest had.....	36 in the 90's	1 in the 60's
	63 in the 80's	1 in the 50's
	December contest had....	

By observing the tabulation it will be noticed quite a difference between the first and last contest and the aim of all of the dealers is to make a rating above 90.

The results and the publication of the contests, I believe, have done a great deal of good in connection with helping to purify our milk supply and lots of credit should be given to Mr. Bothell in advocating a series of yearly contests.

LICENSE

Every person that sells milk or cream is supposed to have a license. I think we have many violators in this respect. The notification of such license I think could be handled by the patrolmen with much less expense to the city, and by so doing could bring in a larger revenue to the city. This year we issued 1004 applications for license and for which was paid to the City Treasurer \$1311.50. This money, I believe, should revert back to the department to help equip our laboratories or help in connection with our work.

From the hearty co-operation of the milk producer and dealers we are certainly nearing the top of the list as far as the purity of a large city milk supply is concerned. Comparison of records with other cities reveals our reason for making the above assertion. Still there is yet a great deal of work to be done and hope that the coming year will bring about still better results.

BACTERIOLOGICAL ANALYSIS OF MILK

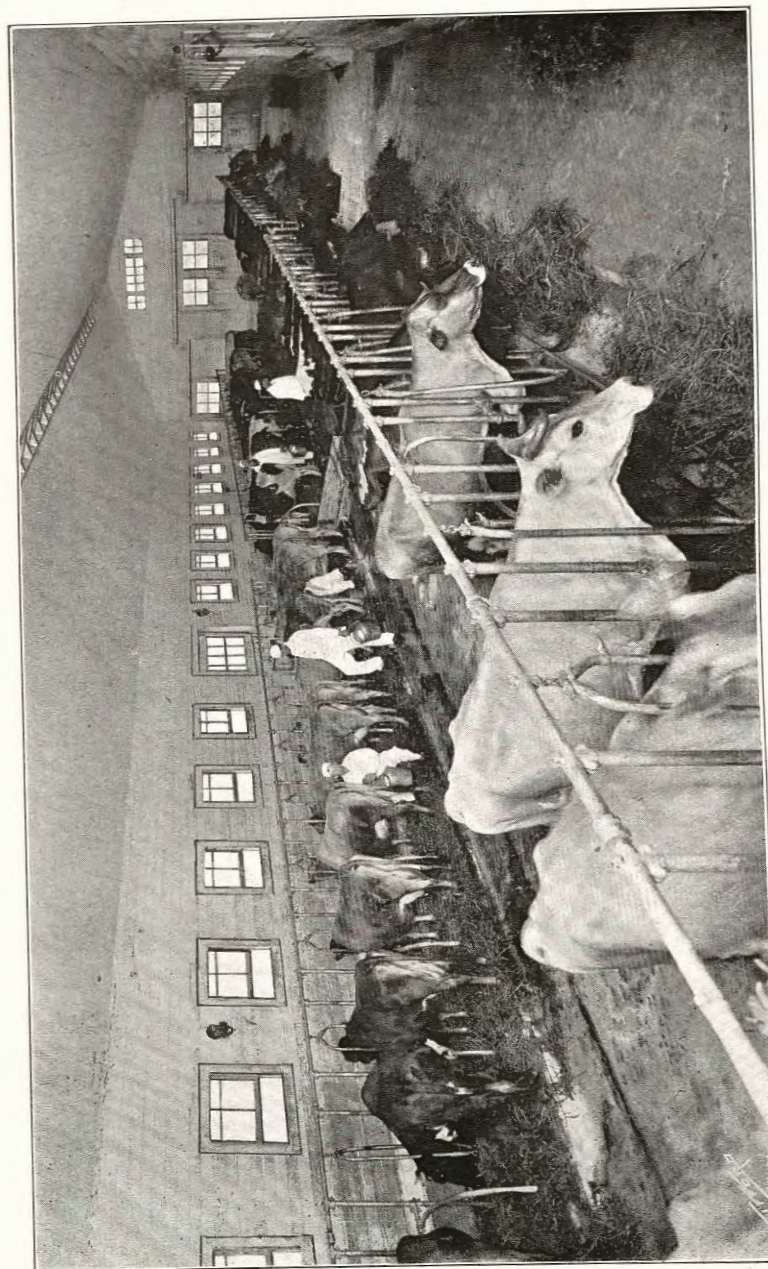
(Certified Milk.)		(Raw dairy milk delivered from milk depots.)	
Under 10,000.....	77.9 %	Under 10,000.....	17.3 %
Under 20,000.....	92.6 %	Under 20,000.....	32.5 %
Under 50,000.....	95.6 %	Under 50,000.....	54.7 %
Under 100,000.....	98.6 %	Under 100,000.....	68.6 %
(Raw dairy milk delivered by producers.)		Under 200,000.....	81.1 %
Under 10,000.....	45.6 %	(Pasteurized Milk.)	
Under 20,000.....	64.8 %	Under 10,000.....	48.0 %
Under 50,000.....	83.13 %	Under 20,000.....	64.9 %
Under 100,000.....	90.58 %	Under 50,000.....	78.4 %
Under 200,000.....	95.58 %	Under 100,000.....	91.5 %
		Under 200,000.....	97.1 %

DAIRY INSPECTIONS

Number of dairies scored.....	728
Number of dairies inspected (not scored).....	852
Total number of inspections of dairies.....	1,680
Average score of dairies that deliver their own product.....	76
Average score of dairies that ship to milk depots and creameries.....	52
New dairy barns up-to-date.....	73
Dairy barns remodeled up-to-date.....	107
New milk houses up-to-date.....	73
Milk houses remodeled up-to-date.....	90
Number of sterilizers installed to date.....	54
Number of boilers installed to date.....	72
Number of dairies closed on account of insanitary conditions.....	11
Number of inspections of creameries and milk depots.....	191
Average score of creameries and milk depots.....	77
Number of dairy herds tested for tuberculosis.....	255
Number of dairy cows tested for tuberculosis.....	4,795
Number of dairy cows reacting to test.....	539
Number of dairy cows suspicious.....	33
Number of dairy reacting cows slaughtered.....	497

MILK ANALYSIS

(Analysis of milk collected from dairymen and milk dealers.)	
Number of samples of milk and cream analyzed.....	3,044
Per cent of samples below standard.....	1.5 %
Average butter fat in milk.....	4.06 %
Average butter fat in cream.....	22.0 %
Average solids-not-fat in milk.....	9.04 %
(Analysis of milk collected from restaurants and hotels.)	
Number of samples collected.....	253
Per cent of samples below standard in butter fat.....	32.1 %
Per cent of samples below standard in solids-not-fat.....	23. %
Average butter fat in restaurant milk.....	3.47 %
Average solids-not-fat in restaurant milk.....	8.64 %



WHERE CERTIFIED MILK IS PRODUCED

CLERICAL DIVISION

In reviewing the work of the Clerical Division for the past year, I feel a great deal has been accomplished. We are now able to give out information to inquiries which in the past was an impossibility on account of having no record. A card system for complaints was installed the first of the fiscal year, thereby giving the bureau a record of complaints received and the report of the inspector to whom it was referred. This has not been entirely successful, due to the fact that many cards have not been returned, but I hope that during the coming year stricter attention will be paid to this system so that at the end of this year we will have a complete record of complaints received and the disposition made of them; also the number that were justifiable and those that were made through spitework.

The office of the Bureau of Health can never be systematized like that of a private business concern owing to the number of situations that arise daily that must be taken care of immediately, but I believe that we are gradually putting the ragged edges together and are taking care of more work than the same number of people do in the average business office.

I would again like to urge the advisability of the Bureau of Health being given at least one, if not more, direct telephone lines. A record for a week shows a total of 832 calls received by this Bureau. A private exchange would greatly facilitate matters, it being almost impossible for the telephone operators in the general exchange to secure from people calling the name of the division wanted.

A total of \$169.20 has been turned into the general fund of the City from certified copies of births and deaths.

Following are the statistics compiled by this division:

GENERAL DISEASES

Typhoid fever.....	17	Syphilis	6
Malaria	1	Cancer of buccal cavity.....	10
Measles	18	Cancer of stomach and liver....	84
Scarlet fever.....	7	Cancer of peritoneum, intestines,	
Whooping cough.....	3	rectum	31
Diphtheria	22	Cancer of females genital organs.	31
Influenza	11	Cancer of breast.....	14
Dysentery	1	Cancer of skin.....	4
Erysipelas	2	Cancer of other organs.....	44
Purulent infection and septi-		Other tumors	0
chaemia	7	Acute articular rheumatism.....	5
Pellagra	1	Chronic rheumatism and gout....	1
Tuberculosis (pulmonary).....	150	Diabetes	53
Acute miliary tuberculosis.....	5	Exophthalmic goiter	0
Tuberculous meningitis.....	28	Leukemia	7
Abdominal tuberculosis	16	Anemia, chlorosis	19
Pott's disease	3	Other general diseases.....	3
White swelling	4	Alcoholism	3
Tuberculosis of other organs.....	8		
Disseminated tuberculosis	6	Total.....	626
Rickets	1		

NERVOUS SYSTEM

Encephalitis	6	Other forms of mental alienation.	2
Meningitis (simple)	18	Epilepsy	3
Meningitis (cerebro-spinal)	3	Convulsions (over 5 years).....	0
Locomotor ataxia	3	Convulsions (under 5 years).....	11
Other diseases of spinal cord.....	6	Neuralgia and neuritis.....	1
Cerebral hemorrhage	143	Other diseases of nervous system.	16
Softening of brain.....	3		
Paralysis without specified cause.	11	Total.....	230
General paralysis of the insane..	4		

CIRCULATORY SYSTEM

Pericarditis	2	Disease of arteries.....	34
Acute endocarditis	8	Embolism and thrombosis.....	18
Organic disease of heart.....	263	Hemorrhage	2
Angina pectoris	21		
Total.....			348

RESPIRATORY SYSTEM

Disease of larynx.....	2	Pulmonary congestion	15
Disease of thyroid body.....	2	Gangrene of lung.....	1
Acute bronchitis	6	Asthma	3
Chronic bronchitis	6	Other diseases of respiratory sys-	
Broncho-pneumonia	53	tem	9
Pneumonia (lobar)	126		
Pleurisy	8	Total.....	231

DIGESTIVE SYSTEM

Diseases of mouth and annexa....	2	Hernia, intestinal obstruction.....	34
Diseases of pharynx.....	3	Other diseases of intestines.....	5
Diseases of esophagus.....	3	Cirrhosis of liver.....	18
Ulcer of stomach.....	10	Biliary calculi	9
Other diseases of stomach.....	20	Other diseases of liver.....	18
Diarrhea and enteritis (under 2		Diseases of spleen.....	2
years)	15	Simple peritonitis.....	10
Diarrhea and enteritis (over 2		Other diseases of digestive system.	2
years)	25		
Appendicitis	34	Total.....	210

DISEASES OF GENITO URINARY SYSTEM

Acute nephritis	16	Uterine tumor.....	1
Bright's disease	163	Other diseases of uterus.....	4
Other diseases of kidneys.....	6	Cysts	1
Calculi	1	Salpingitis	3
Diseases of bladder.....	10		
Diseases of prostate.....	6	Total.....	212
Uterine hemorrhage.....	1		

EARLY INFANCY

Congenital debility (1) premature		Other diseases peculiar to early in-	
birth	43	fancy	14
(2) Congenital debility.....	69		
Total.....			126

OLD AGE

Senility	53
Total.....	53

ILL DEFINED DISEASES

Ill defined organic diseases.....	1
Cause of death not specified or	
ill defined	3
Total.....	4

THE PUERPERAL STATE

Accidents of pregnancy.....	5	Puerperal albuminuria and convul-	
Puerperal hemorrhage	5	sions	8
Other accidents of labor.....	1		
Puerperal septicaemia.....	9	Total.....	23

DISEASES OF SKIN AND CELLULAR TISSUE

Gangrene	3	Other diseases of skin.....	3
Furuncle	2		
Acute abscess.....	1	Total.....	9

DISEASES OF BONES AND ORGANS OF LOCOMOTION

Diseases of bones.....	1	motion	1
Diseases of joints.....	1		
Other diseases of organs of loco-		Total.....	3

MALFORMATIONS

Congenital malformations.		3—Other congenital malformations	8
1—Hydrocephalus	4	Total.....	17
2—Congenital malformations of			
heart	5		

EXTERNAL CAUSES

Suicide by poison.....	23	Traumatism by firearms.....	7
Suicide by asphyxia.....	4	Traumatism by fall.....	26
Suicide by hanging.....	6	Traumatism by machines.....	3
Suicide by drowning.....	5	Traumatism by other crushing.....	50
Suicide by firearms.....	18	Excessive cold.....	1
Suicide by cutting.....	4	Electricity	2
Suicide by jumping.....	3	Homicide by firearms.....	10
Poisoning by food.....	2	Homicide by cutting.....	3
Other acute poisoning.....	3	Homicide by other means.....	1
Burns	18	Fractures	1
Absorption of deleterious gases..	7	Other external causes.....	6
Accidental drowning.....	30		
Total.....			233

Number communications received.....	980
Number communications sent.....	835

CONTAGIOUS DISEASES RECORDED

	Dec., 1913.	Jan., 1914.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	Total.
Diphtheria.....	31	11	11	13	9	16	21	13	13	15	23	36	212
Scarlet fever.....	13	17	10	12	24	16	13	16	6	4	8	11	150
Smallpox.....	5	12	8	11	116	9	9	17	21	1	5	13	127
Measles.....	256	542	461	360	202	54	15	4	1	1	5	9	1911
Typhoid fever.....	2	1	4	1	2	5	5	7	17	2	6	2	54
Chickenpox.....	15	22	26	21	34	23	17	8	2	4	13	21	206
Whooping cough.....	1	0	1	1	1	8	0	1	0	0	2	0	15
Mumps.....	1	7	3	6	3	5	0	1	0	2	0	1	29
Erysipelas.....	1	4	2	2	0	0	2	0	0	1	0	3	15
Tuberculosis.....	28	15	20	23	21	30	18	16	20	23	16	10	240
Meningitis.....	0	1	2	0	0	0	0	0	0	0	0	0	3
Bronchitis.....	0	1	0	0	0	0	0	0	0	0	0	0	1
Hives.....	0	0	1	0	0	0	0	0	0	0	0	0	1
Pellagra.....	0	0	0	1	0	0	0	0	0	0	0	0	1
Pinkeye.....	0	0	0	0	0	1	0	0	0	0	0	0	1
Totals.....	353	633	549	451	312	167	100	83	80	54	78	106	2966

BIRTHS RECORDED

	Births.	Male.	Female.	White.	Black.	Brown.	Yellow.
December, 1913.....	362	197	165	348		10	4
January, 1914.....	367	183	184	358		6	3
February, 1914.....	304	139	165	298		5	1
March, 1914.....	362	192	170	354		5	0
April, 1914.....	340	160	180	331	2	7	0
May, 1914.....	352	188	164	342	1	5	3
June, 1914.....	333	187	146	327	2	4	2
July, 1914.....	351	192	159	341	1	7	0
August, 1914.....	361	188	173	350	3	5	3
September, 1914.....	298	154	144	293	1	3	1
October, 1914.....	317	161	156	311	1	2	4
November, 1914.....	291	170	121	285	1	5	0
Totals.....	4,038	2,111	1,927	3,938	14	64	22

DEPARTMENT OF PUBLIC SAFETY

DEATHS RECORDED

	Deaths.	Male.	Female.	Ore.	U. S.	Fgn.	Unk.	White.	Yellow.	Black.	Brown.	Stillborn.
Dec., 1913.....	199	127	72	48	88	76	7	188	6	3	2	16
Jan., 1914.....	215	127	88	62	85	57	11	207	6	.....	.....	12
Feb., 1914.....	220	140	80	53	86	75	6	215	4	1	.....	14
March, 1914.....	211	127	84	47	60	93	11	202	9	.....	.....	19
April, 1914.....	232	138	94	50	107	63	12	224	5	3	.....	13
May, 1914.....	215	126	89	46	89	73	7	210	3	2	.....	10
June, 1914.....	221	132	89	38	18	67	8	219	2	.....	.....	20
July, 1914.....	157	88	69	43	68	44	2	153	4	.....	.....	10
Aug., 1914.....	178	109	69	37	83	50	2	168	4	4	2	12
Sept., 1914.....	184	114	70	43	78	58	5	175	5	3	1	11
October, 1914.....	169	92	77	41	67	55	7	168	1	.....	.....	18
Nov., 1914.....	162	107	55	36	70	49	.....	160	2	.....	.....	13
Totals.....	2,363	1,427	936	544	969	760	90	2,289	51	16	7	168

STATEMENT OF THE AUDITOR SHOWING CONDITION OF APPROPRIATIONS DECEMBER 1, 1914—BUREAU OF HEALTH

	Appropriation November 30, 1914.	Total Incurrence.	Unincumbered Balance.	Claims Audited and Paid.	Claims Outstanding.
Personal Service.....	\$ 41,834.00	\$ 41,654.26	\$ 179.74	\$ 41,654.26	.....
Supplies.....	6,172.27	5,874.67	297.60	5,297.17	577.50
Material.....	109.00	108.99	.01	108.99	.....
Equipment.....	2,215.00	2,210.43	4.57	2,210.43	.....
Repairs.....	950.00	863.38	86.62	848.34	15.04
Transportation and Communication.....	2,564.00	2,487.08	76.92	2,385.09	101.99
General Plant Service.....	3,285.00	3,121.00	164.00	2,871.00	250.00
Contingencies.....	50.00	33.53	16.47	33.53	.....
Totals.....	\$ 57,179.27	\$ 56,353.34	\$ 825.93	\$ 55,408.81	\$ 944.55

At the completion of this report for the past year I feel on reviewing it considerable satisfaction and pride in the amount of practical work accomplished and also the greatly improved organization of the different divisions of the Bureau, and am looking forward with pleasure to the ensuing year. Many of the problems to be solved in public health matters require considerable time and patience, in fact it takes an entire year and longer to get the hearty support of the public for any reforms which are a departure from the old and established methods.

Following is a summary of a part of the special work not mentioned in the general report:

In a contest between cities of the Northwest at North Yakima, Washington, in October Portland carried away the first prize.

In a series of three contests held under the supervision of the Dairy Division of the U. S. Bureau of Animal Industry during the year, the bacterial counts were very low, some of them below 1000 per cent and none higher than 250,000 per cent.

An analysis of the mortality rate among infants under one year of age reveals no curve during the hot summer months which

speaks well for the milk supply. The total number of deaths under two years of age from diarrhea and enteritis was remarkably low, only 15, or 3.6 per 1000 births, while in 1909 it was 32.6 per 1000 births. The total number of deaths from all causes per 1000 births was only 63.4. During the coming year a united effort will be made to lower this even more.

FLY CAMPAIGNS

The Bureau of Health participated in a very successful campaign for the extermination of the fly in the city during the first ten days in April.

The committee was composed of representative citizens from nearly all the civic organizations and prizes were offered to the school children for the largest number of flies killed. This was one of the best educational features in public health ever held in Portland.

MOSQUITOS

During the early spring the stagnant pools within the city limits were treated with crude oil with the result that very few mosquitos were noticed. The Division of Sanitation of the Bureau of Health cooperating with the Department of Public Works succeeded in causing many of these pools to be filled in.

COOPERATIVE WORK

Hearty cooperation has been maintained with other Departments and Bureaus of the city, particularly the Department of Public Works. The prompt and earnest response at all times of this department is a source of much gratification to the Health Bureau.

Mr. Mickle, the State Food and Dairy Commissioner, is always willing to lend a helping hand when the appeal is made. Cooperation with no duplication of activity is our motto.

All the civic organizations have responded very quickly to requests for assistance, for which we beg them to accept our thanks.

CONVICTIONS AND FINES

Convictions have been many as will be seen in the subsequent tabulated report, but fines are few. It is our custom to have only small or no fines imposed for the first offense. We feel that results are better accomplished by instruction and education than by force.

CITY HEALTH OFFICER IS CITY REGISTRAR

The registration of births and deaths is done much more promptly and efficiently than it was in 1913. The medical profession and public at large are learning the importance of the proper tabulation of vital statistics. With a registration law in the state, and it is to be hoped the next Legislature will pass one, this work will be made more easy in the City of Portland. Our City is the only section of the state in the registration area.

PERSONNEL OF THE BUREAU

The force while small and inadequate to do the vast amount of work as it should be done, is earnest and industrious. Practically every employe is doing his or her utmost to make this most important work felt in our community. Some of them work many hours overtime in order to keep up with the demands exacted of

them. A more faithful, loyal and conscientious group of individuals cannot be found anywhere. I especially wish to call your attention to the ability and industriousness of our bacteriologist, Prof. E. F. Pernot. He is the most capable man we could possibly obtain and I consider it very fortunate for the City of Portland that he is with us. The success of this Bureau is largely due to his untiring efforts.

RECOMMENDATIONS

All of the recommendations made by the chiefs of the different divisions in their attached reports have my hearty approval. I wish to particularly emphasize the following:

1. The combination of the City and County Hospital work, including, of course, the care of all communicable diseases. I am informed that the buildings could be constructed upon the new property acquired by the Medical Department, University of Oregon. This would be an admirable plan.
2. The combination of the bacteriological laboratories of the State Board of Health and the City of Portland.
3. That the Medical Inspection force for the public schools be increased to at least eight inspectors, and four nurses; that the supervision of communicable diseases should by all means be kept in the Bureau of Health.
4. An additional fumigator should be provided to assist in the work which is increasing from year to year.
5. That a dentist be employed for one-half day, six days each week. This can be done with very little extra cost to the city and insure more efficiency with greater convenience to the general public.
6. A municipal garbage collection system should be inaugurated as soon as possible, and every citizen should get behind the Department of Public Utilities and lend his support to bring this about.
7. That the Emergency Hospital and City Physician be transferred from the control of the Health Bureau to the Police Department, not that any criticism of the hospital or its management is offered but because it more rightfully belongs to that department.
8. That all dealers in second-hand clothing or bedding be required to fumigate at stated intervals under the supervision of an inspector of the Health Bureau who shall place a tag with the words "Bureau of Health—Fumigated" before being placed on sale. This would aid in preventing the spread of contagion. Uncalled for blankets and clothing at railroad, express and steamship companies' offices should also be included. At present these blankets and clothing are used by all kinds of people and resold without any previous history of their origin.
9. An ordinance to prevent the renovating of old mattresses without being fumigated or sterilized should be prepared and passed. This is a practice that is extremely dangerous to public health.
10. The passage of an ordinance to require a permit to engage in the restaurant, delicatessen, cafeteria or bakery business, charging a small license fee, license to be renewed annually.
11. Co-operation with the State Dairy and Food Commission to compel stamping of the containers of Chinese eggs and to be placarded as such when on sale.
12. A revision of the barn ordinance allowing barns housing only one horse or cow to have a metal garbage can instead of a

manure box. They would be emptied oftener and therefore be more sanitary; also to specify in this ordinance a minimum of three-inch concrete with the three-fourth-inch top dressing of cement.

NEW ORDINANCES

The following ordinances pertaining to public health were passed by the Council during the year:

Ordinance No. 29698 regulating the cleansing, sale and use of wiping rags.

Ordinance No. 28872 regulating the keeping of dogs.

Ordinance No. 27785 prohibiting the establishment, within the City limits of sanitariums for the treatment and care of persons afflicted with tubercular diseases.

Ordinance No. 29083 making it the duty of the owner, person in possession and agent of the owner of any lot, tract or piece of land during certain months to cut and keep cut and removed therefrom and from the half of the adjoining street abutting the property, weeds and certain other vegetation and during all months of the year to keep removed therefrom stagnant water, rubbish and unsanitary substance.

Ordinance No. 28443 prohibiting any building to be erected for, used or occupied by three or more animals within any residence district without a permit, defining the word "animal" and "residence district."

Ordinance No. 27005 regulating the construction and use of buildings for stables and for the keeping of horses, mules and cattle, within certain districts of the City of Portland.

Ordinance No. 27214 to amend Section 4 of Ord. 27005 regulating the construction and use of buildings for stables and for the keeping of horses, mules and cattle within certain districts of the City of Portland.

Ordinance No. 23716 amended that all cement floors must be mixed in certain proportion and arranged so that in flushing floor would be clean and sanitary.

Ordinance No. 28676 prohibiting the use of certain buildings for a stable without a license.

Ordinance No. 29063 regulating the slaughtering of animals and selling of carcasses and parts thereof. (Held up in the Courts).

Ordinance No. 29887 repealing 28872, muzzles on dogs.

Ordinance No. 28749 amending Section 6 of Ord. 23716 regulating the construction and use of buildings as stables.

Ordinance No. 29270 prohibiting common drinking cups and roller towels in the City of Portland.

In conclusion, I wish to say that the Bureau of Health, considering the money appropriated, is as strongly and systematically organized as any department in the country. Our city is growing very rapidly and there are a number of important constant activities as well as frequent new ones which require careful consideration, foremost of these is the milk supply, school inspection, communicable diseases, a correction of bakeries, restaurants, lodging houses, general sanitary conditions (pools and excavations, old privy vaults yet to be abolished, stricter ventilation of theatres, rooming-houses and factories, screening of foods, etc.), correct vital statistics tabulation,

DEPARTMENT OF PUBLIC SAFETY

care of the emergency sick and injured, prevention of plague by the extermination of the rat, and many others.

I have given my best thought, interest and enthusiasm to this work thus far to bring the standard of the Bureau of Health well to the forefront.

I wish to express my sincere thanks to the Council, both individually and collectively, and to every assistant in all the divisions in the Bureau for their hearty cooperation and support. The rules and instructions of the Bureau have been carried out as nearly to the letter as it was possible to do so.

My appreciative thanks are extended to the daily newspapers in their helpfulness to the Bureau of Health in promoting all sanitary measures suggested by this bureau and in many instances for the able and brilliant editorials along sanitary and hygienic lines.

As in the past the counsel and advice of the public is solicited in all matters pertaining to the strengthening and broadening of the Bureau of Health.

Respectfully submitted,

M. B. MARCELLUS, M. D.,
City Health Officer.

MUNICIPAL COURT

During the year ending November 30, 1914, there were filed in the Municipal Court approximately 10,200 complaints. There were collected in the form of fines during this period \$27,077; forfeitures, \$2,982.25; costs, \$416.

What amounts to a departure from the former practice of the court was instituted on May 23, 1914, when, by order, special sessions were set aside for the trial of cases involving morals and domestic relations. These sessions of the court, for convenience, are called "The Morals Court and Court of Domestic Relations." They are, of course, merely sittings of the Municipal Court, general, from want of any ordinance creating a Morals Court. The sessions are held in a small room adjoining the main court room, and the advantages sought to be achieved consist in relieving witnesses testifying respecting delicate matters from the annoyance and embarrassment of large and morbid courtroom audiences. This applies in matters of domestic relations as well as in cases involving breach of moral laws and ordinances. Experience reflects the fact that in matters of court procedure, women having cause for complaint against their husbands frequently withhold complaint because they do not like to relate their secret family affairs in the presence of large numbers of morbidly curious people. The sessions referred to, I am glad to report, have the direct effect of relieving that situation, and, there is a further fact when dealing with cases of this character, that court and counsel seem better able to approach nearer the truth of the case when spectators are few and the inquiring body proceeds rather informally in a small room. The so-called Morals Court does not purport to be a secret tribunal, nor is there any disposition to deprive anyone of a public trial. These sessions are always open to anyone who has any right whatever to be there, but I have no hesitancy in saying that they are impliedly closed to those whose interest is purely that of indecent curiosity. Good women and girls, very new in wrong doing, are frequently brought into the Municipal Court, and it amounts to a pronounced alleviation of their distress, as well as that of their close friends and relatives, that the proceedings relative to their cases are heard with as little public advertising as possible.

My observations of the workings of the so-called Morals Court and Court of Domestic Relations lead me to what I think the very sound conclusion that such a court ought to be created by law, thus conferring the added power and dignity that would attach to it by reason of such an enactment.

I desire in this connection to mention the invaluable assistance rendered to the court by the Women's Protective Division, in conducting the Morals and Domestic Relations sessions of the court.

The experiment of probation for first offenders has been given a thorough trial, and has proved very successful. There is, as your honorable body is aware, no authority of law for probation from the Municipal Court or for a Probation Officer, but early in this administration, at the request of the Judge of the Municipal

DEPARTMENT OF PUBLIC SAFETY

Court, Chief of Police Clark assigned Patrolman J. W. Inskeep to serve as court officer. Mr. Inskeep's duties in this connection were enlarged and, later, wholly diverted to that of acting as an officer to whom persons relieved from penalties during good behavior were required to report. At the close of the period covered by this report there were approximately 200 men on probation, and the records disclose that most of them have made good. I desire to report, to the credit of Mr. Inskeep, that he has in numerous instances secured remunerative employment for men placed in his charge, and that, generally speaking, his services as Probation Officer have been invaluable to the court.

Early in the year, at the suggestion of Mr. F. W. Stadter, Deputy City Attorney, assigned to the Municipal Court, the plan of installment fines was put in practice. The regulation has been that where persons, otherwise worthy, first offenders, and those giving promise of reform, were punished by fines and unable to pay, the terms of payment by installment are entered in a book, and they are allowed to pay their fines in installments suitable to their circumstances. While some of the fines go unpaid by reason of breach of trust and inability to pay and are later remitted out of considerations of clemency, the system is very generally successful, and is, of itself, an excellent scheme of probation and deterrence.

JOHN H. STEVENSON,
Municipal Judge.

POUND BUREAU

POUND BUREAU REPORT 1914

MONTH.	Dogs Caught	Licensed Redeemed	Unlicensed Redeemed	Sold	Given Away or Escaped	Killed	Left Pound	Dead Dogs Removed From Streets	Dead Delivered to Crematory	No. of Horses	Cattle	Other Animals Killed	Left In Pound.				Amount Received
													Horses	Cattle	Other Animals	Animals	
December, 1913.....	140	19	18	10	.....	65	28	25	90	4	2	*1	.....	.....	.....	.....	\$1.00
January, 1914.....	139	6	14	11	.....	94	14	33	127	12	2	.....	.....	.....	.....	.....	3.00
February.....	127	3	11	10	.....	84	19	26	110	1	1	.....	.....	.....	.....	.....	.....
March.....	123	9	13	8	.....	75	18	37	112	13	7	*2	.....	.....	.....	.....	4.00
April.....	124	3	11	5	.....	60	36	24	83	20	25	*1	.....	.....	.....	.....	11.00
May.....	125	6	8	3	.....	94	13	33	135	18	5	.....	.....	.....	.....	.....	9.00
June.....	96	16	4	10	.....	40	15	33	82	14	18	*1	.....	.....	.....	.....	8.00
July.....	116	19	12	3	.....	64	19	35	90	16	20	.....	.....	.....	.....	.....	5.00
August.....	90	10	6	3	.....	54	16	39	83	9	4	.....	.....	.....	.....	.....	8.00
September.....	136	15	34	4	.....	64	35	72	96	9	5	.....	.....	.....	.....	.....	3.00
October.....	233	42	43	7	.....	104	25	15	120	13	6	.....	.....	.....	.....	.....	4.00
November.....	180	33	24	3	.....	94	23	18	112	7	6	.....	.....	.....	.....	.....	5.00
Totals.....	1629	181	198	76	9	910	255	349	1259	146	101	.....	.....	.....	.....	.....	\$ 63.00

HARBOR PATROL

To the Hon. H. R. Albee, Mayor of the City of Portland, Oregon:

Dear Sir: I have the honor to submit the following report of the operations of the Harbor Patrol for the year ending November 30, 1914.

1. General supervision of the harbor and docks has been maintained during the year and all rules and regulations have been strictly enforced whenever and wherever practicable.
2. A constant patrol of the harbor and docks has been maintained both night and day by officers of the Harbor Patrol Service.
3. Strict watch has been kept on all vessels arriving from ports that are deemed infected by the United States Public Health Department, to prevent a spread of any contagious disease.
4. Passenger steamers when arriving or departing, have been attended by officers of the Harbor Patrol, who assist newly arriving persons with information, regulating hotel runners and traffic, and keeping order on these docks where large crowds of people congregate.
5. Six persons were saved from drowning by members of the Harbor Bureau.
6. Thirty-six bodies were recovered from the river by the City Grappler. A charge has been made for the services of the City Grappler to persons having the means to pay and to persons of small means the charge has been remitted by the Council, all moneys collected being paid to the City Treasurer.
7. Cargo and other material lost overboard from docks or vessels and where the City Grappler has been called to recover same, the owners were charged for the Grappler's service.
8. Ninety arrests were made and fighting and disorderly conduct aboard of ships has been quelled by members of the Patrol.
9. Thirty-two snags which were a menace to navigation were taken from the channel by the Patrol Boat during the year, and twenty-two fire alarms responded to.
10. Five disabled launches were towed to different landing places by the patrol boat.
11. Eight skiffs, two sets of boom sticks, three canoes, one house-boat, one life-boat, one life-raft, four launches, one wagon, one sail-boat, were recovered by the Harbor Patrol boat.
12. Three horses that had fallen overboard from docks were saved by the patrol boat crew.
13. Dutch SS. Maria, which was berthed at the Oceanic dock when it was destroyed by fire on July 5th, was towed to safety by the harbor patrol boat.
14. Persons injured along the water front have been brought to the harbor station in the patrol boat and thence sent to hospitals.
15. A strict watch is maintained along the docks and waterfront to prevent the storing of gun-powder, blasting powder, dynamite, and other explosives.
16. The dumping of ashes, hold sweepings and other debris from vessels in this port has been strictly prohibited; this to prevent the unnecessary shoaling of the river.

17. Newly arriving vessels are boarded, their masters informed as to the harbor regulations and are under supervision at all times that these regulations are being carried out.

18. The Patrol is now supplying ocean-going vessels with Bull Run water and water to the amount of 1,154,200 gallons has been furnished vessels during the past year.

19. Representatives of foreign governments and shipping firms were given information as requested and the harbor and docks inspected by them in the patrol boat.

20. One hundred and eighty-eight dollars and twenty-five cents was received for Grappler's services, same being turned over to the City Treasurer.

Respectfully submitted,

J. SPIERS,
Harbormaster.

ANNUAL REPORT
OF THE
CIVIL SERVICE
BOARD

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

CIVIL SERVICE BOARD

To the Honorable Mayor, of the City of Portland, Oregon:

The Civil Service Board herewith submits its report for the fiscal year ending November 30, 1914.

EXAMINATIONS

We have been unable to hold examinations sufficient to provide eligible lists to meet the requirements of the various departments. This was caused:

1. On account of reorganization necessary to put into effect the new form of city government.
2. Adoption of new classification code creating ranks in each service and making necessary examinations for promotion from one rank to another.
3. Requests of department heads for special examinations for special positions.
4. Time taken up in the adjusting of affairs relating to civil service employees and departments arising from changing classification and standardization of salaries.
5. The time given to hearings in the matter of appeals from order of discharge.
6. The provisions in the charter prohibiting hiring special examiners. We are oftentimes handicapped in securing capable men from outside the city service to help in examinations of a technical nature.

SPECIAL COMMITTEE

To reduce the number of examinations and yet provide suitable eligible lists is the aim of the board. To help us in this plan, the Oregon Society of Engineers, at our request, appointed a committee consisting of D. C. Henry, Chairman; Henry M. Morse, Acting Chairman; Fred D. Weber, and John W. Cunningham, to make a survey of positions in the engineering service and recommend classifications and scope of examinations for same. They are going into this matter thoroughly and will probably report in the near future.

TEMPORARY APPOINTMENTS

There has been a tendency in some departments to make temporary appointments of men not on eligible list or in the regular service, without first inquiring of the Civil Service Board whether suitable men were available from our lists. We amended Rule VII so as to make it definite and explicit on this point, and since there seems to be a better disposition to comply with these provisions on the part of the appointing authorities, we anticipate little trouble in the future in this respect.

EFFICIENCY RECORDS

Much has been said against the efficiency record system during its first year in operation and very little in its favor. However, it must be admitted that this system does give a record of employees'

services useful to a department head and is a means of maintaining discipline. Also that it does serve as a check on employees, who because of this system render more efficient services, particularly when a poor record may prevent an increase in salary. There is no doubt that in some instances an employee is by this means kept up to the standard, whereas without this system his services would in a measure be unsatisfactory but not enough to warrant a suspension or dismissal.

On the other hand the lack of uniformity in making up these records is unsatisfactory to all concerned. Some comply only with the letter of the rule, filing reports of demerits only, or even in a few instances sending in blank reports from month to month. Others go further and file special reports raising the normals when deserved. The effect is that two men, equally efficient, doing the same class of work, but in different departments, would have in the one case merely a normal efficiency rating and in the other an increase over the normal. In the matter of promotion this might work to the disadvantage of the first though he is equally deserving.

It requires a great amount of clerical work in this office and the various departments to keep up these records.

HEARINGS

Twenty-one appeals from orders of discharge were heard and decisions rendered during the year. In only two cases were the appellants reinstated. A hearing was held January 8, 1914, involving eleven police officers charged with gambling and conduct unbecoming an officer. In the case of three of these officers the dismissal was sustained; the other eight were suspended for a period of six months, at the end of which time they were to be placed on eligible list for patrolmen and be subject to appointment from said list. None of these eight have been appointed.

We wish to call attention to the wording of Section 317 of the Charter relating to the order of reappointment of laid-off employees, which reads as follows:

* * * * * "and if such offices or places shall again be created or reinstated, the employees so removed (except as to emergency employees) shall have preference for reappointment in the order of their discharge."

This is clearly an error in carrying out the intent of Civil Service as according to these provisions when several employees have been laid off at different times, we are compelled to certify the latest appointee who may have worked only a few months, while the last man laid off may have been an employee for several years.

GEO. W. CALDWELL,
A. E. CLARK,
JOHN F. LOGAN,
Civil Service Board.

NUMBER OF EMPLOYEES UNDER CLASSIFIED CIVIL SERVICE

DEPARTMENT OF PUBLIC SAFETY		
Mayor's Office		
Stenographic Clerk	1	
Police Bureau		
Captain of Police	4	
Lieutenant of Police	1	
Detective Sergeant	6	
Detective	21	
Sergeant of Police	13	
Patrolman, Driver, Jailer, Guard.	223	
Harbor Master	1	
Matron	3	
Superintendent Women's Protective Division	1	
Asst. Supt. Women's Protective Division	2	
Clerk	2	
Stenographic Clerk	2	
Gasoline Engineer	3	
Municipal Grappler	1	
Chauffeur	1	
Cook, Linnton quarry	1	
Elevatorman	3	
Engineer, City Hall	3	
Janitor	3	
City Pound		
Pound Master	1	
Deputy Pound Master	3	
Total	297	
Bureau of Fire		
Chief Engineer	1	
Assistant Chief	1	
Battalion Chief	3	
Captain	32	
Lieutenant	43	
Master Mechanic-Hydrantman	3	
Fire Engineer	21	
Hoseman, Truckman, Driver	241	
Master and Pilot Fire Boat	3	
Engineer Fire Boat	4	
Stoker	23	
Clerk	2	
Stenographic Clerk	1	
Superintendent Fire Alarm and Police Telegraph	1	
Lineman	3	
Blacksmith	1	
Electrical Instrument Maker	1	
Inspector Fire Escapes	1	
Plumber	1	
Total	386	
DEPARTMENT OF PUBLIC AFFAIRS		
Secretary to Commissioner of Public Affairs		1
Bureau of Parks		
Superintendent	1	
Assistant Superintendent	1	
Civil Engineer	1	
Stenographer	1	
Copyist	1	
Zoo Tender	1	
Foreman of Maintenance	1	
Gardeners	4	
Custodian Forestry Building	1	
Foreman	1	
Superintendent of Playgrounds		1
Playground Directors	40	
Attendants Comfort Station	9	
Matron at Playground	1	
Watchman	3	
Laborers	67	
Total	134	
Bureau of City Hall		
Superintendent of Building	1	
Plant Engineer	1	
Janitors	9	
Elevatorman	1	
Telephone Operator	2	
Messenger	1	
Total	15	
Bureau of Weights and Measures		
Bureau of Weights and Measures	1	
Deputy Sealer of Weights and Measures	1	
Total	2	
Bureau of Free Employment		
Chief Clerk	1	
Assistant Clerk	1	
Total	2	
City Attorney		
Stenographers	4	
Division of Municipal Court		
Clerk	2	
Total	6	
DEPARTMENT FINANCE		
Secretary to Commissioner		1
City Treasurer's Office		
Accountant	1	
Cashier	1	
Clerk	6	
Stenographer	3	
Total	11	
Bureau of Purchase and Stores		
Chief Clerk	1	
Stenographer	1	
Bill Clerk	1	
Stationery Clerk	1	
Material Inspector	1	
Total	5	
Municipal Shops Division		
Superintendent	1	
Automobile Mechanic	4	
Blacksmith	1	
Horseshoer	1	
Messenger	1	
Storekeeper	1	
Storekeeper Assistant	1	
Wheelwright	1	
Ship Carpenter	1	
Ship Carpenter's Assistant	2	
Carriage Painter	1	
Laborer	1	
Total	16	

CIVIL SERVICE BOARD

Garage Division			
Automobile Mechanic	1	Foreman Carpenter	1
Assistant Storekeeper	1	Blacksmith	1
Laborer	1	Brickmason	1
		Plant Engineer	1
		Water Boy	1
Total	3	Cook	1
Total	24	Total	366
DEPARTMENT OF PUBLIC UTILITIES		City Auditor	
Secretary to Commissioner	1	Chief Deputy	1
Chief Clerk	1	Deputy	1
Stenographer	1	Accountant	7
		License Clerk	1
		Clerk	18
Total	3	Stenographer	3
Bureau of Garbage Disposal		Total	31
General Foreman	1	DEPARTMENT OF PUBLIC WORKS	
Assistant Foreman	1	Secretary to Commissioner	1
Chief Engineer	1	Principal Assistant City Engineer	1
Topman	1	Civil Engineers	6
Watchman	1	Instrumentmen	13
Fireman	1	Chainmen	29
Dumpman	3	Draftsmen	11
Teamster	1	Computer	7
Yardman	1	Blue Printer	1
		Physical Laboratory Tester	1
Total	11	Inspector Streets and Sewers	
		(Class A)	20
Bureau of Street Cleaning and Sprinkling		Inspector Streets and Sewers	
Superintendent	1	(Class B)	48
Clerk	1	Chief Clerk	1
Chauffeur	3	Deputy Clerk	20
Foreman-Laborer	210	Stenographic Clerk	5
District Superintendent	3	Steam and Gasoline Engineer	6
Hostler	10	Bridge Carpenter	7
Broom Maker	2	Chauffeur	1
Repairman	3	Foreman; Laborer	65
Horseshoer	1	Cement Finisher	1
		Chief of Bureau of Buildings	1
Total	234	Inspector of Buildings	6
		Examiner of Plans	1
Water Bureau		Structural Engineer	1
Civil Engineer	1	Structural Draftsman	1
Assistant Civil Engineer	2	Chief Electrical Inspector	1
Superintendent of Construction	1	Electrical Inspector	5
Instrumentman	1	Plumbing Inspector	1
Chainman	3	Deputy Plumbing Inspector	5
Draftsman	7		
Computer	1	Total	266
Assistant Superintendent	1	COMMISSION OF PUBLIC DOCKS	
Gateman	10	Chief Clerk	1
Chief Clerk	1	Wharfinger	1
Clerk	26	Watchmen	3
Addressograph Operator	2	Stenographer	2
Inspector	32	Stenographic Clerk	1
Inspector Water Pipes	1		
Pump Engineer	10	Total	8
Stenographer	1	CIVIL SERVICE BOARD	
Chauffeur	3	Stenographic Clerk	2
Meter Inspector	1	Total number under classified	
Meterman	2	Civil Service	1799
Calker	2		
Foreman-Laborer	24		
Carpenter	228		
	2		

CIVIL SERVICE BOARD

CLASSIFICATION

Classification.	Examiner.	Appointed.	Discharged.	Resigned.	Reinstated.
Class C—Clerical Service.					
Deputy, Clerk, Rank D	57	6	2	4	1
Stationery Clerk	10	1	0	0	0
Clerk, Rank E	16	4	1	0	0
Stenographer	23	3	0	2	0
Messenger	5	5	1	3	0
Class E—Engineering Service.					
Sewer Engineer	9	0	0	0	0
Computer	9	2	0	0	0
Draughtsman	12	0	0	0	0
Class F—Fire Service.					
Fire Engine Engineer	15	3	0	0	0
Stokers	23	6	0	2	0
Hoseman, Truckman, Driver	118	15	14	21	0
Class I—Inspection Service.					
Inspector, Water Bureau	110	4	9	1	0
Class K—Skilled Labor Service.					
Cook	5	1	0	0	0
Stone & Wood Block Paver	3	1	0	0	0
Automobile Mechanic	22	4	0	0	0
Gardener	11	1	0	0	0
Class L—Labor Service.					
Attendant Comfort Station	19	8	2	0	0
Janitor	20	1	0	0	0
Watchman Docks	59	3	0	0	0
Elevatorman	0	0	1	0	0
Class P—Police Service.					
Captain of Police	24	2	1	0	0
Patrolman	192	12	16	14	1
Detective	22	0	0	0	0
Class S—Supervising Service.					
Superintendent of Playgrounds	2	1	0	0	0
Senior Playground Director	13	4	0	0	0
Playground Director	51	21	0	1	0
Wharfinger	59	1	0	0	0

RECAPITULATION

Applications filed	3,100
Examined	910
Appointed	109
Discharged for cause	47
Resigned	48
Former employees reinstated to eligible lists	11
Reinstated on appeal	2

The expenses from November 30, 1913, to November 30, 1914, have been as follows:

Salary, Secretary	\$1,800.00
Clerks	1,961.95
Stationery, Office Supplies, Advertising, etc.	401.07
Contingencies	252.62
Total	\$4,415.64

ANNUAL REPORT
OF THE
DEPARTMENT OF
PUBLIC WORKS

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

DEPARTMENT OF PUBLIC WORKS

ROBERT G. DIECK
COMMISSIONER

MAIN OFFICE—

C. J. KRUSE, Chief Clerk

BUREAU OF STANDARDS—

R. S. DULIN, Chief

BUREAU OF BUILDINGS—

H. E. PLUMMER, Chief

Building Division—

A. S. LOTSPEICH, Chief Inspector

Electrical Division—

E. F. DUNLAP, Chief Inspector

Plumbing Division—

WM. HEY, Chief Inspector

CITY ENGINEER—

P. H. DATER

Bureau of Highways and Bridges—

H. W. HOLMES, Chief to September 1st.

R. E. KREMERS

Pavement Construction and Maintenance Division—

J. HANNAM

C. W. WANZER } District Engineers

Structural Division—

J. W. SADLER, Chief Inspector

Bridge Maintenance Division—

NELS REED, Superintendent

Sidewalk Division—

R. F. HURLBURT, Superintendent

Bureau of Sewers—

J. C. SHARP, Chief

Construction Division—

C. H. SMITH, Chief Inspector

Maintenance Division—

C. A. ROBINSON, Superintendent

Bureau of Surveys and Drafting—

W. P. HARDESTY, Chief

Drafting and Computing Division—

O. A. KRATZ, Chief Draftsman

Survey Division—

I. C. ANDERSON

J. J. BROOKS

A. F. MORRIS

H. G. RICHARDSON

} District Surveyors

Street Extension Division—

C. F. FISHER, Chief

DEPARTMENT OF PUBLIC WORKS

To the Council, Portland, Oregon.

Gentlemen: I beg to transmit, herewith, a report of the operations of the Department of Public Works for the fiscal year 1914, with observations upon certain desirable changes.

Although it may appear that the money value of work accomplished is small as compared with that of previous years, it is to be noticed that the work has been most striking in its thoroughness of execution. A decided improvement in the conduct of work has been attained and the attitude of the employees toward the public has been marked with greater courtesy. These are the result of a more stable organization, of direct responsibility, and clearer differentiation of duties.

In the larger sense, attention to the needs of the public is of more importance than strict technical service and, because of the decreasing number of complaints it is evident that the public is being more effectively served.

I, personally, feel considerable pride in this attainment and desire to express to the employees of the Department, my gratification in their work.

Very respectfully,

R. G. DIECK,
Commissioner of Public Works.

GENERAL OBSERVATIONS

The **Spirit of Work** generally observed in the department during the year has been most gratifying. This quickening of effort is evidence that employees are coming to respect the public service and have recognized the effort to adjust salaries with worth and uniform standard. There still remain, however, employees not qualified for their duties or who are paid by the City more than their services warrant. If the public service is to reach a proper standard, salaries should be based first on efficiency and, second, on length of service and character of the position.

The **Efficiency System** established under the Administrative Code is a real effort to make effective work the sole reason for advancement and to point out the drones. If properly administered, such a system is an effective control, arousing in employees a sense of responsibility and encouraging a pride in the work which is sure of recognition. Much criticism has been heard as to the unequal enforcement of the rules laid down and, although this criticism may not be entirely unwarranted, the limited trial of the system does not allow of the conclusion that the principle behind the system is erroneous because individual application has not always been thorough or uniform. It is my full belief that if the system were conscientiously enforced in all departments, there would be general improvement in municipal work and the entire service would attain dignity and stability. In the final analysis, the merits of such a system are not to be determined by rigid rules and, whatever its defects, application over a reasonable period can be the only fair test. It is essential for the success of any efficiency system that rewards for merit and demotion for neglect and indifference be held out to all.

The whole purpose of an efficiency system is to supply a method for differentiation of individuals on the basis of work and when praiseworthy effort is not recognized under declared rules, the employee rightfully questions the intent of the system and loses his interests. Capable men will not be attracted to the service unless rewards are sure and substantial. It has been contended that the ultimate effect of promotions at stated intervals as defined in the Administrative Code would eventually result in a serious expansion of the budget, but it is my belief that parallel with increases in salaries will come increased efficiency of employees, making possible substantial reductions in force to balance increases in salary, let alone the improvement in character of work.

In the last months of the year the efficiency returns were in much better form and, with experience, there can be no question that minor defects can be cured.

Pension System—Due to the lack of a pension system, the service is everywhere burdened with employees who, through age or physical weakness, are not now competent to perform work in an economical manner. It is unfair to the departments using large bodies of men for rough labor, to burden them with employees who are no longer capable of performing an average day's work. Not only is the work of such men costly in itself, but, because of

the practical impossibility of segregating the strong from the weak, incentive to better work disappears and the efficiency of the weakest soon becomes the standard. At the earliest moment the Council should seriously consider the question of pensions for if present conditions endure, the cost of city work may never be reduced. Again, if the City purpose to compete in the open market for public improvements, it must be free to choose the best of service and cannot hope for success in the venture unless its forces are of highest efficiency.

Improved Reports—There has been much improvement in the substance and form of official statements. In past years no great emphasis was placed upon the completeness and simplicity of statements in official reports and, as a result, not only has their construction been defective, but carelessness in preparation has led to disputes and demands for additional information. Free discussion of technical matters is encouraged, the only restriction being that presentation be concise with no argument touching administrative policy. No official matter is allowed to be treated in an informal manner and disposition of all matters is fully recorded. Dependence upon the memory of individuals is thus no longer necessary and there is a decided inclination to state every proposition so clearly that the necessity for review is gradually disappearing. In later years the matter may be again called in issue and the wisdom of the requirements will then be evident.

Unwise Economy—The insistent and general cry for reduction in governmental expenses has seriously disturbed the operations of this department and has discouraged preliminary investigations for major improvements which will soon be demanded and which require careful advance study to escape errors that always come when designs are hurried. It is most unfortunate that such work may not now be undertaken, for in slack times is the opportunity to calmly plan for the future when the impatience of the public does not bring hasty decisions. The restricted appropriations for 1914 forced a reduction in work to the point of positive danger but as a result of the staggering reductions in allowances for 1915, the department will be forced to neglect even ordinary maintenance of the City property, as represented in sewers and street pavements. While a retrenchment in expenditures for construction work is undoubtedly proper in lean times, this retrenchment should not extend to reductions in allowances for maintenance. The life of all public improvements is measurable by their upkeep and if this upkeep be neglected, rapid deterioration results and present economy is productive of abnormal outlays for maintenance in subsequent years.

Hard-Surface Replacement—A fixed policy as to responsibility for the replacement of hard-surface pavement must be declared by the Council. On some of the streets in the business section repairs are no longer economically possible and resurfacing constitutes the only reasonable solution. The improvement resolution for the resurfacing of Alder street from Sixth to Lownsdale streets (where the pavement had outlived its usefulness) was introduced, during May, to bring the whole subject of resurfacing in the simplest form to the attention of the Council, and to

develop a definite plan of action. It could not be urged by anyone that the property was unable to meet the assessments. It was clear that the surface had been worn out by intense general traffic and that, as a main thoroughfare, the interest of the public in its condition exceeded any local interest. The rapid deterioration of the asphalt surface at numerous places and the threatened breakdown of the concrete base, where the asphalt surface had been completely worn away, demanded immediate action to prevent a complete destruction of the pavement. The objections of local interests prevailed and minor repairs of an indifferent nature were made at the worst places, wholly at private expense. In part, the patches have stood fairly well, but in places all evidence of repair has disappeared and new defects have developed, particularly at the joints between old and new materials. The appearance of the roadway is worse than ever. The concessions by the Council have done nothing more than to delay the solution of the entire problem. The disgraceful condition of Washington street for its entire length, and of Broadway from Stark to Taylor streets, brings unfair criticism upon the department, which has not been allowed funds for resurfacing these streets or been supported when, in a parallel case, it endeavored to require local interests to perform the work under regular improvement proceedings. Under these conditions the department must stand helplessly aside and watch the complete destruction of the pavements.

It seems to me a distinct injustice to demand of owners a continuing outlay for the upkeep of hard-surface pavements abutting their properties, when the benefits from such improvements cannot be shown to accrue except upon original installation. It is manifestly unfair to insist that the City in general has neither responsibility nor interest in the streets and that the wear on pavements has generally any direct bearing on property values,—that is to say, that the value of property on streets is measured by the extent of traffic, solely. It is equally unfair to hold to the idea that, although the original expense of construction was met through local assessment, there should be no departure from the practice in the case of replacements. If there were an added benefit at each renewal of a pavement, the assessment value of every parcel in an improvement district should be correspondingly advanced after each such operation. That the assessor holds to no such rule is evidenced by a casual inspection of the assessment roles. In fact, assessments are reduced even though pavements are replaced, or advanced, entirely without regard to the condition of the roadway. The original installation of a hard-surface pavement does reflect upon property values in an increase in assessment, since, by the original installation the property is made available for its best use, but it would be absurd to contend that the effect of pavements is always in a direction to advance market values.

The procedure in assessing the costs of replacements is not uniform throughout the United States. In some cities replacements are made entirely at local expense; in others, the general fund bears the entire burden, the project being financed either from direct revenues or by issuance of general repaving bonds. In the

remainder of the cities, both local and general assessments in varying proportions are made.

The undeclared policy of the City will add to the difficulty of the situation as more pavements come to need replacement and unless this be definitely declared, a firm and unvarying stand may not be maintained. A flexible rule admits of unfairness and discrimination.

IMPROVEMENT CODE

Sewer Proceedings—The unfortunate experiences attending the construction and bonding of every main sewer system afford indisputable evidence of gross defects in the present legislation touching the whole matter of drainage.

In the last annual report was pointed out the unfairness of the Code as it affects the construction of main sewers through large areas of unplatted and unimproved land not in immediate need of sewerage. The construction of the final unit of the East Stark street sewer system is an excellent example of the severe financial burden imposed upon vacant property by an improvement unreasonably advanced, as far as the needs of the property are concerned. It is unlikely for some years that any great building activity will be shown in most of the area served by this section of the sewer, yet, during the entire period of undevelopment, this already over-burdened land will be forced to meet assessments for a sewer which, upon its completion, can directly serve only a small populated area in Montavilla, on the extreme easternmost limits of an arbitrarily-fixed drainage district. The inequity in this case must be convincing, especially as the built-up area asking for sewerage should undoubtedly have been included in a drainage district with sewers having flow northward to the Columbia River. While plans for this system were under way, a change in the point of discharge was considered, solution being sought in a design ultimately providing outfall to the Columbia River, but temporarily discharging into the East Stark street system, through a sewage lifting station; to give the needed relief to Montavilla. Such an adjustment would have materially reduced the capital outlay for the main sewer, and, in part, corrected the defective design practically forced upon the department by imperfect drainage laws and the improper district limits. On the other hand, there would have been greatest difficulties in financing the construction, maintenance and repair of the proposed pumping station, in satisfactorily readjusting prior assessments over a large area and, most of all, in defending construction of sewers, with a capacity in excess of actual needs, if the Montavilla section were excluded from the district. In the face of these difficulties, the plan was abandoned.

In the drainage of the Johnson Creek basin, the Peninsula basin in part, and of several basins in the hill sections of the West Side, similar difficulties will develop unless the City, by statute, be able to declare drainage districts irrespective of artificial city boundaries, and to levy assessments for main sewer construction upon all lands ultimately benefited, though not otherwise subject to the municipal authority. Without such authority, the construction

of sewers, for other than strictly sanitary purposes, will be a grave error and lead to financial losses.

The construction of sewers allowing no entrance of storm water is a dangerous procedure, for failure to provide channels for natural streams will result in property damage and suits which the City cannot hope to resist successfully. Local demands and threats of legal action will soon force the building of storm water drains in spite of the City's desire for economy, and the plea of limited jurisdiction will not serve to excuse the City's action in closing natural watercourses. Before the next legislative session, a general drainage bill should be prepared for presentation. The question is one of extreme complexity and should be approached with full knowledge of the difficulties to be overcome.

Cement or Vitrified Pipe Sewers—The amendment to the Improvement Code, made in 1911, which requires that in sewer construction cement pipe be specified wherever vitrified clay pipe may be used, has frequently led to absurdity, since, with high velocities, best engineering practice does not regard unprotected cement pipe as the equal of vitrified clay pipe. Convinced of the superiority of vitrified clay pipe on steep grades, the department has, in such instances, recommended use of this pipe in preference to cement pipe and has, thereupon, been subjected to unpleasant criticism and controversy. The provision as drawn is sweeping in terms and, in utter disregard of practical experience, unquestionably declares that both type of pipe are of equal serviceability under all conditions.

The **Street Extension Proceedings** in present form are an invitation to cumbersome legal action unless practically unanimous agreement of all assessed parties be had. The exasperating delays which have always attended important street openings and have encouraged neighborhood quarrels and bitter feeling toward City officials, are a discouragement to any enthusiastic support of large projects. The speedy termination of proceedings under the "Additional Method" commends its general use, but the draft on the general revenues for major projects would bring serious disturbance to the City's finances. The Council is therefore fully justified in hesitating to incur its current funds, even for a project of the unquestioned value of the Sandy Boulevard extension to Burnside street and fully understanding the discouraging legal delays under ordinary condemnation methods. A change in the Code either in a return to the old procedure where remonstrance was not so broad in its power, or in a grant of authority to float general street extension bonds, later to be covered by local assessments, is imperative, otherwise all extensions except distinctly local and minor cases, must be dropped.

Parallel with any change in procedure should come the right of "excess condemnation." Wherever tried, this scheme has shown the greatest ultimate economy and has made possible an adequate control of construction abutting streets of first importance.

City Planning—The discussion as to the appearance of bridges leads to the very important question of control. Independently of the source of funds, the citizens have the right of protection against objectionable design of structures in public places offensive to

good taste, whether these be bridges, public buildings, monuments, statues or fountains. If the gift of, say a statue be unconditionally accepted, there is no assurance that an otherwise pleasing street or park may not be permanently marred. Administrative officers with specialized functions are not, as a rule, qualified to judge of propriety of design or be expected to show the courage necessary to reject a bequest which, though in bad taste, is urged by powerful interests. The control of such matters must be of a continuing nature and independent of change of administration. A board or committee created by charter amendment and operating much as the present Commission of Public Docks would be the proper repository of such authority. In New York, Washington and other cities in America and in the larger cities in Europe, civic art commissions have long been established and have demonstrated their serviceability. In contradiction to the commonly-held opinion, the decisions emanating from such bodies have usually been marked by temperateness and foresight and wherever contrary to the plans of the administrative officers, time has shown the strength of their judgment. Of course, any body of this sort with advisory power, only, and no power to veto, is a useless instrument. Experience has shown that the veto power has been invoked in rare cases, only, where political bodies, under pressure, have hesitated to reject. During the year, an experiment was tried in the Department with a volunteer advisory committee to assist in the formulation of a broad policy of public improvement and to arouse a general interest in major projects. The several meetings of the committee led to no result other than to confirm the opinion that purely advisory bodies have neither encouragement of effort nor real interest in work beyond their power to direct. As expected, the committee's life was short and futile. In spite of failure in the attempt, the feeling was gained that public improvements of major character would receive a strong and intelligent impetus if the program might receive the unqualified sanction of a representative body acting with comprehensive understanding of future needs without local bias or prejudice. It may perhaps be urged against a charter provision creating an art commission of this kind that a return to decentralization of authority would be inevitable, but the functions of such a unit of government are certainly not legislative nor administrative and, in no sense, would they trespass upon the authority of the Council to govern expenditures. Its broad work would be that of experts lending their advice to the legislative body. It is strongly urged that an amendment to the charter authorizing the appointment of a civic art commission be placed upon the ballot at the June election.

County Roads—Within the city boundaries the County of Multnomah still controls fifty-two miles of roads, of which seven miles lie on the boundaries.

The urgent demand for transfer of county roads to the city has come from the County's failure to maintain them. At this time many of the roads are in deplorable condition and little attempt has been made to make even ordinary repairs. A general acceptance of county roads by the city would at this time be distinctly unwise since the funds for the repair of streets are inadequate for present needs. The County has applied its road fund to the repair of roads

outside the limits and in spite of the fact that the City contributes over ninety per cent of the county taxes, has taken the untenable stand that all highways within the corporate limits are essentially city streets. Certain of the roads can never be other than inter-community highways and these the city should never consent to accept as streets. Others are purely local streets and as soon as possible should come under the care of the City. However, until a general policy of maintenance is declared, the City should refuse to accept further burdens for road repairs.

Certain of the main-travelled roads will need to be paved even before the abutting property becomes of sufficient value to assume the entire cost and, under such circumstances, the County should formulate some arrangement to assist the owners. It has been suggested that the County designate certain roads which it desires to transfer to the City and set aside a fund to pay a portion of the cost of hard-surfacing the roadway.

COUNTY ROADS WITHIN THE CITY OF PORTLAND

1 Arteries.				2 Through Streets and Roads.				3 Local Roads.				4 Roads Located on City Boundary.			
Name.	Length.		Miles.	Name.	Length.		Miles.	Name.	Length.		Miles.	Name.	Length.		Miles.
	Lin. ft.	Miles.			Lin. ft.	Miles.			Lin. ft.	Miles.			Lin. ft.	Miles.	
Barnes Road.....	2,700	.51		Dosch Road.....	4,500	.85		E. 28th & 53rd Av.	7,700	1.46		Fremont St.....	5,300	1.00	
Cornell Road.....	2,500	.66		Fairmont Blvd.	17,500	3.31		E. Steele Ave.....	2,610	.49		E. 82nd St.....	10,000	2.00	
Canyon Road.....	2,000	1.14		(2 roads).....	5,400	1.02		E. 62nd St.....	2,610	.49		E. 42nd St.....	7,800	1.48	
E. 32nd St.....	20,940	3.79		Marquam Road..				E. 67th St.....	2,610	.49		65th Ave.....	9,300	1.76	
E. 32nd St.....	14,800	2.83						E. 71st St.....	2,610	.49		Lance Ave.....	5,000	.95	
Foster Road.....	14,800	2.81						St. Johns River	7,500	1.42					
Freight Road.....	5,280	1.00						Road.....	3,000	.57					
St. Helens Road.....	6,200	1.18						E. 59th St.....	675	.13					
Marquam Road.....	5,700	1.08						E. Taylor St.....	5,000	.95					
Montgomery Drive.	5,150	.98						Tacoma Avenue	1,000	.19					
E. 92nd St.....	7,800	1.48						(West end).....	2,500	.47					
Powell Valley.....	14,400	2.73						E. 17th St.....	2,000	.38					
Patton Road.....	6,600	1.25						E. 72nd St.....							
Slavin Road.....	8,000	1.52						Front & Nicolai..							
Section Line.....	5,400	1.02													
Boones Ferry.....	600	.11													
Columbia St. Rd..	28,990	5.48													
Fremont St.....	2,600	.49													
Barr Road.....	5,400	1.02													
Base Line Road.....	8,100	1.53													
Tacoma Ave.....	5,700	1.08													
E. 17th St.....	1,000	.19													
Totals.....	173,680	32.88			27,400	5.18			37,805	7.04			38,000	7.19	

Total of Nos. 1, 2 and 3, 45.10 miles.

Total of No. 4, 7.19 miles.

Grand total, 52.29 miles.

Revision of all the City's Printed Forms has been constantly under way by Mr. O. A. Kratz, Chief Draftsman, acting for the Forms Committee of the Council. Mr. Kratz has performed exceptional service in this work, securing uniformity and great economy in printing. Many of these forms showed need of immediate adjustment. Forms of general application were practically unknown. Such simple record forms as time sheets and foremen's daily reports in use by one department, were not arranged to serve in the operations of others. Even within a department the bureaus had designed record blanks for their particular needs without consideration of forms of like import used elsewhere. As a consequence, large stationery stocks were carried and the multiplicity of types was bewildering. The old proposal estimate and contract blanks for improvement work were completely redrafted and made of uniform size for flat filing in loose leaf form. As an excellent example of Mr. Kratz's intelligent work, is mentioned the form and arrangement of the standard specifications, which are now printed in standard, pocket size, loose leaf sheets, the same as all field records. Their greater convenience and facility of reference, as compared with the old cumbersome forms, has been demonstrated after a full season of use by the inspection force.

Publication of the City's Business through the medium of exhibits has proven successful, here as elsewhere. The charts for all the departments required under the Charter have been prepared in this department, which now maintains current record on standard charts. During the year these graphic records were shown three times—at the semi-annual and annual fiscal periods and, in more elaborate form, at the Manufacturers & Land Products Show at the Armory. In this last the City maintained a well-balanced exhibit which received favorable comment because of its artistic arrangement and completeness. In my opinion, the Council would be making a wise expenditure in arranging for similar exhibits at more frequent intervals for the activities and expenditures of the City are in this form far more clearly presented to the public than is possible in the dry annual report.

Officers and Store Yards—The widening field of departmental activities has emphasized the inadequacy of the City Hall offices and the need for larger storage facilities for official records and for construction materials and equipment.

The municipal building is poorly designed for the present needs and related offices may not be grouped in a natural arrangement. The time is at hand when additional office space should be allotted through extensions to the building itself or in rented quarters. The latter arrangement is undesirable and tends to disorganization in a department where close supervision and economy of operation are possible only through rigid centralization of control.

The effectiveness of the construction and maintenance forces of the department is dependent, in great measure, upon the rapidity of delivery of materials and availability of equipment. To meet routine and, especially, emergency needs, there should be available not less than six, and preferably ten, well-located yards of generous extent from which supplies may at all times be taken. The present storage facilities are insufficient, consisting of three small

areas on property under control of other departments and of one poorly located, small, rented yard. Not one of these is in a proper position for economic distribution of materials and, because of doubtful tenure, the investment for proper housing of supplies and equipment is not benefited. The purchase of several sites for yards and an allotment for development are an imperative necessity.

Storage Vaults—The department has a vast number of old maps, documents and records which are of inestimable value. Many of these constitute the City's only proof of title. No adequate storage room is available for these old records or for the voluminous files of more recent improvements. Records of millions of dollars of street and sewer improvements are without any storage provisions. There is immediate need of fireproof vaults where such records may be stored and filed for reference as needed. A single law suit lost because of destroyed or missing records might easily cost the City more than the construction of the necessary storage vaults.

MAIN OFFICE

ACCOUNTING DIVISION

The great benefit expected from the establishment of standard account-titles has been demonstrated in the more adequate control of expenditures. Although at times the proper classification of an expenditure has been in question and some inconvenience in reckoning job costs has resulted from the segregation of expense in the several groups as opposed to the system of direct charge against the job, the fuller data available for the estimates at budget time overbalance all objections thus far presented. Experience has proven, however, that the rigid allotment of funds in numerous sub-titles into which the standard titles are sub-divided, makes the appropriations inelastic and allows the Commissioner no opportunity, on his own responsibility, to adjust minor differences within the appropriations. It is almost a certainty that there will be errors of greater or less degree in the estimates, especially in a department such as this, where the operations are largely of an emergency character and a program of work cannot be drawn with nicety. The extent of future needs is largely speculative, and the real value of the sub-title classification is in locating what may be termed extraordinary expense. In other words, the full purpose of municipal accounting would be attained if the appropriations were made by main account-titles only, the departments being required to carry their accounts under these in subdivided form and, as heretofore, submitting their estimates in detail, under the several account-titles. By comparisons with records of the former year, as now required in submission of the budget estimates, the Council would be fully informed of conditions and the direct burdens of the Auditor would be much lessened, allowing him opportunity to supervise the departmental books and to prevent unauthorized incumbrances immediately. The sub-title classification is essentially a departmental aid in the preparation of budget estimates and accounting, in detail, and serves no great purpose either as a control or as a budget aid, without the interpretation of the departments.

RECORDS DIVISION

To serve the expanded needs of the department, a new filing system of general application was adopted on July 1st and, with minor modification, is now in full working order. All correspondence is now collected in the central files and the filing of plans and documents is fully controlled. In passing to the new method, some confusion resulted, but this was overcome when the details of the system were thoroughly understood. The history of the course of any matter is now fully recorded and, by a system of checks and ticklers, the location of any piece of correspondence may at once be known. Due to the numerous shifts in location and to the lax methods of recording documents in the past, there is still much difficulty in locating old papers and plans. Much work must be done upon the indexing of official plans to make them available for ready reference. In the past the records were imperfectly maintained and there now exists a large accumulation of valuable papers bearing no marks to indicate their importance

or bearing. On the other hand, many superseded plans and obsolete profiles and cross-sections have been carefully preserved, with the result that valuable filing space is cluttered with dead matter. As soon as other work permits, it is the intention to set the division to the work of examining all papers in the files, of which only those of importance will be kept.

The volume of correspondence handled has been:

Incoming..... 6863 pieces
Outgoing..... 7380 pieces

Total..... 14243 pieces

including correspondence of the Bureau of Buildings for the last five months of the year. On the average, about seventy distinct matters passed through the files daily. The above statement covers original matters only, and does not represent the entire business of the Records Division, since supporting memoranda and reports bear the numbers of original correspondence.

PERMIT DIVISION

The operations of this division are being rapidly unified and, in the coming year, all the departmental permit matters should be controlled through it. The establishment of house numbers is now under its direction and greater satisfaction has been noted. As yet, permits for plumbing are not handled by the division, but, upon the passage of the revised Plumbing Code, the division will assume charge.

STATEMENT OF PERMITS ISSUED DURING FISCAL YEAR 1914

Kind.	Number.	Valuation.	Fee.
Building.....	6,166	\$ 7,373,285.00	\$ 8,759.50
Electrical.....	7,859	506,050.00	7,981.25
Bill Boards.....	37	5,650.00	17.00
Sidewalk.....	735		1,078.80
Grading.....	12		47.50
Opening Streets.....	2,980		
Moving Houses.....	19		
Totals.....	17,808	\$ 7,884,985.00	\$ 17,884.05

APPROXIMATE COST OF PERMIT DIVISION

Personal service.....	\$5,580.00
Supplies, etc.....	493.30
Total	\$6,073.30

BUREAU OF STANDARDS

This bureau is organized to include the following divisions:

- a—Blueprinting and Photography; under a Blueprinter;
- b—Physical Laboratory; under a Cement Tester;
- c—Chemical Laboratory; directly under the Chief.

BLUE PRINTING AND PHOTOGRAPHY

While the administration of this division comes under one head, the actual operations of blueprinting and photography are kept separately. From the tabulation in the blueprinting report it will be seen that the total charge against all departments amounts to \$2618.48. The total cost of all work enumerated was \$2712.20, showing a deficit of \$93.52. Based on commercial prices, which would prevail if the Department of Public Works had not the advantage of this division, the total cost to the City for the above would be \$4333.45, which turns the bookkeeping deficit of \$93.52 into an actual saving to the City of \$1621.25. With a greater use in prospect of the facilities of this division by School District No. 1, Multnomah County and the Commission of Public Docks, this deficit, which is due entirely to overhead cost in the division, should disappear.

The Division of Blueprinting and Photography has been operated under adverse conditions due to cramped quarters, but plans have been drawn and actual remodeling is going on at this writing, which will greatly enhance the efficiency of this division. The darkroom will adjoin the blueprinting room, thereby permitting one man to be the better enabled to conduct the work of this division.

During the past year a filing system with card index for photographic negatives has been installed, which greatly enhances the utility of this division. The value of the photographic work will increase with its extension to cover all features of the public construction. The several bureaus are already coming to appreciate the service.

PHYSICAL LABORATORY

During the past year the work of this division has consisted principally of cement and paving brick testing. In the ensuing year its activities will be materially increased, owing to the addition of new testing machines, for the laboratory will be equipped to undertake the inspection and testing of numerous construction materials for both public and private work. The equipment now installed includes a Fairbanks-Morse briquette machine with molds, tanks, etc., for cement testing, standard brick rattle, Riehle Transverse Machine for castiron and Deval Abrasion machine. For the coming year authority has been granted for the purchase of a Riehle rubber tester, a 150,000-pound universal testing machine, and a stone-crusher and pulverizer.

Tests stipulated in various specifications by this and other departments have not been made, owing to lack of equipment, but the introduction of these and other machines will obviate this difficulty. Alterations now being made will permit of an entire room 23x26 feet being given over to this division. When all the apparatus on hand and to arrive is installed, the following materials,

in addition to those mentioned above, may be tested: Steel of all kinds, castiron, concrete, sewer pipe, rubber and timber. The laboratory is now equipped with apparatus for all standard American Society of Civil Engineers tests for Portland cement. Our standard brick rattle for abrasion tests for paving and sewer brick is located at the foot of East Salmon street on the Columbia Contract Company's dock. Owing to the noise and dirt inseparable from its use, no change in location is advisable.

The physical testing of materials of construction is making rapid strides in the larger cities of the country, as the importance of this work is more fully realized. The necessity of this work increases almost daily and it is desirable that the City should, from time to time, increase its facilities so that the purchase of all supplies and materials of construction may be conducted on a more scientific basis. By the use of suitable equipment and the employment of trained inspectors, it will be possible to answer in advance all questions as to the suitability of materials for the use intended. The time when cement was cement, steel was steel, and castiron was castiron, without any qualifications as to the service expected, has passed for everyone and differentiation of materials for various uses is proceeding by rapid strides. The installation of new testing apparatus places Portland easily in the lead among the cities of the Pacific Northwest and in line with the most advanced cities of the country in this particular.

Attached are tabular statements of the work of this division, showing average results on various brands of cement and classes of paving brick.

CHEMICAL LABORATORY

The principal work of this division for the past year has been the inspection and testing of materials and mixtures for bituminous pavements. It has also supervised the treatment of all creosoted timber and creosoted wood blocks for paving. In addition, many tests have been made of paints, oils and bitumens for this and other departments. Complete tests on mixtures for bituminous pavements have been made as follows:

Number of tests on sheet asphalt.....	97
Number of tests on Asphaltic Concrete (Topeka Mix).....	181
Number of tests on Standard Bitulithic.....	31
Number of tests on Gravel Bitulithic.....	79
Number of tests on Asphalt and asphaltic cement.....	170

This represents the laboratory control of all mixtures for bituminous pavements laid in the City for the past year. A statement of the pavement yardage will be found in the City Engineer's report. Miscellaneous tests and analyses were made as follows:

Sarco Asphalt mixtures.....	10	Soil	3
Various grades of Petro Elastic..	6	Cement hardeners.....	4
Samples of bituminous mixtures	11	Iron	2
Expansion joint material.....	1	Brass	6
Wood and brick fillers.....	3	Bituminous paving fillers.....	9
Creosote Oils	10		
Paints	13	Total	80
Coal	2		

Miscellaneous tests made on crushed rock, gravel and sands:

Crushed rock.....	7	Bank sand.....	8
Crushed gravel.....	3		
Uncrushed gravel.....	1	Total	26
Columbia River sand.....	7		

During the past year this division has added to its equipment an electrolytic apparatus for the rapid analysis of alloys, an oil centrifuge and an Emerson Calorimeter. We are now prepared to test or analyze alloys, fuel oils, coal, paints, road and lubricating oils and numerous other materials. This division has supervised the treatment of creosoted material as follows:

Creosoted timber, feet B. M.	253,234
Creosoted blocks, feet B. M.	274,415

This bureau has also acted in an advisory capacity for this and other departments of the City Government and prepared specifications for various materials of construction. This bureau has stood ready to act in close co-operation with all the departments of the City Government and officials of Multnomah County, the Commission of Public Docks, the Port of Portland and School District No. 1. It offers the fullest use of its equipment and consultation with its Chief and Division Heads to all these public bodies. As shown above, we now are, or soon will be, in a position to make complete tests on most of the materials of construction and many of the supplies in common use. Through the facilities of this bureau, many of the purchases of these governing bodies may be systematized and placed on a scientific and economical basis. As the taxpayers of these various bodies are almost identical, it would seem advisable not to duplicate either the equipment or the personnel of this bureau, or to neglect its fullest use.

COMPARATIVE STATEMENT OF BLUE PRINTING

Department.	Blue Paper.		White Paper.		Blue Cloth.		White Cloth.		Negatives.		Total.
	No.	Sq. ft.	No.	Sq. ft.	No.	Sq. ft.	No.	Sq. ft.	No.	Sq. ft.	
Public Works.....	8,778	28,792	5,335	9,398	338	1,664	592	5,050	594	1,887	\$ 1461.51
Public Utilities.....	1,869	3,463	541	2,534	4	4	287	2,344	24	43	325.72
Public Affairs.....	215	1,252	35	133	8	131	5	63	3	11	44.00
Public Safety.....	10	30	.....	.....	.....	.....	1	18	.....	.....	1.66
Finance.....	40	47	.....	.....	.....	.....	.....	.....	.....	.....	1.94
Auditor.....	39	298	7	32	205	2,036	.....	.....	.....	.....	169.22
Civil Service.....	60	48	20	20	.....	.....	.....	.....	4	4	2.00
Municipal Ref. Lib.....	.....	.....	1	18	.....	.....	.....	.....	.....	.....	72
Multnomah County.....	376	1,457	1,219	8,108	35	263	531	3,642	345	2,071	686.36
State R. R. Commission.....	26	26	.....	.....	.....	.....	.....	.....	.....	.....	52
Commercial Work.....	5	75	135	65	.....	.....	.....	.....	6	3	5.83
Totals.....	11,418	35,478	7,293	20,308	590	4,098	1,386	11,117	976	4,019	\$ 2618.48

CITY ENGINEER'S OFFICE, 1912

No. of Prints.....	City Engineer.		Water Department.		Park Department.		County Assessor.		City Auditor.		Fire Department.		Building Inspector.		Total.
	City	Engineer.	Water	Department.	Park	Department.	County	Assessor.	City	Auditor.	Fire	Department.	Building	Inspector.	
	33,172		11,305		500		1,647		236		334		193		47,388

AVERAGE RESULTS OF TESTS OF PORTLAND CEMENT

Brand.	Fineness.		Time of Set.		Tensile Strength in Lbs. per Sq. In.						Accelerated Test 5 Hrs. Steam 212°
	Per cent through.										
	No. 100.	No. 200.	Initial.	Final.	Neat Cement.			1 Cement; 3 Sand.			
					24 Hrs.	7 Days.	28 Days.	7 Days.	28 Days.		
	98.7	85.2	3 H. 41 M.	6 H. 40 M.	286	747	797	320	454	O. K.	
Golden Gate.....	97.2	80.4	3 H. 36 M.	6 H. 23 M.	320	605	679	263	371	O. K.	
Mount Diablo.....	98.2	87.8	3 H. 47 M.	6 H. 26 M.	288	677	716	355	514	O. K.	
Olympic.....	96.8	80.7	4 H. 03 M.	6 H. 56 M.	307	663	723	255	361	O. K.	
Riverside.....	96.9	82.1	3 H. 35 M.	6 H. 23 M.	391	725	750	360	459	O. K.	
Santa Cruz.....	96.9	82.1	4 H. 28 M.	7 H. 25 M.	284	639	773	258	358	O. K.	
Standard.....	97.5	87.3	4 H. 06 M.	6 H. 59 M.	297	692	788	265	391	O. K.	
Washington.....	99.0	87.3								O. K.	

AVERAGE RESULTS OF TESTS FOR ABRASION ON VITRIFIED BRICK

Kind of Brick.	Quality Tested.	Average Loss on Abrasion.
Sewer.....	67,000	18.2% (See below)
Sewer.....	20,000	31.7%
Flange paving block.....	167,000	16.9%
Flange paving block.....	12,000	20.1%
Paving block.....	618,000	15.9%

N. B. 20,000 sewer brick rejected.

AMOUNT OF PHOTOGRAPHY DONE AND MATERIALS USED

Month.	Public Works.	Public Utilities.	Public Safety.	Public Affairs.	Multi-nomah Count.	Miscellaneous.	No. of Plates.	No. of Prints.	Total Cost.
December.....1913	\$ 22.89						41	90	\$ 22.89
January.....1914	21.95		\$ 1.10				47	43	23.05
February.....1914	30.45	\$ 13.22	9.13				124	127	52.80
March.....1914	24.78			\$ 3.63		\$.90	36	65	29.31
April.....1914	30.38	3.00		9.86			52	92	43.24
May.....1914	41.71				\$ 1.00	.76	68	106	43.47
June.....1914	10.86	3.66					18	31	14.52
July.....1914							44		17.40
August.....1914	9.45	7.95					67		22.80
September.....1914	6.50	12.50	3.80				93	167	60.51
October.....1914	50.01		9.80			.70	21	70	13.97
November.....1914	6.49	7.48							
Totals.....	\$256.06	\$ 47.80	\$ 23.83	\$ 13.49	\$ 1.00	\$ 2.36	611	791	\$ 343.96

BUREAU OF BUILDINGS.

General Observations—Much progress has been made toward a complete revision of the codes enforced by the bureau. Drafts of the Housing Code and a revised Electrical Code have been presented to the Council and a new Plumbing Code is practically complete. The Building Code has been well advanced by the committee in charge.

The housing conditions of the city are badly in need of regulation and there is present danger that in some sections slums will develop unless vigorous action is taken to prevent a further overcrowd. The ordinance as proposed by the special committee and now under review in the department is in the line of best modern practice though, in the form submitted, its enforcement by the bureau and its interpretation by laymen, would be difficult. The draft of the ordinance to be submitted to the Council will be in much simplified form.

The increasing number of elevator accidents has clearly demonstrated the need for a control of elevator installation and operation. This need will increase with the development of the city. The time is now at hand, however, to impose a strict regulation of automatic elevators. The unusual number of fatal accidents during the year reveals the positive danger to the public in their use. With increase in their number and with the indifference to proper maintenance which is bound to follow the City's neglect of supervision, the number of fatalities will surely increase and in that event the Council will be subjected to severe criticism. It must be recognized that effective inspection of elevators implies an increased expenditure in the department and that indifferent regulation is practically worthless and leads the public to a false idea of security.

The need of legislation to control the smoke nuisance is not yet pressing even though, in individual cases, complaints are well founded. Only a small amount of time in preventive work has been possible, due to the limited force, but, through ready co-operation on the part of the operators, compliance with all reasonable demands has been secured, even though no actual authority to enforce corrections, exists.

The reduced force for the coming year will prevent the commencement of a campaign for the enforcement of the ordinance on proper ventilation of buildings, particularly of theaters. Practically nothing has been done in this direction and in many theaters the air is seldom changed. In the larger sense, control of theater construction is a health measure and should receive prompt attention.

Although the force allowed up to this time has been sufficient to permit of inspection of buildings during their construction, there has been no opportunity to investigate their maintenance or the very important question of occupancy. Many cases have come to attention in which permits were secured for a building as of one type and after issuance of the permit the occupancy was changed, with the result that the intent of the Building Code has been grossly violated. The investigation of occupancy cannot be under-

taken unless there be an additional force for the present establishment is inadequate to do more than supervise buildings in construction and repair.

Building Activities—Comparing the first eleven months of the year with those of the previous year, the reduction in value and number of permits has been marked; in the former case, 45.3, and in the latter, 8.7 per cent. This reduction may in general be laid to the general economic depression, to the financial disturbances resulting from the European war, and to a necessary recovery from over-building in previous years. It is now quite evident that the balance in supply and demand has practically been reached.

The activity in the construction of public and semi-public buildings has been noteworthy, particularly within the zone under control of the Commission of Public Docks. Among the more important buildings completed or placed under contract are the Broadway Theater, the National Theater, the American Theater, the Couch and Shattuck schools, two docks for the Commission of Public Docks, two docks for the Southern Pacific Company, one dock for the Oregon-Washington Railroad and Navigation Company, and the fourteen-story Meier & Frank building.

Permits for construction of residences have decreased in number from seventeen hundred and five for 1913, to fourteen hundred and twenty-nine for 1914. The value of large building construction planned is somewhat less than the normal, which condition is undoubtedly a consequence of unsettled financial conditions.

BUILDING DIVISION

The campaign against dilapidated and decayed buildings was temporarily stopped following an adverse decision by the Circuit Court as to the validity of the ordinance. Guided by this decree, a redraft of the ordinance was at once commenced and on November 28th the revised ordinance became effective. Proceedings were at once started to cause the removal of a number of buildings in dangerous condition.

The character of building inspection has been materially improved and visits are now made before the lath and plaster work is completed, thus allowing examinations of the entire framing, and checking of fire preventive details. By the change in method, the average number of daily inspections per inspector has been reduced from 21.5 to 19.2. Under the old procedure, however, the Building Code had been repeatedly violated and concealment of defective construction was easy. It is desirable that the inspection be further extended to include an examination of foundation walls and chimneys during construction, but if this work be undertaken an addition to the inspection force will be needed.

ELECTRICAL DIVISION

The efficiency of the division has been advanced by subdividing the districts into two parts, the subdivisions being covered on alternate days. The effect of this has been a decrease in the trouble of the inspections and in an increased number of daily visits per inspector.

Final inspection and approval of a large number of installations has never been made and the cards covering these installations

had been accumulating for several years prior to 1913. To prepare these for filing, one inspector has been engaged for some months and early in 1915 all necessary entries should have been made.

PLUMBING DIVISION

The average number of daily inspections per inspector has been increased from 9.3 to 10.9. Viewing the experience of the past few months, a further improvement in the number of daily inspections is probable.

Under the existing ordinance, effective sanitary regulation is impossible and observance of modern plumbing rules is secured by "rulings" and if such action were contested in court, the City would be defeated.

CLERICAL DIVISION

Following a well-defined complaint against the delays suffered in securing permits for building construction, an investigation of the whole matter of permit issuance was ordered. Under the established disjointed scheme, applicants were forced to present themselves to a number of offices, take their chances as to position in line and proceed from one end of the building to the other. After a number of conferences between the several departments concerned, it was finally arranged to assign the issuance of permits to the Permit Division of the department, removing the necessity of application to the Bureau of Water Works and to the City Treasurer. Charges for water involved in the permit, and other matters, will be handled in the Permit Division as soon as the requisite forms and furniture are provided. The complete system should be in operation by February 1, 1915. Although the collection of fees is not now made in the department, yet simplification in procedure has already greatly reduced the time necessary under the old procedure.

ARCHITECTURAL WORK

The plans for the construction of the new City barn were prepared and the supervision of its construction undertaken. Much difficulty was experienced in securing adequate foundations owing to the fact that the site is a filled creek bed. The unstable foundations have caused an increase above estimated cost, but the completed structure should cost about ten per cent less than the amount allowed under the bond issue. The work has been noteworthy in that, for the first time in the Northwest, the method known as the "Quantity Survey" was employed on a public building. This method comprehends the submission to intending bidders detailed statements of all quantities entering into the construction. The uncertainties attending the hurried preparation of proposals is thus eliminated and unbalanced bids are impossible. All bids are strictly comparable and award may be made upon a definite and invariable basis. The use of this method has been favorably noted by the American Institute of Architects, and contractors who submitted bids have assured the department that they were relieved of considerable expense in the preparation of their bids.

The bureau also designed the steel market sheds for the Carroll Public Market. Certain novel features in the way of

collapsible tables and removable floors have been very successful in maintaining good sanitary conditions at the market. The type of roof is not entirely satisfactory, but economy demanded a cheaper type of construction.

There is no question but that the City should constantly employ an architectural draftsman to perform its architectural work. In the coming year the construction of several fire stations and of the detention home at Troutdale is contemplated and no reason appears why the Bureau of Buildings should not undertake such less-complicated work. Alterations of minor importance to public buildings are constantly undertaken and if a draftsman were available, the indifferent results now secured would undoubtedly be removed. The excellent service of the bureau in connection with these operations demonstrates that it has capabilities other than those of inspection.

Failure of Basement Wall, Fifth and Morrison Streets.—About 10 o'clock of the morning of October 7th, 1914, the basement wall at the Morrison street side of the excavation for the Meier & Frank Building failed for a length of about fifty feet. At this point, the wall was about thirty feet in height, and was designed to act as a support for the sidewalk and a retainer for the Morrison street roadway. The failure produced a slide in the street which took with it the hard-surface pavement, water and sewer mains, and electric conduits. The building site was immediately flooded with water and sewage. It became necessary to close Morrison street to streetcar and vehicular traffic for about two months, but the south walk was at all times kept open.

The accident appears to have been due to the fact that the braces for the wall forms were insufficient during the hardening. The material in the roadway becoming displaced, exerted pressure upon the sewer and water mains, leakage from which acted as a lubricant and increased the pressure on the wall.

No one was injured by the accident, but the City was put to considerable expense, and the disturbance to traffic was of a serious nature. The City contends that responsibility for the accident rests with the builders and has filed claim against them.

Special Permits—There seems to be no simple way to eliminate the vicious special permit. In spite of a desire to grant no special privilege, this bureau has been called upon to issue permits for several buildings whose construction violated the code in essential features. These were done by ordinance as shown below:

Ordinance No. 27802—Lutke Manufacturing Co., wooden platform.

Ordinance No. 28269—Ella Eiseubach, increased length of marquise.

Ordinance No. 28813—Spokane, Portland & Seattle Railway Co., frame depot in fire limits.

Ordinance No. 29076—First Methodist Church, addition to wooden gallery.

Ordinance No. 29438—Dr. Andrew C. Smith, extending time of removal of frame building in the fire limits.

Ordinance No. 29403—T. Scott Brooke, sixth class building in inner fire district.



SECTION OF MARKET SHED, SHOWING METHOD OF RAISING TABLES AND FLOORS TO PROVIDE UNOBSTRUCTED STREET FOR FLOOR FLUSHING

With the exception of Ordinances 28813 and 29403, the grants have not been objectionable. In these two cases the regulations in regard to the type of building within the fire limits have been grossly violated and the bureau is being beset with applications for special permits of similar nature. In the other cases the grants were made to correct what appeared to be unreasonable hardships imposed by a rigid code. In the case of 29438, the grant was an extension of a former permit and there was no good reason why the building should be removed at this time. Work has been permitted at this place under a former special permit and, even though the time limit had expired, the building as rebuilt was of sufficient strength to be allowed to remain. The privilege of the special permit is a species of favoritism and leads to gross abuses.

GENERAL

Character of Work and Items of Revenue	Building Division.		Electrical Division.	
	Eleven Months 1913.	1914.	Eleven Months 1913.	1914.
Total number days worked by Inspectors...		1,324½		1,418½
Total number of inspections.....	30,162	27,911	17,142	22,728
Violations of Ordinance discovered.....	5,501	6,642	2,846	7,281
Cases prosecuted in Municipal Court.....	80	151	9	21
Cases prosecuted in Circuit Court.....		4		
Cases of work being done without permit...	764	814	395	400
Elevator inspections.....	92	60		
Complaints investigated.....	518	699	26	5
Billboard inspections.....		55		
Fire reports.....		62		
Dangerous buildings and dangerous wiring.	227	11	14	33
Car tickets used by Inspectors.....		4,037		5,914
Ratio visits to car tickets used.....		6.9		3.8
Average valuation of permits issued per day.	\$ 44,144.62	\$ 25,735.72	\$ 2,560.00	\$ 1,766.30
Average number permits issued per day....	23	21.5	28.8	27.4
Average No. inspections per Insp. per day..	21.1	19.9	15.75	16.0
Amount obtained from fees, permits.....	\$ 10,610.00	\$ 8,759.50	\$ 8,852.00	\$ 7,971.25
Amount obtained from fees, billboard permits.....	32.50	17.00		
Amount obtained from rejected appeals....	60.00	150.00	\$ 10.00	
Total received from fees and appeals.....				
Letters written.....	3,343	3,320	300	803
Bulletins sent out.....	9	3	8	5
Sanitary inspection notices sent out.....				

GENERAL—Continued

Character of Work and Items of Revenue	Plumbing Division.		Total.	
	Eleven Months 1913.	1914.	Eleven Months 1913.	1914.
Total number days worked by Inspectors...		1,235		3,978
Total number of inspections...	14,094	15,091	61,398	65,730
Violations of Ordinance discovered...	1,446	1,262	9,793	15,185
Cases prosecuted in Municipal Court...	1		90	172
Cases prosecuted in Circuit Court...				4
Cases of work being done without permit...			1,159	1,214
Elevator inspections...			92	60
Complaints investigated...	44	131	588	835
Billboard inspections...				55
Fire reports...				62
Dangerous buildings and dangerous wiring...			241	44
Car tickets used by Inspectors...		4,951		14,902
Ratio visits to car tickets used...		3.1		
Average valuation of permits issued per day			\$ 46,704.62	\$ 27,502.02
Average number permits issued per day			51.8	48.9
Average No. inspections per Insp. per day	9.3	10.9		
Amount obtained from fees, permits...			\$ 19,462.00	\$ 16,730.75
Amount obtained from fees, billboard permits...			32.50	17.00
Amount obtained from rejected appeals...			70.00	150.00
Total received from fees and appeals...			\$ 19,564.50	\$ 16,897.75
Letters written...	1,905	1,977	5,548	6,100
Bulletins sent out			17	8
Sanitary inspection notices sent out...	1,347	186	1,347	186

BUILDING PERMITS ISSUED FROM DECEMBER 1, 1913, TO NOVEMBER 30, 1914

Month.	Steel Frame Construction.		Reinforced Concrete Construction.		Mill Construction.	
	No.	Value.	No.	Value.	No.	Value.
December, 1913.			2	\$ 35,000.00	1	\$ 500.00
January, 1914.					1	20,000.00
February.			2	61,000.00	4	17,000.00
March.	2	\$ 7,000.00	2	5,500.00		
April.			1	203,500.00	5	75,900.00
May.			2	3,000.00		
June.			3	156,000.00		
July.	1	50,000.00				
August.						
September.						
October.			1	5,000.00		
November.			1	160,000.00		
Totals.	3	\$ 57,000.00	14	\$ 629,000.00	11	\$ 113,400.00

BUILDING PERMITS ISSUED FROM DECEMBER 1, 1913, TO NOVEMBER 30, 1914—Continued

Month.	Ordinary Construction.		Frame Construction.		Alterations and Repairs.	
	No.	Value.	No.	Value.	No.	Value.
December, 1913.	12	\$ 173,110.00	202	\$ 322,325.00	227	\$ 88,580.00
January, 1914.	6	24,400.00	194	288,860.00	277	100,950.00
February.	13	48,465.00	240	392,190.00	290	80,490.00
March.	14	124,015.00	338	534,850.00	325	77,530.00
April.	9	56,300.00	271	327,995.00	303	94,955.00
May.	14	204,675.00	222	321,495.00	282	89,135.00
June.	12	122,235.00	226	438,130.00	268	104,840.00
July.	7	191,850.00	227	262,840.00	274	105,080.00
August.	10	15,675.00	198	304,880.00	288	72,285.00
September.	5	8,600.00	203	236,650.00	224	40,090.00
October.	10	51,050.00	175	236,665.00	218	63,625.00
November.	5	99,540.00	121	137,645.00	176	39,330.00
Totals.	117	\$ 1,119,915.00	2617	\$ 3,804,525.00	3152	\$ 956,890.00

Month.	Wreck.		Move.		Excavate.	
	No.	Value.	No.	Value.	No.	Value.
December, 1913.	8	\$ 10,975.00	3	\$ 375.00	1	\$ 800.00
January, 1914.	6	1,676.00	4	1,450.00	1	100.00
February.	11	2,725.00	6	1,025.00	2	1,500.00
March.	11	2,135.00	8	3,225.00		
April.	5	400.00	4	1,450.00	3	3,300.00
May.	9	10,625.00	6	2,450.00	1	300.00
June.	7	1,465.00	14	7,615.00	1	500.00
July.	4	425.00	15	5,200.00	2	4,000.00
August.	6	1,700.00	5	850.00		
September.	3	950.00	1	1,000.00	1	500.00
October.	10	3,390.00	2	275.00	2	1,500.00
November.	4	950.00	2	275.00	2	2,100.00
Totals.	84	\$ 37,415.00	70	\$ 25,190.00	16	\$ 14,600.00

Month.	Docks—New.		Docks—Alterations and Repairs.		Billboards.	
	No.	Value.	No.	Value.	No.	Value.
December, 1913.	3	\$ 6,500.00	7	\$ 2,400.00	2	\$ 250.00
January, 1914.	4	5,540.00	10	5,540.00	1	75.00
February.			5	1,135.00	1	30.00
March.	2	125,000.00	6	3,710.00	3	670.00
April.	1	5,000.00	3	700.00	3	1,020.00
May.	2	10,550.00	4	1,650.00	1	150.00
June.			5	3,650.00	3	150.50
July.	2	250,300.00	2	1,050.00	6	320.00
August.	3	14,000.00			6	540.00
September.	3	17,500.00	5	3,850.00	4	490.00
October.	3	137,500.00	5	9,700.00	5	905.00
November.	1	4,000.00	6	9,950.00	2	1,050.00
Totals.	24	\$ 571,975.00	58	\$ 43,375.00	37	\$ 5,650.00

BUILDINGS GRADED ACCORDING TO OCCUPANCY

Month.	Grade I. Public Buildings.		Grade II. Quasi Public Bldgs., Hotels, Office Bldgs., Stores, etc.		Grade III. Tenements.	
	No.	Value.	No.	Value.	No.	Value.
December, 1913.....	8	\$ 3,600.00	22	\$ 225,160.00	2	\$ 35,000.00
January, 1914.....	3	12,050.00	10	28,600.00	1	10,000.00
February.....	5	36,700.00	13	102,800.00	1	6,000.00
March.....	3	8,150.00	13	53,500.00	5	118,000.00
April.....	3	254,800.00	17	61,635.00	2	12,000.00
May.....	3	17,300.00	12	24,575.00	6	201,000.00
June.....	5	150,000.00	9	58,750.00	5	118,500.00
July.....	2	1,750.00	5	80,750.00	2	27,000.00
August.....	5	10,500.00	7	38,500.00	1	27,500.00
September.....	1	21,000.00	5	28,350.00		
October.....	13	55,150.00	7	62,400.00	1	5,000.00
November.....	4	196,550.00	3	14,800.00	1	10,000.00
Totals.....	55	\$ 767,550.00	123	\$ 779,820.00	27	\$ 570,000.00

Month.	Grade IV. Dwellings and Flats.		Grade V. Stables and Sheds.		Grade VI. Miscellaneous.	
	No.	Value.	No.	Value.	No.	Value.
December, 1913.....	114	\$ 237,200.00	65	\$ 11,400.00	6	\$ 18,575.00
January, 1914.....	125	253,250.00	59	28,960.00	3	400.00
February.....	160	314,750.00	72	56,630.00	8	1,775.00
March.....	227	469,270.00	98	17,975.00	10	4,470.00
April.....	154	286,315.00	106	47,585.00	4	1,360.00
May.....	134	273,675.00	79	11,490.00	4	1,130.00
June.....	124	359,475.00	83	21,055.00	15	8,585.00
July.....	122	242,050.00	98	17,665.00	4	135,475.00
August.....	108	227,150.00	83	15,415.00	4	1,490.00
September.....	83	179,100.00	113	15,605.00	6	1,195.00
October.....	77	148,350.00	78	12,590.00	10	9,225.00
November.....	59	117,700.00	57	56,260.00	3	1,875.00
Totals.....	1487	\$ 3,108,285.00	991	\$ 312,630.00	79	\$ 185,555.00

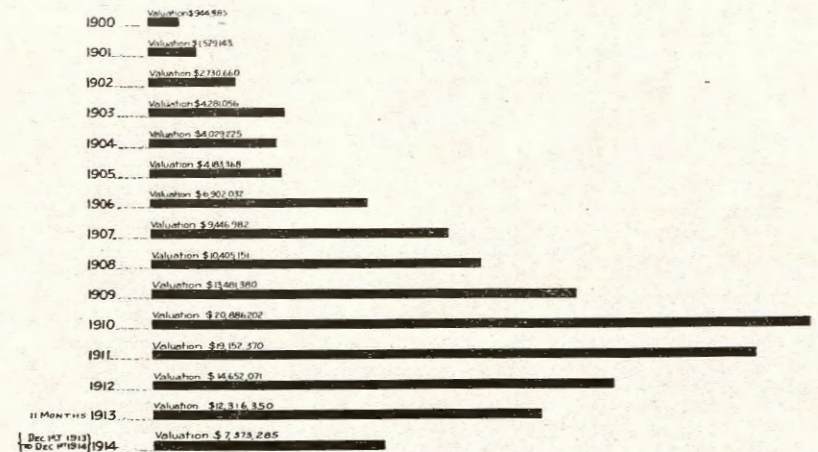
TABLE OF VIOLATIONS BUILDING DIVISION

1. Poor foundations.....	132
2. Defective construction.....	1,931
3. Too close to lot lines.....	89
4. Defective chimney.....	1,311
5. Heating apparatus and enclosures.....	83
6. Elevators and enclosures.....	142
7. Stair and shaft enclosures.....	138
8. Roofs and roof drainage.....	91
9. Fire blocks and bridging.....	1,529
10. Sidewalk and street obstructions.....	121
11. Light and ventilation.....	112
12. Fire protection of openings.....	71
13. Defective scaffolds.....	12
14. Stable regulations.....	118
15. Miscellaneous.....	621
16. Fire escapes, exits, standpipes, etc.....	12
17. Frame buildings in fire limits.....	33
18. Dangerous buildings.....	96
Total.....	6,642

BUILDING PERMITS ISSUED IN PAST YEARS

Years.	Number.	Total Valuation.	Average Value of Permit.
1900.....	392	\$ 944,985.00	\$ 2,410.00
1901.....	745	1,529,143.00	2,050.00
1902.....	1,244	2,730,660.00	2,195.00
1903.....	1,628	4,281,056.00	2,630.00
1904.....	1,720	4,029,225.00	2,340.00
1905.....	2,318	4,183,368.00	1,805.00
1906.....	3,166	6,902,032.00	2,180.00
1907.....	3,890	9,446,982.00	2,430.00
1908.....	4,849	10,405,151.00	2,145.00
1909.....	4,739	13,481,380.00	2,845.00
1910.....	6,523	20,886,202.00	3,200.00
1911.....	7,686	19,152,370.00	2,495.00
1912.....	8,224	14,652,071.00	1,780.00
1913.....	*6,244	*12,316,350.00	1,970.00
1914 (Dec. 1st, 1913 to Nov. 30, 1914).....	6,166	7,373,285.00	1,195.00
Totals.....	59,534	\$ 132,314,260.00	\$ 2,230.00

*11 months only covered in report.

BUILDING OPERATIONS
FROM 1900 TO DATE GIVEN BELOW

TOTAL 1900 TO DEC. 1914 \$132,314,260.
 TOTAL ESTIMATED COST OF PANAMA CANAL \$375,000,000
 TOTAL BUILDING OPERATIONS - 35.2% OF ESTIMATED COST OF PANAMA CANAL.

ELECTRICAL PERMITS ISSUED

MONTH.	1913			1914 Dec. 1, 1913 to Nov. 30, 1914.			TOTALS.		
	Num- ber.	Total Valuation.	Average value per permit.	Num- ber.	Total Valuation.	Average value per permit.	Num- ber.	Total Valuation.	Average value per permit.
December	583	\$ 44,700.00	76.80	615	\$ 47,715.00	\$ 77.60	615	\$ 47,715.00	\$ 77.60
January	495	34,350.00	69.40	632	34,590.00	54.60	1,215	79,290.00	65.25
February	639	106,070.00	166.60	544	36,015.00	66.50	1,039	70,365.00	67.70
March	709	49,450.00	69.80	863	56,275.00	65.20	1,502	162,345.00	108.10
April	665	41,445.00	62.30	769	34,615.00	45.10	1,478	84,065.00	56.95
May	504	54,280.00	91.50	711	37,925.00	53.30	1,376	79,370.00	57.60
June	646	58,085.00	89.95	603	53,150.00	88.00	1,197	107,430.00	89.80
July	691	67,805.00	98.00	580	37,790.00	65.00	1,226	95,835.00	78.15
August	761	49,940.00	65.50	632	50,345.00	79.60	1,641	134,401.00	81.80
September	894	102,510.00	114.50	744	41,925.00	56.40	2,072	120,225.00	58.10
October	680	44,115.00	64.00	635	38,590.00	60.75	2,207	181,965.00	82.50
November	7,336	\$ 652,810.00	\$ 88.98	531	37,155.00	69.90	1,788	123,775.00	69.20
Totals	7,336	\$ 652,810.00	\$ 88.98	7,859	\$ 506,050.00	\$ 64.45	17,356	\$ 1,280,811.00	\$ 74.10

CITY ENGINEER

Volume of Improvements—From present indications it is clear that the volume of improvements will be small in the coming year. The sudden increase in the number of successful remonstrances against improvements practically ready for contract, during the last three months of the year, is a clear index of the state of the public mind brought on by the war in Europe and an evidence of desire to engage in no work which might be reasonably postponed. This attitude towards improvements generally is a distinct caution to the Department and warrants the closest scrutiny of petitions and their rejection, except when the demand is both large and insistent. Such losses as were suffered through the discontinuance of improvement proceedings may not be borne under the 1915 appropriations.

Remonstrance Against Street Improvements has of late been grossly abused. This powerful weapon, designed to protect the citizens against indiscriminate and ill-advised improvements and to prevent improper contract letting, seems to have become an instrument of private revenge. The suspicion is apparently well founded that unsuccessful bidders, seeking to discourage their successful rivals, have actively assisted in the circulation of remonstrances with the result that many paving operations desired by a majority of property interests and of unquestioned value, have been abandoned. There is reason to believe that half-truths and even deliberate falsehoods have been told to gain the end and, although this Department has no right to question signatures, conversations with remonstrators have shown that deceit has been practiced in securing signatures. The right to annul questionable improvements should never be denied, but when private spite enters, the most vicious practices are encouraged. Effort to cope with the difficulty was made through insistence upon the filing of petitions representing 40% of the assessable property before improvement proceedings would be initiated, but even with this arbitrary requirement, the automatic discontinuance of proceedings under the present 60% rule, may not be entirely prevented. Although wasted effort in the preparation of plans represents a considerable money loss to the City, the resulting disturbance to the whole administration of the Department of Public Works is of greater concern, for confusion follows and interest in the work is lost.

Improvement Extras—Even with all reasonable precaution, items may be omitted from the estimates for proposed local improvements due to unforeseen conditions. It is practically impossible to make assessment against the improvement district to cover unexpected work. To overcome this difficulty there is employed in some cities a device known as "Stipulated Prices," which are established by ordinance and apply when work not covered by the estimates, is found necessary. This simple expedient removes practically all uncertainties following unavoidable errors, places all bidders on a fair and equal footing and definitely advises all persons what will be assessed if the plans be found incomplete.

The determination of fair unit prices is, of course, a subject of discussion with varying extent and locality. Individual cases might possibly demand separate treatment, but it is the general practice to

hold to uniform stipulated prices regardless of local difficulties or extent of the work. In the past, payment for such work has been made either through a draft on the general fund, if the extent be great, or, if the extent be small, through the vicious practice of increasing certain items in the final estimate. Neither method can be defended. In its present form, the Improvement Code appears not to admit the use of such a method, but if further investigation demonstrates its value under local conditions, the Code should be amended to overcome a difficulty constantly recurring.

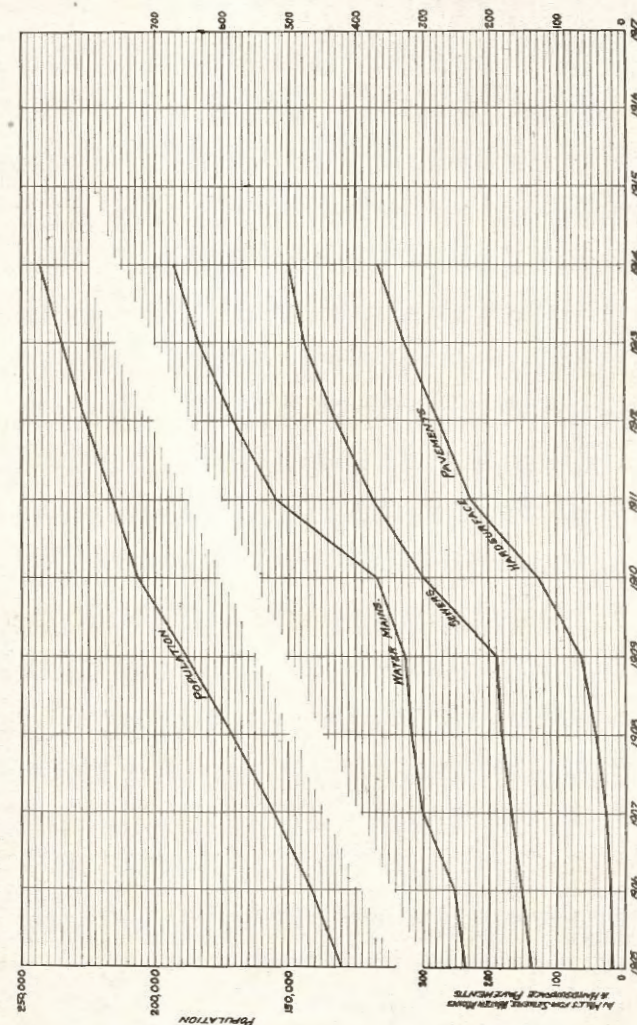
Delinquent Contractors—The Council's declaration of delinquency of two contracting firms after their continued neglect to obey orders, has had a salutary effect for it is now generally known that the City will not tolerate indifference or be complacent in enforcement of contracts. In one case all uncompleted contracts were declared forfeited and the bondsmen forced to complete the contracts at substantial loss. This action of the Council has served to make the bonding companies more cautious in their assumption of risks and has taught them that their responsibility to the City does not terminate when they have secured collection of their premiums. Without doubt, future risks will be underwritten with care, thus assuring the elimination of irresponsible bidders on public work, and relieving the Department from the past difficulties in enforcement of contracts.

The policy of granting no extensions of time, except with fullest reason, has resulted in fewer requests from contractors and has hastened execution of public work, with a consequent reduction in inspection costs. The time allowed is now established after careful consideration of the local difficulties of the work so that the Department's recommendations for extensions are made only for unforeseen delays, mostly the result of interruptions in the improvement proceedings or the failure of the public service corporations and the City bureaus to complete their work on schedule time.

The Horse-Drawn Transportation obtained on requisition has been unsatisfactory. It is almost impossible to obtain vigorous animals when construction work is under contract and the vehicles supplied are not always in good condition. Possessing large stables, the City should be able to supply animal transportation to all departments, with a full equipment of ordinary construction machinery. On the average, the Department of Public Works has need of five double teams during the entire year and with such a steady demand the City barns would have no cause to anticipate loss from idle stock. With displacement of horse-drawn street cleaning machines by motor equipment, an excess of animals and vehicles must result and unless they be rented to the several departments under a fair schedule of charges, their sale at a loss is inevitable. The whole matter of transportation control is in need of adjustment and the time is close at hand when the control of all means of transportation should be placed under a single direction upon which the departments would requisition for service. It must have been observed by everyone that the present City transportation, and particularly the motor equipment, is not working to capacity and that it is capable of reduction if centrally handled.

Preliminary Sub-surface Work—In hard-surface street improvements much difficulty is encountered in clearing the way for the contractors. The underground work is held back until the last moment,

GRAPHIC CHART SHOWING TOTAL MILEAGE
FOR WATER MAINS, SEWERS AND HARDSURFACE PAVEMENTS AND
POPULATION FOR YEARS FROM 1905 TO 1914 INCLUSIVE.



to save interest charges and to avoid capital outlays if proceedings be discontinued. This action frequently forces a street contractor to commence his work before other operations are completed, in order that the time limit may not be exceeded. He is thus unfairly burdened with the expense of settling trenches which are improperly tamped, and to assume responsibility for defects in the sub-grade which later develop.

It is desirable that sufficient interval elapse between completion of underground work and the construction of pavements, that stable foundations may be assured. To this time, all hard-surface pavements have been threatened by unequal settlement over excavations and the Department has been forced into constant controversy with contractors regarding adjustments in surface for which they were not responsible. To correct this evil, in part, no extensive grading work, other than the slight amount required for fine grading, should be included under contracts for hard-surface pavements. The separation of grading and hard-surface improvements will permit of correction of most of the defects in subgrade resulting from underground construction since in the ordinary course a full season will intervene between the improvement proceedings, and will tend to a greater ultimate economy, since paving contractors generally do not wish to undertake grading and follow the practice of subletting such work to others. By this procedure there would be an increased expense placed upon the City for preliminary work on the improvement proceedings, but the assuredly better results would more than offset the small additional outlay under a "two-proceeding" program.

Pavement Classification—The attempt to specify a group of pavements on the basis of use and in full compliance with the spirit and letter of the Ellis Amendment, proved unsatisfactory after several months of application. Any classification which neglects to take account of prices or of serviceability, leads to absurdities, as the experience of the past year proves conclusively. Unless the Council agrees to award contract to the lowest bidder for the type of pavement best suited to local conditions or as desired by owners, there is no alternative but the construction of the cheapest pavement regardless of anything but first cost, with the attendant danger of remonstrance. It cannot reasonably be urged that first cost should be the sole consideration for, if this were so, no high-cost pavement could find a field in Portland. In answer to this, it has often been said that the classification thus being shown to be improper should be revised and that specifications for other types of pavement should be drafted. Even admitting the weakness of the attempted classification, it must be evident to the least-informed that new types of pavement may not be developed without extended research and costly experimentation. The Ellis Amendment, if blindly enforced, limits classification and complicates the whole situation, though in spirit it has much merit.

Appreciating the inadequacy of the groupings and their failure to satisfy other than the simpler cases, revision of the schedule was undertaken. The subject was approached through a thorough investigation of values as represented by what may be termed "final cost"—that is the total expense for the pavement from installation to the time of its necessary replacement. In the discussion, the more important elements entering were original costs, maintenance and

repair charges, interest charges, depreciation (as measured by anticipated life) and service on grades. The large number of factors entering into the discussion greatly complicated the reduction of the data, and, because certain of the assumptions, as, for instance, depreciation and cost of up-keep, could not be considered as other than speculative, the equations of cost admit of application only to average conditions. Beyond this, the involved nature of the expressions derived makes their application impossible to laymen and cumbersome of solution. Temporarily, the development of this method of awarding contracts has not been pursued but, ultimately, the method outlined should be established as the rational one.

Lack of cost records of repairs and maintenance has prevented a satisfactory classification based upon economic considerations. Most of the pavements are of such recent construction that their maintenance is still in the hands of the contractors.

Some of the more glaring deficiencies in the classification were corrected in a later grouping and better success has lately been attained, but even this has not given satisfaction or made the recommendations of the Department of much importance. With the present attitude of the Council, the reports of the Department are merely summaries of bids and technical discussions do not serve useful purpose.

Cement Pipe versus Monolithic Construction for sewers of large diameter has been a question in issue. Upon stable foundations and with adequate protection of the invert against scour, these types are practically equivalent in service, except that the construction of monolithic sewers may be more closely inspected and that pipe sewers are adjustable to alignment without delays in construction of forms. On the other hand, in unstable foundations, leakage of sewage into the subsoil at the numerous joints of pipe sewers follows settlement and adjustments in the soil without movement of the sewer itself, are scarcely possible, whatever may be the type of joint or the character of workmanship. Generally, the bids for monolithic construction have been lower than those for pipe sewers, but in a recent advertisement for bids, the reverse was the case.

In that instance the Department, in the face of a possible economy, recommended award to the monolithic construction, having some doubt as to the character of the foundation. In places where it is undesirable to open long sections of trench in advance of construction, pipe sewer has a distinct advantage over monolithic construction and in such cases it might be more desirable to make award for a higher-priced construction to save inconvenience.

Street Occupancy—Illegal occupancy of street areas, particularly street ends, has received unusual attention from the department during the past year. Failure to control such occupancy in the past has cost the City title to much valuable street area. It is the present policy to investigate all known cases and to attempt to ascertain the legal status of the areas in dispute. In cases where the City's rights are established, the illegal occupants are either ejected or made party to formal agreement allowing temporary occupation until the land is needed for public use. Under either plan the City's title is established. The most flagrant cases are presented in the street ends along the water front. A campaign against such occupancy jointly with the Commission of Public Docks is now

under way through which the City's title to large areas now in danger of alienation, may be perfected.

Street Oiling—It is felt that the oiling of gravel and macadam streets might be undertaken by The Bureau of Highways and Bridges in connection with repairs to better advantage than is now possible. In spite of a desire for full co-operation between this bureau and the Bureau of Street Cleaning, it has often happened that in the great rush of work, oiling proceeds before the surface has been properly repaired and unpleasant criticism develops. Properly the oiling of roadways is a function of the City Engineer and as soon as possible this work should be transferred to him.

BUREAU OF HIGHWAYS AND BRIDGES.

ORGANIZATION

The Bureau is organized as follows:

Pavement Construction Division—In charge of all street improvements under Council proceedings, including street grading, construction of sidewalks and curbs and paving, also the inspection of pavement cuts and the repair of pavements laid under contract.

Pavement Maintenance Division—In charge of maintenance of streets: including gravel and macadam roadways; maintenance of crosswalks and repair of hard-surface streets.

Structural Division—In charge of the design and construction of bridges, retaining walls, elevated roadways, and similar structures.

Bridge Maintenance Division—In charge of the maintenance of city bridges, planked roadways, etc.

Sidewalk Division—In charge of all sidewalk construction not laid under street improvement proceedings.

Traffic Division—In charge of traffic surveys and plans for the betterment of traffic conditions.

Grass and Weeds Division—In charge of the enforcement of ordinances covering the removal of weeds, earth slides, etc.

Park Division—This division was transferred to the Bureau of Parks on October 1, 1914, and its report for the year will appear in the report of that bureau.

PAVEMENT CONSTRUCTION DIVISION

The attached tables give the amounts of street improvements executed. The work of this division consists in determining the type of improvement required for the particular location and the supervision of its construction.

The City is divided into two districts, each under a District Engineer in general charge of both construction and maintenance work in his district.

Pavement Selection—The rapid increase in heavy tonnage vehicles raises a serious question involving all types of pavements. Throughout the country the tendency toward substantial construction of both base and wearing surface is evident. Several cities are considering the adoption of an eight or nine-inch concrete base, while in foreign practice even greater thickness of base is not regarded as radical. Local conditions are now such that practically all of the paved streets are subjected to some intense vehicle traffic. It is therefore reasonable to demand that the construction of light types of pavement be restricted solely to sections where the probability of use by other than lightest vehicles is negligible.

Asphaltic Concrete—During the year there was laid a relatively large amount of this pavement of the bituminous base type, i. e., a graded mixture of crushed gravel and asphalt. This construction is of recent adoption, its advantage being in relative initial cheapness compared with pavements having concrete or crushed rock foundations. Its permanency is still an open question and close observation upon its action in service only, will serve to gauge its real merits or defects.

Redress Pavements—A large amount of "redress" pavement has been laid during the last three years. This consists of a bituminous

wearing surface laid directly on the old macadam base after it has been scarified. The suitability of this type depends upon the character of the macadam, its thickness and the crown elevation. In the past it frequently happened that upon grading the macadam roadway to the established contour, the macadam covering remaining was found too thin for firm support of the area and the results were unsatisfactory. To avoid past difficulties it is now the practice to undertake full field investigation before approval of this type of construction and to reject as unsuitable for redress any macadam which appears insufficient either in depth or texture.

Wood Block Paving—It is desirable that further experiments of wood block paving methods be made. The great advance in methods of treatment of blocks promises to overcome the serious defects coming from excessive expansion and absorption. Effort is being made to reduce the high unit cost through changes in standard dimensions. The experiments are still in the primary stage and conclusions are unwarranted. If the experiments succeed, the price per square yard may be materially reduced so that competition with pavements of less first cost and shorter life may be possible. As long, however, as low first cost is the sole consideration, any extensive development in wood block pavement cannot be expected.

One-Course Concrete—A radical change in the manner of laying concrete pavements was made during the year. This consisted in the adoption of the one-course method, as provided in the revised specifications, to secure more uniform composition of the thin slabs.

Pavement Cuts—The following repairs to pavement cuts were inspected:

	Number	Square Yards
Private cuts.....	1,656	6,752
Sewer cuts.....	202	322
Waterworks cuts.....	1,019	1,501
	2,877	8,575
Repairs to defective pavement.....	.....	3,935
Total yardage.....	.....	12,510

The present method of handling repairs to cuts leads to most unsatisfactory results. The mere filing of a bond guaranteeing the replacement of the disturbed pavement authorizes any person to cut the surface and to excavate below the foundation. Backfilling and tamping the materials is beyond control of the Bureau. Demands for repairs are often unwelcome to the paving contractors. The good faith of contractors must be relied upon to secure proper work, owing to the fact that contractors must deal with private individuals and cuts are widely scattered, and many are made in the rainy season when paving plants are out of operation.

On streets still under maintenance by the contractor, the replacement of the actual wearing surface is usually well done, but on other streets strong incentive to the best work is lacking. At numerous places depressions in the surface indicate imperfect backfilling but the inadequacy of force prevents even a superficial inspection.

From every point of view the restoration of pavements is a proper function of the City. As a possible solution of the problem,

the following is suggested: Before issuance of permit an amount somewhat in excess of estimated cost of replacement of the pavement shall be deposited with the City Engineer. Upon completion of the work and before any backfilling is undertaken, the City Engineer shall be notified and shall thereafter assume entire charge of the work, making the backfill and restoring the surface. The cost of the work shall then be billed against the permittee or deducted from his deposit. The responsibility for the replacement work would then be placed upon the City and difficulties with the permittee would disappear. A similar procedure is followed in several of the larger cities and gives thorough satisfaction.

PAVEMENT MAINTENANCE DIVISION

The work of this division has been mainly directed to the repair of macadam and gravel streets and to the installation of wooden crosswalks. Approximately 25.7 miles (514,000 square yards) of macadam streets were redressed at an average cost of 3.45 cents per square yard and 16.2 miles (323,000 square yards) of gravel streets were redressed at an average cost of 3.95 cents per square yard, exclusive of a small expenditure for rock, of negligible effect upon the unit cost.

67,804 square feet of walks were relaid at a cost of \$4,851.37, or at a unit cost of 7.15 cents per square foot.

In addition, the division performed the following miscellaneous work:

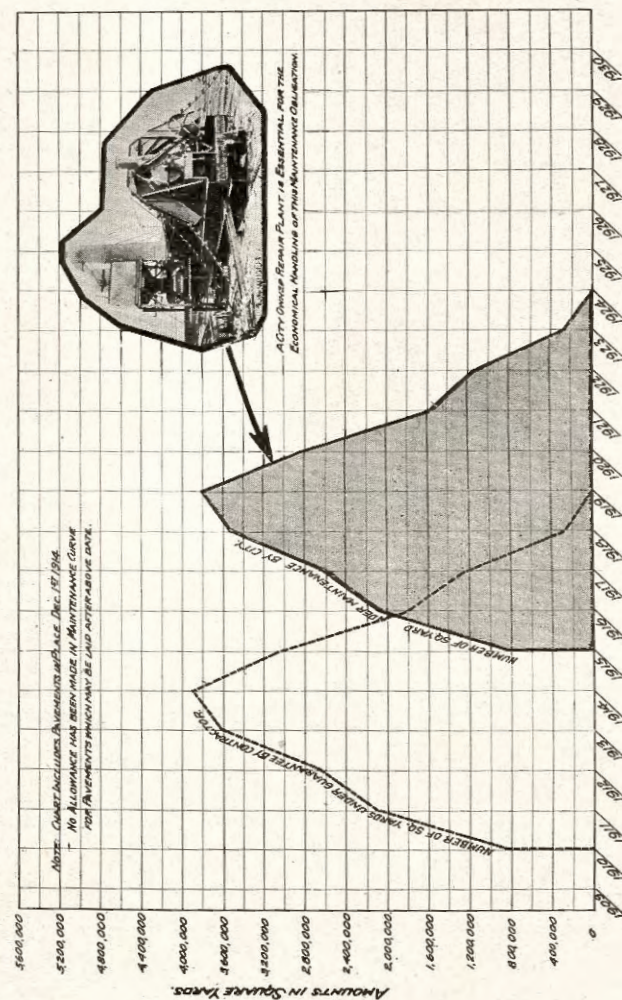
	Sq. Yds.	Cost
Relaying stone block pavement.....	2,015	\$446.51
Relaying brick pavement.....	110.5	155.75
Relaying wood block pavement.....	106	264.45
Grading and reshaping dirt streets.....	.....	472.07
Rolling streets for street contractors, this cost being billed against the contractors.....	.....	\$92.18

Hard-surfaced Maintenance—The preservation of hard-surface pavements is the greatest single problem before the City, for upon the termination of the maintenance and guaranty contracts the City must assume the burden. When it is generally understood that in 1915, 832,000; in 1916, 2,100,000; in 1917, 2,662,000; in 1918, 3,628,000, and in 1919, 3,907,000 square yards of bituminous pavement will be under direct maintenance by the City at the expense of the general funds, and will so continue upon these for five years, the seriousness of the situation cannot be questioned.

Delays in execution of repairs until financial conditions improve are indefensible and the citizens will not tolerate defective pavements. Any attempt to dodge the issue by speculating in repair bills must lead to disaster, and in spite of argument, pavements will continue to disappear through wear.

Repair Plant—The requisition for a municipal asphalt plant is an immediate and positive necessity. The major portion of hard-surface area being of the bituminous type, most of the maintenance work must be done by contractors operating large asphalt plants, generally unadapted to small and scattered patch work. The City

CHART SHOWING TOTAL AMOUNTS OF BITUMINOUS PAVEMENTS UNDER GUARANTEE BY CONTRACTOR ALSO AMOUNTS UNDER MAINTENANCE BY CITY.
 CHART DOES NOT INCLUDE PAVEMENTS LAID PRIOR TO 1910 WHICH ARE UNDER SPECIAL CONTRACT MAINTENANCE
 AVERAGE LENGTH CONTRACTORS' GUARANTEE = 5 YEARS, AVERAGE LENGTH CITY'S MAINTENANCE = 5 YEARS.



has never been able to repair its asphaltic pavements for less than \$1.50 per square yard for the larger cuts and \$5.00 per square yard for the cuts aggregating less than one square yard. Even with such prices, the work proves unattractive to contractors and constant urging is required to execute orders for patching.

With a plant of one thousand square yards daily capacity, the City should be able to lay surface at not to exceed seventy-five cents per square yard. The plant would also be available for use both by the City and by private individuals for the replacement of surface at cuts and for the repair of privately-paved streets no longer under maintenance where minor repairs would greatly prolong the life of the pavement.

It is not advocated that the City acquire a plant of a capacity more than sufficient for repair work. Competition with paving contractors would at this time be distinctly unwise but the problem of maintenance justifies a capital outlay for a small repair unit during 1915.

STRUCTURAL DIVISION

Grade Crossing Elimination—Preliminary plans for the elimination of grade crossings along the Oregon-Washington Railroad & Navigation Company's right-of-way have been completed and tentative estimates of cost prepared under the following schemes:

- 1—Complete depression of tracks;
 - 2—Complete elevation of tracks;
 - 3—Partial elevation and partial depression of tracks,
- with viaducts at:

Sandy Boulevard and East Thirty-seventh street;
East Forty-second Street;
East Forty-seventh Street;
East Fifty-second and Fifty-third Streets;
East Sixtieth Street;
Halsey Street (Barr Road);
East Seventy-fourth Street;
East Eighty-second Street.

To allow of full discussion, designs for crossings at both East Fifty-second and East Fifty-third Streets are in development, but, from present information, a crossing at East Fifty-third Street appears more logical and certainly is the simpler in construction. Whatever the final solution, a cross street, located a short distance northward from the right-of-way should be opened between East Fifty-second and East Fifty-fifth Streets to furnish reasonable access to the territory south of the railway and to the viaduct.

As corollaries to the work, studies in the following fields have been made:

- 1—Traffic, present and probable;
- 2—Industrial possibilities;
- 3—Economic disposal of excavated material;
- 4—Maintenance of traffic during construction;
- 5—Regrading of areas adjacent to the line.

A general layout of all proposed crossings had been developed in detail and working plans are well advanced. To avoid a skew crossing at East Eighty-second street, a relocation of streets in the vicinity has been proposed. The problems of construction will thus be simplified and the property damage greatly reduced.

At all times the Railway Company has been in consultation with the department's engineers and differences have been amicably adjusted as they appeared. This full agreement of both parties will greatly shorten the preliminaries and permit of quick entry into contract. The spirit of co-operation shown by the company has been most gratifying and is an evidence of its good faith.

The approaches to the viaducts are being discussed from several angles and, in the filed reports upon the project, every feasible method of treatment will be touched upon. The work being of considerable magnitude and affecting a large area on both sides of the line, the preliminary studies have been most exhaustive and have been extended to cover a zone about one-half mile in each direction from the center line. Especial care is being taken to establish rational limits of the assessment district and to develop an equitable assessment scheme. This being the first application of the charter provision touching grade separation, the effort has been to cover every point in the investigations which might have even a remote influence upon the final decision. The magnitude and importance of the project and the lack of previous experience upon similar work have warranted the greatest caution.

To permit of full appreciation of the changes to follow the work at the Sandy Road crossing and as a supplement to the report, the proposed viaduct at this place is being visualized on a generous scale in an enlarged photograph. This will be most instructive to all interests.

The unreliable field data available and the adjustment of some serious errors in recorded elevations along the whole line have brought much delay. The discovery of these errors during the preliminary work has, however, been most fortunate, for, if plans had been carried out upon the original lines, the required clearance for trans-continental trains would not have been provided at most of the proposed viaducts and changes during the work would have been not only costly, but most difficult of satisfactory explanation to the citizens. The recorded elevations were first questioned when an attempt to harmonize the street, sewer and railroad profiles at their common point at the Sandy Road crossing, was unsuccessful. At once all recorded benches used in the preliminary surveys were ordered checked with the permanent benches just established and checked under the bench level survey. All errors were determined in both extent and location. The bench level survey received a severe try-out and conclusively demonstrated its accuracy and value. When it is realized that the construction of the seven proposed viaducts would cost about \$500,000 and that the capital outlay for the entire regrade work would be not less than \$2,000,000, the expenditure of less than \$6000 for the bench level survey covering the entire city, has proven of immediate profit. A further delay in the work has come from difficulties in the arrangement of related areas to be finally used for factories and industries and in the discussion of the order of development of proposed and future crossings. The full report with plans and estimates should, however, be ready for filing about the end of February.

Holgate Street Viaduct—In October, 1913, proceedings for the separation of grades at the Southern Pacific crossing on Holgate street were initiated. The tentative plans submitted by the com-

pany were approved as to line and grade, but a proposal to erect the trusses from the old railroad bridge across the Willamette River was rejected after the discovery of serious deterioration in the steel and of the probable fatigue of certain members of the trusses. Important parts of the trusses were considerably distorted; the pins and joints were corroded and much damage had been done to the members during the wrecking operations. Following rejection of the Company's plan, the department was requested to prepare designs which would meet its requirements and might be executed for a sum not to exceed \$55,000, which had been set aside in the Company's budget. The plans have now been prepared and in general have been approved by the Company. They comprehend the erection of a steel viaduct with four seventy-five-foot spans of the through girder type, with a twenty-eight-foot roadway and two six-foot walks. Earth fills are proposed for the approaches on grades not exceeding five per cent. All details except the question of responsibility for maintenance of the structure, readjustments in transverse streets and some minor matters, have now been agreed in.

Inadequate Bridges—One of the immediate results of the traffic survey has been the conclusion that the present bridge facilities are insufficient. The rapid development of motor-driven vehicles and of the heavier types of streetcars, coming parallel with an unprecedented expansion in pavement construction, has brought new problems in transportation. It is now certain that many of the bridges considered as sufficient for at least twenty-five years of service are of too light construction for the intensified traffic and that the present over-stressing must result in a rapid deterioration.

Condition of the Trans-River Bridges—For some time it has been known that the Morrison street bridge was sustaining a live load in excess of designed allowance and that, because of the arrangement of the deck in traffic lanes, the overloading was threatening the safety of the structure locally. A thorough inspection of the visible parts of the structure, supported by a rough analysis of some of the more important truss members, has shown that with present intensity of traffic, excessive fibre-stresses are developed at numerous points and particularly so in the floor system. The design of the deck is such that the entire center lane, which carries two street railway tracks, has no connection with the other portions of the floor system except at the floor beams. This discontinuity in the floor system encourages abnormal local vibration and dangerous dynamic stresses, which the analysis has shown to be greatly in excess of allowable practice. An estimate of the available life of the structure under such an abnormal condition would be purely guess, for, with steadily increasing loading, particularly that of swiftly-moving motor vehicles, the metal will become fatigued from unit stresses above the allowances of safe design. It is practically impossible to determine what parts of the structure are in distress, since, with insufficient and unreliable data upon the physical condition of the steel and with the extreme flexibility of the structure as a whole, a stress analysis can give little information other than to locate approximately glaringly over-stressed members. Although the imposition of an increased dead load is not entirely defensible, it seems wiser to stiffen the floor system so as to deaden the

excessive local vibration and the destructive impact of swiftly-moving vehicles. For safety, either extensive repairs must soon be made or the intensity of traffic upon the bridge must be reduced. Estimates of essential repairs are in preparation.

A less detailed examination was made of the Burnside Street bridge. The trusses are of light construction and are carrying traffic much in excess of design allowance, with a resulting strain on several members. A critical examination may reveal conditions as in the Morrison Street bridge.

Three recent fires on the river bridges and several serious water front fires direct particular attention to the wooden bridge approaches. Those of the Morrison Street bridge are unsafe for the present traffic and further, present a decided fire menace. Replacement with permanent construction will become an urgent necessity in the near future.

The Ford and the Thurman Street bridges are in need of replacement. Not only are the roadway parts too light, but the outlines of the bridges are not in harmony with surroundings. Preliminary examinations of sites and designs for the structures have been under way, but the funds appropriated do not permit of the presentation of thorough studies. During the slack period of construction, projects of this kind are best started, and in the present inactivity in construction there is offered an opportunity to approach the whole subject of bridge development in the calm and thorough manner which is essential, but which has been sadly lacking in the determination of many former projects. In prosperous times, popular demand prevents detailed discussion and local pressure often largely determines the design.

Appearance of Bridges—The development of pleasing designs for bridges has received little attention and, generally, the present structures lack graceful outline and finish. Utility and low first cost evidently have been the governing factors, but it certainly is as much a municipal duty to consider the appearance of a structure as it is to provide adequate strength. Ornamentation and broad treatment of surroundings unquestionably increases expense, but economy should not so far govern as to create offense to good taste. There can be no hope of developing a strong civic pride if, by its own indifference and act, the City persists in assuming that the pleasing has no place in engineering construction. Portland's possession of a climate favorable to plant growth has apparently been forgotten in the finish about the bridges and no serious effort has been made to improve the sites after construction or to remove the scars that came from construction work. The disgraceful condition of the slopes about all the bridges in Sullivan's Gulch is full testimony of this neglect. The stranger entering this gateway upon seeing the continuous dumps on both sides of the railway line must come to the belief that the City is slovenly in its habits and lacks civic pride. In attention to simple things such as this, the administration should be the leader and should never permit itself to engage in any work which mars the beauty of the city or give its sanction to any construction of mean design.

Bridge Approaches—Too little attention has heretofore been given to the consideration of approaches, the aim seeming to be to build structures rather than to provide transportation facilities

of the highest value. This absurdity is well in evidence at the east approach to the Broadway Bridge where, through determined opposition to an improvement proceeding, an impassable street has practically nullified the value of the structure.

Fire Protection Broadway Bridge—The frame structures of the Albers Brothers Milling Company along the south side of the first shore span on the west approach, constitute a most dangerous fire hazard in that a fire breaking through their roofs would at once spread to the highly inflammable timber of the deck. Such a fire would soon cause extensive damage to the floor system and, if not promptly checked, the trusses might be damaged beyond repair. Various protective measures have been proposed and several tests of fireproofing materials, urged for use, have been conducted. In some cases the resistance of the materials to an intense fire was insufficient and, generally, methods proposed were excessive in cost. A simple plan has been proposed which, briefly, calls for the installation of a corrugated metal screen, swung several feet below the floor system and extending upward to the height of the hand rails. This appears to be not only the cheapest in first cost, but the most economical in maintenance, since all parts of the protective work are open to inspection and maintenance.

Vista Avenue Wall—Work at this wall was completed in January at a total cost of \$24,785.00, including the installation of a deep French drain along the west line of Vista Avenue and of a cement mortar screen wall enclosing the webs and walls, matching in finish the adjacent walls. The adopted design is believed to be the most economical for side hill work and is generally being used. Not only does the design permit of a great reduction in height of the retaining wall proper, but the webs and slabs are lighter than in former designs and the structure, as a whole, possesses greater rigidity and resistance to overturning. Every detail of drainage and construction received the most careful attention and the absence of all settlement or shrinkage cracks, after a full season of use, gives evidence of thorough inspection.

St. Francis Hill Slide—Early in January, after a long and severe storm, a large mass of earth (later determined to weigh at least one hundred and thirty thousand tons) was discovered to be in movement, in a northeasterly direction headed toward the main building of St. Vincent's Hospital. The concrete curbs on the north side of Maywood Drive commenced to separate from the concrete roadway at an alarming rate, and the south walk, after upheaval and fracture, moved laterally over the top of the curb until it projected into the roadway. Before work to arrest the movement could be commenced, the separation between roadway and curb was close to six inches. Fortunately, the six-inch concrete pavement in the roadway remained practically unbroken, except locally at the curb line, and offered sufficient resistance, both through friction on its bed and action as an arch, to direct and retard the advance of earth, although, as a whole, it was in slight movement, both horizontally and vertically. Later, however, the pavement crushed at the virtual haunches, near the limits of the up-hill disturbed area and the over-burden above the roadway no longer had the advantage of resistance at its toe. The unexpected strength developed by this concrete slab counteracted the tendency to

sudden shifting of the earth, and allowed the department time to collect its equipment and to brace the trench timbering against it.

The slide progressed at an increasing rate, reaching a maximum of over one-quarter inch per hour (in one day a total movement of seven inches was noted.) At the center of the slide on Maywood Drive the total horizontal shift of the north curb was 2.73 feet and the subsidence of the earth consequent upon the slip varied from 3 to 6.50 feet.

A hurried examination of conditions was convincing proof that there was no time for elaborate investigation and, as the readiest means of checking further movement, orders were given to construct a French drain along the south side of the street at right angles to and for the full length and face of the sliding earth, which was in a completely saturated condition and almost a semi-liquid. In the previous year a disturbance of the same kind, but of lesser magnitude, occurred at this place and the owners of the adjacent property had sought to stop further slipping by constructing a system of longitudinal and transverse timber-lined tunnels for the drainage of the evidently water-logged soil. These tunnels, however, had not operated to satisfaction and were apparently of slight utility in cutting off the underground flow from the hills above and in draining several large flowing springs reported to have been covered over by fills during the street construction. Their condition was such, however, that they were available as pipe galleries in which to lay the sub-drains of the rock-filled trench. In spite of the most discouraging weather conditions and of the constant movement of the heavily-timbered trenches beneath the concrete of the roadway, the excavations were finally carried to an average depth of seventeen feet, where the basic cause of the movement was found in a thin stratum of plastic clay (lubricated by the confined sub-surface water) upon which the whole mass was sliding. At times the trench bracing was in danger of collapse and only by the greatest caution could the excavations proceed in safety. As soon, however, as the sub-drains were in place, the daily advance of the slide rapidly decreased and, in a few days after completion of the drains, the earth had evidently found its equilibrium.

Of course the extensive and irregular advance of the slide caused fracture of water and sewer pipes and probably the leakage from them into the already over-charged earth was the impulse needed to destroy cohesion. Although the threatening disaster had been prevented, it was evident that the hurried emergency work could not be regarded as other than a temporary preventive and that, independent of the admittedly faulty drainage, the whole disturbed area should be confined by some stout barrier. After an exhaustive field study of the slide during the ensuing summer, a plan calling for a pile retainer of rather unusual form was evolved and contract for its construction let. The details of the design are clearly shown on the plan which accompanies the report. The sewer, curbs, walk and roadway have now been restored and evidence of the accident has been removed. With the exception of some work of clearing up, the reconstruction had been completed by the end of November, though, due to retarded setting of the concrete, the roadway was still held closed to traffic.

The success of the work cannot be questioned for accurate read-

ings on well-established points of reference, at frequent intervals throughout the whole period of operations, have shown that the huge mass of earth has been blocked in its advance. The ingenious solution of the unusual problems presented in this work and the courage and determination shown by Howard W. Holmes, Chief of the Bureau, and J. W. Sadler, Chief Inspector of Bridges, deserve especial mention.

Second Street Slide—Following the heavy rains of January, the high fill on Second street across Marquam Gulch settled considerably, damaging the macadam roadway and allowing surface water to enter the mass of earth. A large mud slide then followed which, by its sudden movement, wrecked three piers and a brick chimney of the Gem Hotel on the east. The damage was repaired by the department, and, as additional precautions, timber fenders, in cut-water form, were built in front of the piers, where future sliding would probably occur.

BRIDGE MAINTENANCE DIVISION

Repairs to Gulch Bridges—On account of the defective decking on the Front Street bridge over Marquam Gulch and the Grand Avenue and Union Avenue bridges over Sullivan's Gulch, the entire pavement and decking were replaced on each bridge. All of the structures are of steel girder type.

The Front Street Bridge is five hundred feet long with a forty-foot roadway, built in 1905. The floor system consisted of three and one-half-inch wood blocks set on four by twelve-inch treated plank, laid on steel I beam stringers. Defects were mainly deterioration of the wood planking. Information available tends to show that green lumber was used and dipped in the preservative, developing an impregnation of about one-sixteenth of an inch. Apparently the moisture was thus retained in the lumber, causing the planking to rot in the center while the outer surfaces appeared to be sound. The wood blocks were in fair condition and would have given four years' further service had the planking not failed.

The structure was redecked substantially in the same manner as originally built, excepting that four-inch wood blocks treated with sixteen pounds and planking treated with ten pounds of creosote were used. In order to prevent excessive "bleeding" and to make the deck waterproof, a radical deviation from general practice was followed in setting the wood blocks. The decking planks were covered with an asbestos felt membrane painted with asphalt and blocks set directly upon this foundation, the lower half of each half being dipped in hot asphaltic filler before the block was placed.

The Union Avenue Bridge constructed in 1908 is four hundred and eight feet long and thirty-six feet wide. The floor system consisted of a six-inch reinforced concrete slab which was covered with a two-inch asphalt wearing surface. The failure of the deck was due to faulty slab design, principally defective because of no provision for the negative moment over the supports. This and other defects as well as heavy increase in traffic, caused large areas of the concrete slab to fail.

The structure was redecked in a manner similar to the Front Street bridge, except that plank five-inch by twelve-inch treated

with eight pounds and five-inch blocks treated with fourteen pounds of creosote were used. The dipping method was used in setting the blocks. Repairs were started August 27, 1914, and completed November 6, 1914, at a cost of \$8975.00.

The **Grand Avenue Bridge** was built in 1907 and is three hundred and fifty feet long by forty feet wide. The superstructure is similar to the Union Avenue bridge and the deck failure was due to similar defects.

The redecking was to be done in a manner identical with that on the Union Avenue bridge, except that the five-inch by twelve-inch transverse planking were laid twelve inches apart and covered with two-inch by twelve-inch longitudinal planks. The contract for this work was awarded Messrs. Jeffery & Bufton at a price of \$7990.00.

Aside from the regular work of repairing wood bridges, plank roadways, etc., the following work was done:

The **Broadway Bridge Wood Block Pavement** was originally laid on a sand cushion. In the fall of 1913 it became evident that extensive repairs were needed, due to the shifting of this sand cushion, resulting from vibration of the bridge. After some delay, the contractors responsible for the pavement agreed to furnish 25,000 wood blocks and, in addition, pay the City \$3000, on condition that they would be relieved of further responsibility. This proposition was accepted by the City and the work of repairing the pavement put in the hands of the City Engineer. In making the repairs, the sand cushion was eliminated, wherever possible, the new blocks being laid directly on the waterproofing membrane on top of the wood planking. Where the patches were so small that the cushion could not be left out, cement mortar was substituted so as to provide an unyielding support.

A total of fourteen hundred and seven square yards of pavement were relaid at a cost of \$1615.13, exclusive of blocks. No asphalt squeegee coat was used on the surface of the pavement. The work was completed August 7, 1914, by Jeffery & Bufton, under contract, for the sum of \$9107.26.

Protection of Steel Supports of First Street Bridge became necessary on account of garbage and street refuse deposited in the gulch. As in the case of the Front Street Bridge, last year, this was done by wrapping the members with wire and applying a concrete jacket twenty-two inches square, giving a minimum covering of two inches, carried to a height estimated sufficient to exceed filling for three or four years. The work was performed by City forces at a cost of \$524.86.

Much Painting of Bridges has become necessary through past neglect. In this connection several varieties of bridge paint were used on portions of the First Street bridge to determine their suitability for bridges in this climate.

Sand Blast—Bids were called for a sand blast outfit for cleaning the steel bridges prior to painting. While the apparatus has not yet been purchased, sufficient information has been obtained with respect to the cost and operation of such systems to show the advisability of its use, and it is hoped that it will be possible to obtain an outfit early in the coming year.

SIDEWALK DIVISION

During the year, property having a street frontage of 80,090 lineal feet or 15.13 miles, was posted on account of defective sidewalks and curbs. 48,600 lineal feet of concrete sidewalks and curb were constructed under permit and inspected by this division. The following sidewalk and curbing were constructed by the City forces for private owners:

Square feet of concrete sidewalk.....	82,040.5
Lineal feet of concrete curbs.....	11,286.00
Total length amounting to, miles.....	2.13
Total cost of the above work was.....	\$12,050.66

Curved Corners—The reconstruction of curved corners was continued and 352 corners were changed from 3-foot to 10, 12 or 15-foot radius. The corners are located mainly in the congested business section and at the main transfer and traffic points on the East Side. The area gained for the intersection averages about 140 square feet and is not followed by inconvenience to pedestrian traffic, due to reduction in sidewalk area.

Of 352 corners treated, 48 were changed by the regular sidewalk crew at the following average cost:

To reconstruct the corner.....	\$25.00
To replace catchbasin.....	15.00
To replace pavement.....	17.00
Total	\$57.00

The remainder were reconstructed by the unemployed under City supervision. The cost averaged 25 per cent higher than the work performed by the regular City crew.

Sidewalk Doors—The abuse of the sidewalk door privilege has been of serious annoyance to pedestrian traffic, and to increase the utility of streets and sidewalks, the Department undertook a survey covering the area bounded by, and including Front, Tenth, Morrison and Stark Streets, to determine upon a uniform regulation for the opening of doors and their clearance and location.

Thirteen doors which had been allowed to remain open during the greater portion of the day were carefully observed, and as a result of the observations and a subsequent agreement with the owners, much unnecessary opening of doors is now eliminated. The survey covered in all four hundred and two doors, and will be the basis for much needed future regulation.

TRAFFIC DIVISION

In development of a general highway plan as outlined in the 1913 report, a traffic survey of the more important street intersections, arteries, county roads, ferries, and bridges was started in January, 1914. As preparatory to the study of traffic movement, a simple and comprehensive method of conducting the survey, classifying street users and compiling statistics was tentatively adopted. Preliminary observation for one week allowed of thorough classification of street users; of a proper establishment of control and sub-control stations, of a working organization of observers, their relays and reliefs, and of establishment of units of weights and time, of the form and arrangement of field and office records developed therefrom.

In all, one hundred and forty-four control and sub-control stations were established and an annotated city map prepared showing each station by number and location. Throughout the work the

unit of time for conducting surveys was established as the even hour, provision being made for a re-subdivision to fifteen minutes in case closer approximation appeared necessary. The total ordinary survey period was adopted as the eight-hour working day and on the trans-river bridges, the period from 6 A. M. to 10 P. M. was adopted as the standard.

Seven stations, in close relative position, were occupied each day to allow of a general gauging of the local traffic at the sections covered. The observations were recorded immediately upon a field sheet, which by a simple system of symbols admitted of precise record of street users, direction of travel, condition of weather, pavement, number and kind of accidents, violation of traffic regulations, effective width of roadway and other matters. Each day the observers were advanced seven stations in order to allow the second observation of a station to fall on the succeeding day in the following week.

To avoid the complex application of numerous office compiling sheets, there was designed a simple office record to include a complete survey of street intersections with 2-3-4-5-6-7 or 8 directions on one sheet.

The office record in use is on eight by eleven-inch loose-leaf sheet (the standard official size for all documents), which is shown for better understanding.

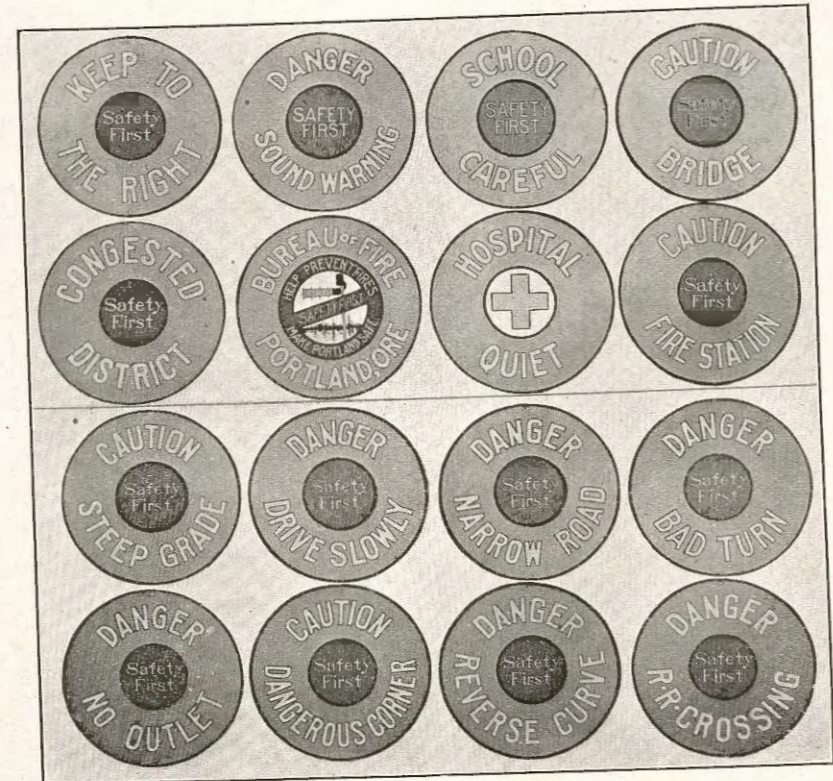
The speed of each vehicle was checked at each station by measured distances and each vehicle was stopped to determine the tonnage. In this manner the net and gross weight of approximately 15,000 vehicles were determined, from which the unit of tonnage was established.

The complete survey of the city is bound in a loose-leaf binder and its simplicity allows of easy access to determine a very comprehensive summary.

The first application of the traffic statistics has been in the re-classification of streets and pavements on the basis of use but it is becoming generally understood that they will assist in solution of other questions than pavement construction. The traffic data have assisted in the solution of many traffic problems in a scientific manner. Among the more important applications are:

- 1—Classification of streets by width, location, pavement, life, congestion, outlet, nature of traffic, grades and number of car tracks;
- 2—Relief of traffic congestion at various points throughout the city, particularly in the business section;
- 3—Feasibility of City's appropriating county roads within the city limits.
- 4—Removal of temporary and permanent obstructions to pedestrian and vehicular traffic;
- 5—More effective traffic control at busy intersections;
- 6—Determination of assessment areas for bridges and street improvements;
- 7—Regulation of traffic movement over trans-river bridges;
- 8—Uniformity in street and warning signs;
- 9—Re-routing of streetcars;
- 10—Basis for traffic legislation.

In the discussion of the rental of the upper deck of the Oregon-



STANDARD WARNING SIGNS

Washington Railroad & Navigation Company's bridge, the practical value of the traffic survey was clearly demonstrated, and recognized by both County and City authorities. An exhaustive study was made of the construction, maintenance and operating costs and of the traffic tributary to the structure.

Warning Signs—As an outcome of the traffic study, a safety first movement was inaugurated by the City which has resulted in placing two hundred and sixty-five warning signs of sixteen different editings at dangerous points throughout the city at the following unit cost:

	Labor.	Material.	Total.
Signs 18 inches in diameter.....	\$0.30	\$0.31	\$0.61
Standards, 1½-inch pipe.....	.08	.92	1.00
Assembling and erection.....	.65	.05	.70
Total	\$1.03	\$1.28	\$2.31

The Street Signs previously erected by the City are of baked enamel on sheet metal and, while of very good appearance when new, are not durable in outlying residence districts. When subjected to abuse, the enamel scales and the metal becomes rusty. By painting and varnishing a heavy sheet metal, a much more durable sign has been made at considerably less cost. One hundred and sixty-one such signs were completed at an average cost of eighteen cents, compared to twenty-nine cents for the enameled sign.

GRASS AND WEEDS DIVISION

The division operated under two ordinances. Under Ordinance No. 27305 (up to June 11th) the following work was performed:

Lots posted for grass and weeds.....	657
Lots cut by City.....	217
Lots posted for earth slides.....	254
Lots cleared by City.....	137

Under Ordinance No. 29083 (effective June 11, 1914), the work was arranged on a much larger scale. The City was divided into nine districts, each under an inspector accompanied by a witness. The procedure adopted was to post the lot and file affidavit of such posting with the Auditor. Upon expiration of the period allowed for compliance, a second inspection was made. Any lot then found uncut was cleared by the City forces. About eighty per cent of notified owners complied with the ordinances in more or less in-different manner. The City received one thousand, three hundred and eighty-seven letters and complaints requesting the removal of nuisances.

Lots posted for weeds.....	25,534
Lots cleared by City.....	1,605

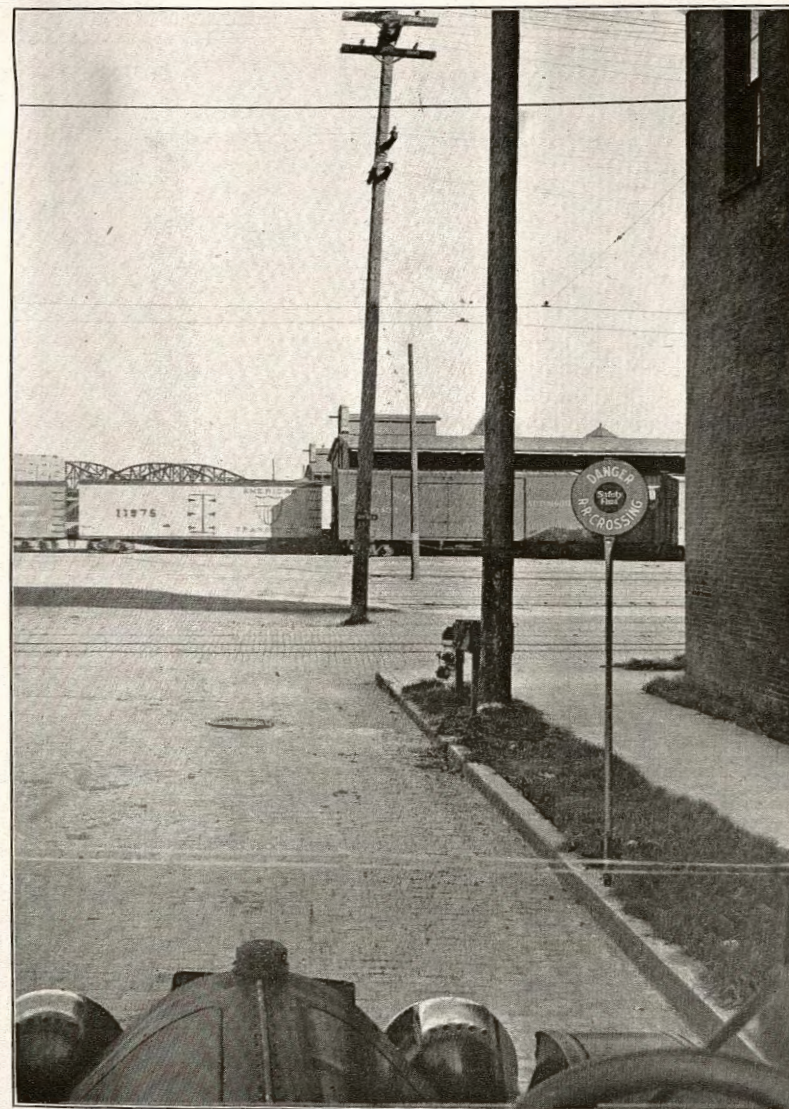
The sum of \$7,288.32 was expended for posting 25,534 lots and clearing 1605 lots which, with ten per cent penalty imposed by the ordinance, was assessed against the property. The cost of posting, alone, exceeded forty per cent of the total expense. Hundreds of protests were made by owners during the cutting season and written objections to the assessments, mostly against the infliction of penalty and admittedly large overhead cost, have been filed.

Although the past campaign has resulted in much improvement in the appearance of vacant lots, radical changes in the ordinance and in its enforcement are essential. The present proceedings are involved and expensive and require large outlays by the City for any effective results.

For resident owners a return to the old ordinance comprehending enforcement by the Bureau of Police is desirable. The fear of arrest and fine will accomplish more than interference by the City's weed forces.

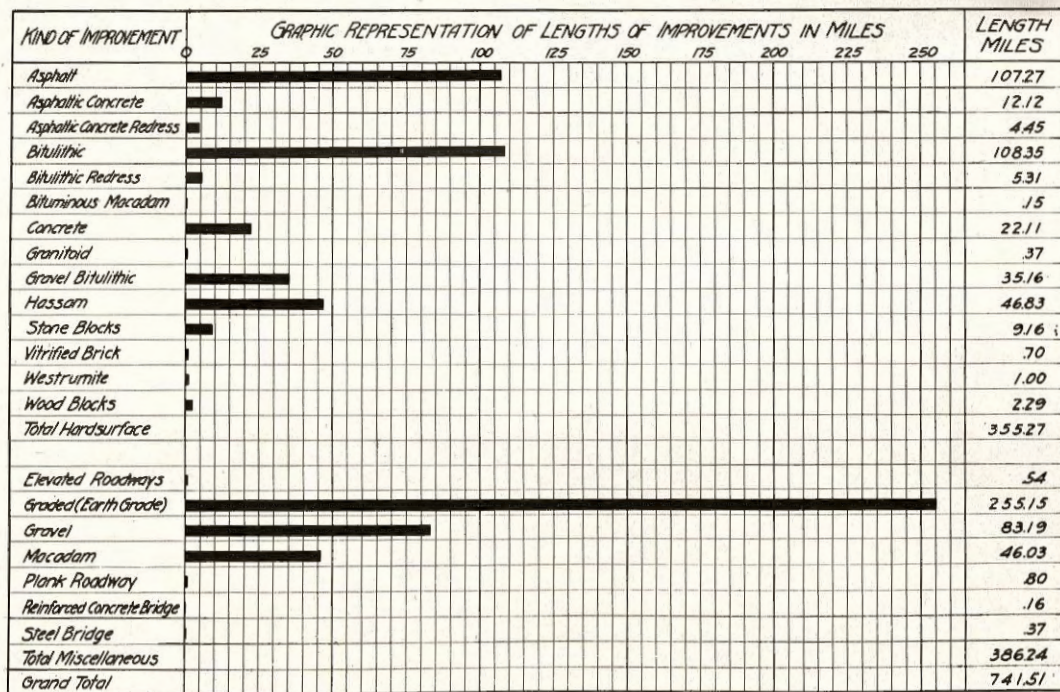
With non-resident owners, a formal procedure somewhat on the lines of that now laid down by the weed ordinance is essential, though the complexity of the present provisions might be lessened.

In the broadest sense, this really is a police function and foreign to that of the engineering forces. The heavy expense of the year is not warranted by the results.



WARNING SIGN INSTALLED AT A DANGEROUS RAILROAD CROSSING

LENGTH AND MATERIAL OF ROADWAYS IN THE CITY OF PORTLAND
IN PLACE DECEMBER 1ST 1914.



STREET IMPROVEMENTS AWARDED AND ACCEPTED, FISCAL YEAR 1914

Month.	Accepted						Awarded					
	Pavement.		Grading and Sidewalk.		Macadam.		Pavement.		Macadam.		Grading and Sidewalk.	
	No.	Cost.	No.	Cost.	No.	Cost.	No.	Contract Price by Prel. Est.	No.	Contract Price.	No.	Contract Price.
December.....	11	\$ 337,554	8	\$ 26,225	1	\$ 17,522	3	\$ 32,582	2	\$ 2,427	3	\$ 21,811
January.....	4	46,425	10	40,448			4	31,337			13	37,212
February.....	2	28,463									6	9,844
March.....	1	40,901	1	5,933			1	3,300			2	4,370
April.....			5	18,013	1	373	9	42,692			4	14,230
May.....	1	13,099	10	32,348			8	39,459			3	22,166
June.....	4	41,117	6	25,896	1	2,171	3	27,155			17	88,878
July.....	9	37,972	11	73,924			3	16,358			7	13,548
August.....	11	52,390	8	24,070			1	5,874			8	45,005
September.....	13	200,156	19	52,340			9	99,222			7	15,310
October.....	8	83,829	5	9,603			12	168,159			3	19,124
November.....	9	168,652	13	61,724			4	20,468			5	4,572
Totals.....	73	\$ 1,050,558	96	\$370,524	3	\$ 20,066	57	\$486,606	2	\$ 2,427	78	\$296,070

Total of the three classes, \$1,441,148. (This is contract cost and does not include the 5% added by City.)

Total in contracts awarded, \$ 785,103.

Total in contracts accepted, \$1,441,148.

YARDAGE OF HARD SURFACE IMPROVEMENT WORK FOR FISCAL YEAR 1914, ALSO UNIT PRICES

Kind.	Sq. Yds.	Unit Price.		Average.
		Maximum.	Minimum.	
Bitulithic.....	33,041.3	\$ 1.90	\$ 1.80	\$ 1.85
Concrete.....	68,919.0	1.55	1.10	1.24
Asphaltic Conc. on Cr. Rk. Base.....	7,291.1	1.25	1.25	1.25
Asphaltic Conc. on Bit. Base.....	1,003.8	1.15	1.15	1.15
Asphaltic Concrete.....	138,467.0	1.50	1.05	1.38
Gravel Bitulithic Class "A".....	128,083.5	1.50	1.32	1.43
Bitulithic Redress.....	17,446.4	1.50	1.25	1.39
Wood Block.....	12,107.9	2.60	2.60	2.60
Asphalt.....	40,447.4	1.70	1.25	1.54
Asphaltic Conc. Redress.....	92,535.9	1.20	1.04	1.05
Hassam Class "B".....	7,627.1	1.43	1.25	1.28
*Macadam.....	32,258.4	.54	.34	.46
Stone Block.....	780.0	2.85	2.85	2.85
Portion in Tracks.				
Vitrified brick.....	30,788.5	2.85	2.00	2.34
Stone Block.....	1,646.5	3.10	3.10	3.10
Hassam Class "B".....	857.0	1.25	1.25	1.25
Portion in Central Strips.				
Vitrified Brick.....	3,395.9	3.25	2.75	3.08
Grand Total.....	616,696.7			

*Not usually classed as a hard-surface pavement.

DEPARTMENT OF PUBLIC WORKS

STREET IMPROVEMENTS IN PLACE DECEMBER 1, 1914

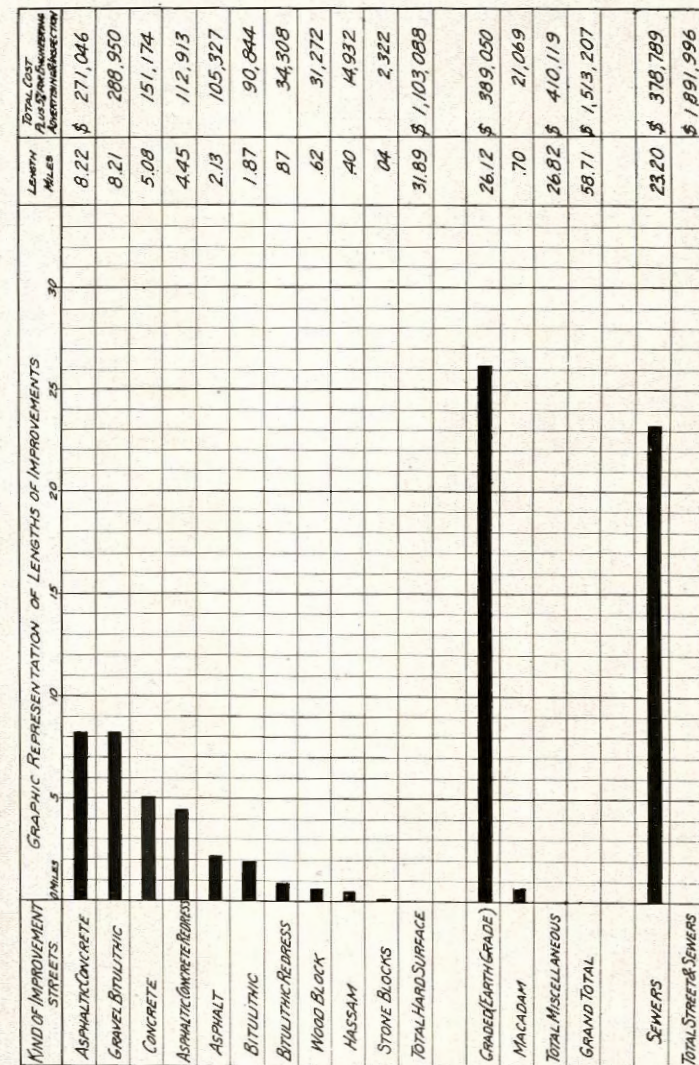
*Nature of Improvement.	Work Done During F. Y. 1914.		Mileage of Roadway at End of F.Y. 1914.
	Length in Miles.	Total Cost Including 5% for Engineering, Advertising and Inspection.	
Asphalt.....	2.13	\$ 105,327.00	\$ 107.27
Asphaltic Concrete.....	8.22	271,046.00	12.12
Asphaltic Concrete Redress.....	4.45	112,913.00	4.45
Bitulithic.....	1.87	90,844.00	108.35
Bitulithic Redress.....	.87	34,308.00	5.31
Bituminous Macadam.....	5.08	151,174.00	22.11
Concrete.....			35.16
Granitoid.....	8.21	288,950.00	46.83
Gravel Bitulithic.....	.40	14,932.00	9.16
Hassam.....	.04	2,322.00	.70
Stone Blocks.....			1.00
Vitrified Brick.....			2.29
Westrumite.....	.62	31,272.00	
Wood Blocks.....			355.27
Total Hard Surface.....	31.89	1,103,088.00	
Elevated Roadways.....			.54
Graded (earth grade).....	26.12	\$ 389,050.00	255.15
Gravel.....	.70	21,069.00	83.19
Macadam.....			46.03
Plank Roadway.....			.80
Reinforced Concrete Bridge.....			.16
Steel Bridge.....			.37
Total Miscellaneous.....	26.82	\$ 410,119.00	386.24
Grand Total.....	58.71	1,513,207.00	741.51

*Indicates the principal pavement in the roadway. A large amount of stone block and brick in the railway portions of the street and brick used in center strips on steep grades are not included in this table.

EXPENDITURES FOR STREET IMPROVEMENTS SINCE 1900

Year.	Expended during year.	Total at end of year.
1900.....	\$ 117,718	\$ 5,255,881
1901.....	124,662	5,380,543
1902.....	134,804	5,515,347
1903.....	449,786	5,965,133
1904.....	620,480	6,585,613
1905.....	446,107	7,031,720
1906.....	475,598	7,507,318
1907.....	897,485	8,404,803
1908.....	1,750,853	10,155,656
1909.....	2,001,413	12,157,069
1910.....	4,091,262	16,248,331
1911.....	7,031,361	23,269,692
1912.....	3,142,510	26,412,202
1913.....	2,732,653	29,144,855
1914.....	1,513,207	30,658,062

CHART SHOWING WORK DONE DURING F.Y. 1914.

FROM DEC. 1ST 1913 TO DEC. 1ST 1914

GROWTH OF STREET IMPROVEMENT SYSTEM TO DECEMBER 1, 1914

Mileage			Total Cost
Hard-surface pavement	Miscellaneous	Total	
355.27	386.24	741.51	\$30,658,062.00

BUREAU OF SEWERS

CONSTRUCTION DIVISION

The value of contract work completed and accepted and other related data are shown in Table No. 1. The working conditions vary so greatly that satisfactory curves of progress can not be drawn. The variables of extent and locality of the particular job and of the type and design of the system offer extreme difficulties to a fair discussion of the general question of progress. Inspection costs are somewhat similarly influenced and no general rule for determining a reasonable charge for any case can be set down. Each sewer construction is practically a new problem, both in inspection and in execution.

Four sewer systems, costing over twenty thousand dollars, each, were accepted during the year:

The East Sixty-third Street Extension of East Stark Street Sewer No. 2.....	\$159,846.82
Lambert Avenue Sewer System.....	63,657.81
East Forty-ninth Street, East Glisan Street and East Davis Street Sewer System.....	33,027.68
East Hoyt Street Sewer System.....	22,122.43

East Sixty-third Street Extension of East Stark Street Sewer—The East Sixty-third Street extension of the East Stark Street sewer, completed during the fiscal year, consists of seven thousand, two hundred and fifty-three lineal feet of eighty-four and eighty-seven-inch reinforced concrete sewer, extending from East Forty-fourth and East Burnside Streets, easterly to East Sixty-third and Willow Streets.

At East Forty-fourth Street it provides an outlet for an area of one thousand, five hundred and sixty acres, and at East Sixty-third Street will eventually drain four hundred acres of the Rose City Park district and seven hundred acres of the Montavilla district.

It affords drainage facilities for East Glisan Street from East Forty-sixth to East Seventy-fourth Streets for the sixty-acre East Sixtieth and East Davis Street sewer district, and for the forty-acre East Fifty-fifth and East Oak Street sewer district, where lateral sewers are already in.

All contracts of less than twenty thousand dollars, each, were for pipe sewers; small laterals and minor lateral systems. The following contracts for trunk sewers were awarded:

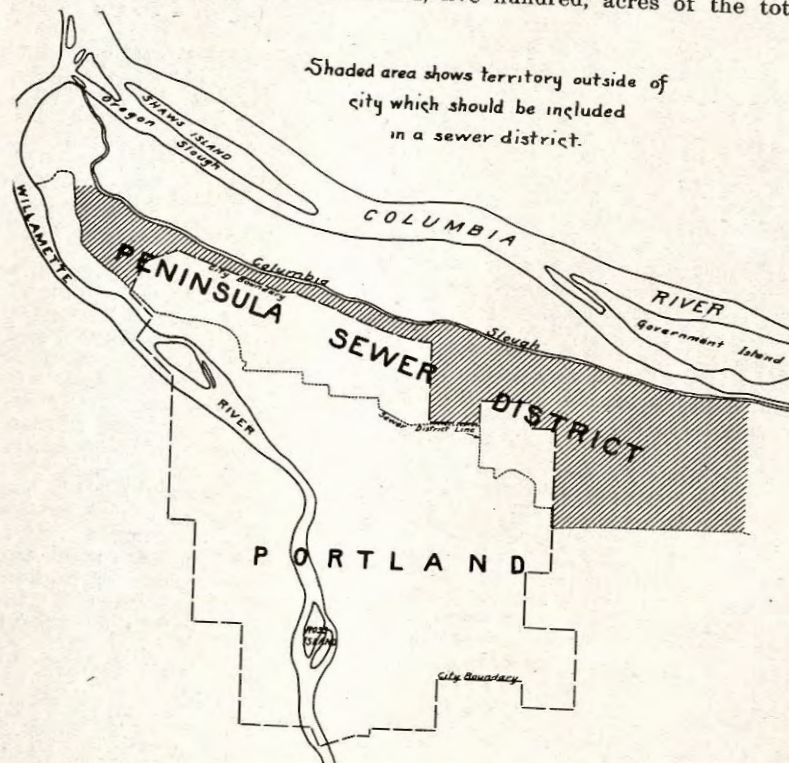
Extension of the Rhine Street Sewer.....	\$108,599.47
Long Avenue Extension of the Holgate Street Sewer.....	16,362.00

Sewerage for the Peninsula District—The most important public improvement under consideration is a sewerage system for the Peninsula district. The rapid increase in mileage of paved and graded streets marks a demand for drainage facilities fully equal to the demand for sanitary provisions. The magnitude of the project justifies a thorough investigation of all the physical conditions of the drainage district, which extends beyond the city limits to the Columbia River and includes twenty thousand acres.

Several important factors govern the selection of a suitable outlet. The fact that the extremes of high and low water are not coincident in the two rivers is of importance in considering the Willamette

River or either of the two sloughs as an outlet. Tidal effects influence the location as to outfall and the program of river development, also enters discussion of the project. As the drainage district is sparsely settled and has considerable extent beyond the city boundaries, the problem of economic design is of unusual complexity.

The surveys for this system were continued during the year and at its close, about fifteen thousand, five hundred, acres of the total



of twenty thousand embraced in the drainage district, had been covered by topographical surveys at a cost of fifteen thousand, one hundred and seventy-five dollars, equivalent to a per acre cost of ninety-eight cents. The survey notes for about twelve thousand, six hundred, acres had been reduced and plotted at a total cost of two thousand and fifty-five dollars, equivalent to an acre cost of sixteen cents. These make the cost per acre, for surveys and mapping, one dollar and fourteen cents. All preliminary field work will be completed in 1915.

Parallel with the topographic work, observations have been made of the flow in the Columbia and Oregon Sloughs for determination of

their suitability as channels of discharge. From cross-sections and float measurements, calculations of the flow at all seasons have been made. Float observations are under way to determine tidal effect on these water courses, particularly at low water. The limited data collected admit of no definite conclusions at this time and until another season of observation has passed, no definite statement can be made as to most desirable locations of outfalls. Present information points to a system with an intercepting sewer located, roughly, along the northern boundary of the city with a single outlet to deep water, below the present harbor limits.

A tide gauge station equipped with a Stevens Automatic Water Level Register, set in a stilling well of wood pipe to eliminate wave influence, was established on the Burnside bridge during April. Records of tidal movement not having been kept for a complete season, any deductions would be premature. It is of passing interest, however to note that no tidal effect is shown at a river stage of thirteen feet above mean sea level and that at low water stage the total variation in river height due to tidal action is from two to two and five-tenths feet. The trace indicates that high water at Portland is from six to nine hours later than at Astoria.

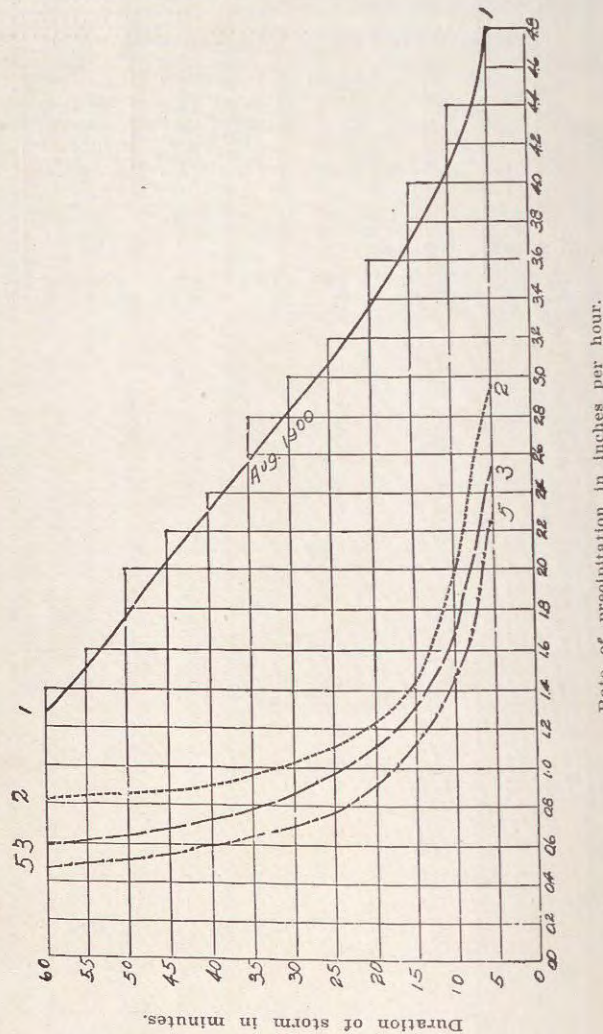
Studies were continued for the determination of proper units of run-off from drainage districts upon which to base sewer design. Rain gauge stations were maintained at East Thirty-fifth and Belmont Streets in the Sunnyside Sewer district, at East Fourteenth and Knott Streets in the Irvington Sewer district, and at East Twentieth and Going Streets in the Holladay Sewer district. These locations were selected in order that the records collected might fairly indicate rainfall in the tributary district. A sewer gauging station was established in each of these sewer districts and automatic records kept of the flow in the sewers. To secure the best information, these gaugings must be continued over a longer period, but in the case of the Holladay district station, the data are of immediate value, as the impervious area is of considerable extent and local conditions approximate those in an average residence district. The results at this station of three type storms of a duration allowing a balanced sewer flow to occur, are shown in the following table. It is interesting to note the practically uniform percentage of run-off in each case.

AMOUNT OF STORM WATER REACHING SEWER—HOLLADAY AVENUE SEWER DISTRICT

Total area of district.....	Acres
Total impervious area (roofs, sidewalks and pavements).....	201
Total paved area (including sidewalks).....	82.93
Total area roof surface.....	58.67
	24.26

Date of Storm.	Duration of Storm.		Computed Volume of Rainfall by Rain Gauge in Cu. Ft.	Total Flow in Sewer by Sewer Gauge in Cu. Ft.	Per Cent Runoff on Total Area.	Per Cent. Runoff on Impervious Area.
	Hrs.	Min.				
December 30-31, 1913....	22	52	824,482	336,890	40.86	99.00
January 4-5, 1914.....	32	10	1,685,445	658,050	38.45	94.50
January 20-21, 1914.....	25	10	1,211,185	485,105	40.00	97.20

*Per cent runoff on impervious area is total amount passing sewer gauge divided by calculated rainfall on impervious areas only.



Tanner Creek Sewer—The portion of the Tanner Creek sewer from Fifteenth and Burnside Streets to its outlet, has long been known to be in a condition approaching failure. Several examinations revealed extensive defects and, in September, formal reports were filed by the City Engineer and Chief, Bureau of Sewers, advising the Council of the danger of collapse and recommending reconstruction of the entire section. Because of the large expense involved in the proposed work and of the intricate problem of assessment over an extensive drainage area, the reports recommended the employment of an experienced engineer in no way connected with the municipal service to undertake an inspection and to make report. By authority of the Council, Mr. Ralph Modjeski was employed to examine the sewer and report on its physical condition. Except in minor particulars, his report confirmed the opinion of the department and advised a general reconstruction. The report made no attempt to enter into the question of design or of insufficiency of depth and touched on the physical condition of the sewer, only.

The apparent defects include a settlement along the entire length of the sewer, longitudinal cracks in the top ring, distorted cross-section at various points and dislodgement of bricks on both top and bottom of the ring. At one place the brick invert has been entirely worn away for a distance of several hundred feet and the side walls are undermined, making failure at this point imminent. In this section the capacity of the sewer is only forty per cent of that required for the run-off, allowing internal pressure upon the already weakened sewer.

In the original design, the great development in building and paving construction of the past ten years had not been anticipated, but failure to provide for this can hardly be advanced as a fair criticism. From Fifteenth and Burnside to Seventeenth and Taylor Streets, the sewer barrel is in fair condition and minor repairs, only, are needed, but the capacity of the sewer is insufficient, making construction of a relief sewer, a necessity. The estimated cost of the whole work (for new section and for the relief) approximates two hundred and forty thousand dollars.

The problem of reconstruction is most complicated because of the necessity of providing for flow from the district and of the complicated question of assessment over a large drainage area. At present a considerable section of the sewer is located upon private property and beneath several buildings of considerable value. In the proposed design it is intended to locate the sewer entirely within the street area and to abandon and fill up all parts of the existing system which lie upon private property. In advance of the work, extensive investigation of foundations must be made, since it is known that the soil along the line is believed to be rather unfavorable for heavy sewer construction. Because of the necessity of maintaining sewage flow during the time of construction, the order of development must be thoroughly worked out in advance of letting of the contract. Upon every count, the work is of extreme difficulty and the most careful procedure must be followed. Parallel with the submission of construction plans, a full discussion of the plan of assessment against property in the district will be prepared,

in order that all affected may have opportunity to investigate the extent of their burdens.

The possibility of collapse of the existing sewer and the serious effect of such a collapse upon the valuable property in the large drainage area, demand prompt action. In the coming year it is hoped to advance the work to contract.

MAINTENANCE DIVISION

The major portion of the expenditures was for routine work with the following exceptions:

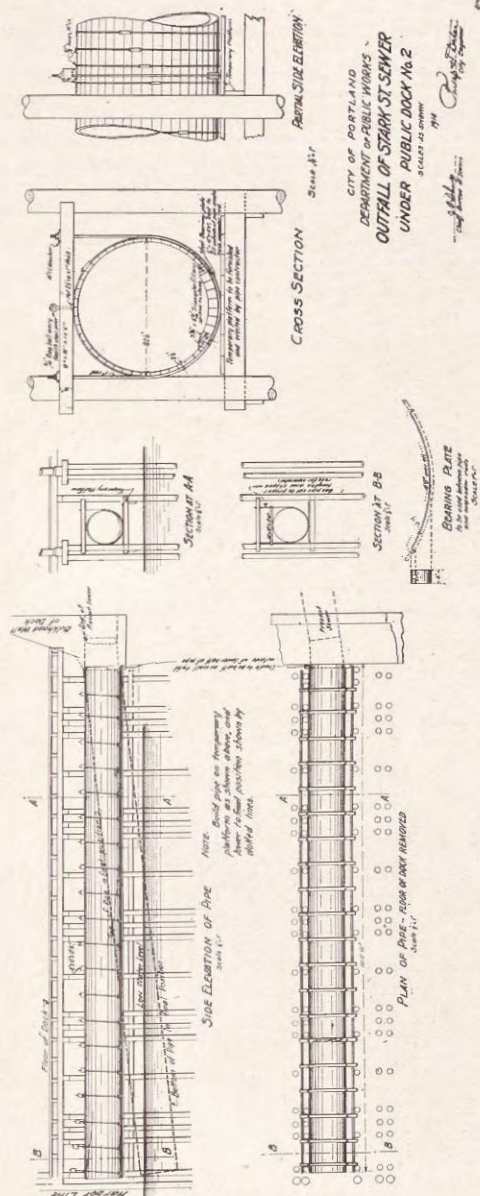
The Maywood Drive sewer, injured by the large earth slide on St. Francis Hill, was again rebuilt. The sewer work immediately followed the completion of the pile driving in connection with the retainer. The expense of \$296.44 was made a charge against the appropriation restoration of the surface on Maywood Drive.

Due to unequal settlement of the earth fill on Second Street over Marquam Gulch, both the north and south laterals were crushed, sewage escaping through the fill. To prevent further damage to the embankment and to adjacent property, these laterals were rebuilt at a cost of fourteen hundred dollars. The high cost was occasioned by difficulties experienced in laying the sewers in deep trench upon treacherous ground.

Due to the collapse of a retaining wall at the new Meier & Frank Building, the low level sewer on Morrison Street near Fifth Street was wrecked. Emergency repairs were made by the installation of a timber flume between close sheeting and by heavy bracing of the undisturbed earth. When the wrecked wall is rebuilt, the sewer will be replaced in original construction. The temporary repairs have cost the City six hundred fifty dollars and thirty-eight cents and bill has been submitted to the Meier & Frank Company since thorough investigation shows that the building operations were responsible for the accident.

Extension of Sewer Outfalls—To prevent the deposit of putrid material at the Municipal Boat Landing on the West Side, the outfall of the Stark Street sewer was extended. A section of twenty-inch wood stave pipe forty-four feet in length was laid with its invert at an elevation of six feet below low water at the harbor line. Complaint against the nuisance has ceased and fouling of the river bed no longer occurs. This is the first instance in which the principle of submerged outfalls has been applied in the city and the successful prevention of deposits confirms the opinion of the department that all exposed outfalls should be similarly treated.

Contract for the manufacture of one hundred feet of forty-eight-inch, and for one hundred feet of seventy-eight-inch wood stave pipe for the outfalls at East Oak and East Stark Streets, respectively, was let for sixteen hundred dollars. This work was required because of the construction of Municipal Dock No. 2 which passed over the old outfalls. In both cases, submerged outfalls were designed. The contract work had not been entirely executed on November 30th. Because of the unusual difficulty of installation, the work of lowering the pipe into place will be undertaken by the City forces. This procedure was decided upon because of possible damage to the pipe during lowering. The sections of sewer will



be suspended from the piling supporting the dock, thus avoiding expensive pile foundations and cofferdam construction.

New Equipment—The purchase of a one and one-half ton truck has resulted in the sale of three horses and two wagons and released one driver for other duties, with a considerable economy in feed and upkeep. The efficiency of the maintenance forces has been largely increased by the speedy delivery of material and transfer of equipment now possible.

The bureau was also supplied with a double diaphragm pump and mounted gasoline engine, as well as an eight horse-power engine for a centrifugal pump possessed by the department. The pumps are invaluable in removing stoppage from sewers which has heretofore been done by excavating in the street and opening the sewers.

TABLE 1
SHOWING AMOUNT OF EACH CONTRACT COMPLETED AND ACCEPTED DURING FISCAL YEAR 1914

Contractor.	Contract.	Work- ing Days.	Amount of Contract.	Total Work done by Contractor.	Cost of Inspection.			
					For Each Contract.	For Each Contractor.	% of Total For Each Contract.	Avg. for Contractor.
Geo. Abraham.....	E. 25th, Klickitat to Siskiyou.....	23	\$ 602.99		\$ 74.75		\$ 12.39	
	Bybee Av., Milwaukie to E. 14th.....	26	825.19	\$ 1,428.18	60.00	134.75	7.27	\$ 9.43
Azar & Co.....	Fremont St.....	34	1,037.76		142.20		13.70	
	Rural Ave., Milwaukie to E. 14th.....	24	1,037.51		88.20		8.50	
	Blandena St.....	9	183.18		34.65		18.95	
	E. 67th & Royal Avenue.....	10	185.28		38.45		20.70	
	Harold Ave., 24th to 22nd.....	17	370.40	2,814.13	55.50	359.00	15.00	12.75
Azar & Isaac.....	E. 11th & Yamhill Streets.....	24	817.03		120.00		14.70	
	E. 47th., N. of E. Stark St.....	26	693.31		154.80		22.70	
	E. 30th, 31st and Sutton Sts.....	27	1,643.10	3,153.44	185.40	460.20	11.27	14.59
K. Y. Azar.....	Albina Avenue.....	39	1,830.00		120.00		6.55	
	Champlain Drive.....	42	818.20		126.00		15.42	
	Harold Ave., Milwaukie to E. 22d.....	42	1,674.92		208.35		12.42	
	Hancock Add. Sewer.....	65	4,820.12		258.00		5.35	
	E. Main Street.....	45	825.98		134.00		16.23	
	E. 19th and Holladay.....	23	573.81		87.85		15.30	
	E. 9th and E. Taylor.....	23	514.51		76.50		14.87	
	E. 60th and E. Davis Streets.....	71	10,841.82		402.70		3.71	
	E. 55th and E. Oak Streets.....	59	7,227.90		261.00		3.58	
	E. 18th, Shaver to Prescott.....	37	1,108.28		124.00		11.20	
	E. 47th and Klickitat Streets.....	11	470.81		52.80		11.20	
	E. 54th and Klickitat Streets.....	29	1,826.79		106.95		5.86	
	E. 55th, 56th and Klickitat Streets.....	55	4,020.34	36,553.48	364.15	2,322.30	8.65	6.36
Bechill Bros.....	Greeley St., Jessup to Portland B.....	37	2,819.10		111.00		3.94	
	Greeley St., Portland Blvd. to Lombard Street.....	37	3,302.15	6,121.25	153.00	264.00	4.64	4.32
*Consolidated Contract Co.....	E. 49th and E. Hoyt Streets.....	121	22,122.43	22,122.43	1,073.60	1,073.60	4.85	4.85
Dennis & Christensen.....	Ogden Ave.....	12	971.00		42.20		4.35	
	E. Stark, E. 64th to 67th Streets.....	45	1,863.55		150.80		8.10	
	E. Salmon Street.....	19	835.22	3,669.77	92.20	285.20	11.00	7.77
*V. R. Dennis.....	Kelly Street.....	11	310.35	310.35	38.95	38.95	12.55	12.55
Fox & Company.....	E. 2nd and Broadway.....	9	148.30	148.30	27.00	27.00	18.21	18.21
Sol. Friedman.....	Duke Avenue.....	28	917.18	917.18	91.55	91.55	9.98	9.98
*Giebisch & Joplin.....	E. 63d St. ext. of E. Stark Street.....	242	159,846.82	159,846.82	3,827.55	3,827.55	2.40	2.40
George Gordon.....	Insley Ave., E. 22nd to 23rd.....	33	978.96	978.96	99.75	99.75	10.20	10.20
Hahn & Rebman.....	Union Ave., Yamhill to Salmon.....	47	782.12		125.00		15.95	
	Union Ave., Salmon to Hawthorne.....	31	1,109.53	1,891.65	108.75	233.75	9.82	12.35
Totals.....					\$13,891.45	\$13,891.45	\$ 3.97	\$ 3.97
*Total of 4 large contracts involving concrete work.....					\$278,654.74	\$8,475.00		\$ 3.04
All other contracts—Pipe Sewers.....					71,231.38	5,416.45		7.60

TABLE 2

COST OF CONTRACTS AWARDED, SEWERS ACCEPTED AND PLANS FILED DURING FISCAL YEAR 1914

Month.	Cost of Sewer Work Awarded (Contract Price.)	Cost of Sewer Work Accepted. (Final.)	Estimated Cost of Sewer Plans Filed.	No. of Jobs Sewer Plans Filed.
December.....1913	\$ 7,115.49	\$ 66,057.96	\$ 2,975.49	1
January.....1914	10,365.14	11,488.43	4,377.85	3
February.....1914	4,956.48	3,704.26	12,012.02	8
March.....1914	2,766.99	16,651.61	1,088.95	2
April.....1914	6,984.49	247,957.38	153,039.58	3
May.....1914	14,603.04	38,325.37	6,137.62	6
June.....1914	110,647.92	1,507.44	224,709.71	4
July.....1914	8,243.71	3,170.09	50,478.53	15
August.....1914	20,226.99	5,990.93	38,111.32	4
September.....1914	36,648.31	15,313.74	37,320.79	2
October.....1914		8,945.32	223,459.46	4
November.....1914			5,182.45	7
Totals.....	\$ 222,558.56	\$ 419,110.53	\$ 758,893.77	59

TABLE 3

EXPENDITURES FOR SEWERS SINCE 1865

Year.	Expended during year.	Tot. at end of year.	Year.	Expended during year.	Tot. at end of year.
1889	\$140,346	\$ 381,790	1902	\$ 57,008	\$1,179,349
1890	49,144	430,934	1903	140,137	1,319,486
1891	61,510	492,444	1904	58,482	1,377,968
1892	249,669	742,113	1905	69,142	1,447,110
1893	171,649	913,762	1906	69,706	1,516,816
1894	21,198	934,960	1907	92,781	1,609,597
1895	16,793	951,753	1908	77,407	1,687,004
1896	13,005	964,758	1909	313,426	2,000,430
1897	5,488	970,246	1910	905,718	2,906,148
1898	7,000	977,246	1911	556,291	3,462,439
1899	12,517	989,763	1912, Dec. 31	566,973	4,029,412
1900	19,391	1,009,154	1913, Dec. 1.	778,284	4,807,696
1901	113,187	1,122,341	1914	367,380	5,175,076

TABLE 4
LENGTH, SIZE AND MATERIALS OF TRUNK SEWERS LAID TO DECEMBER 1, 1914

Size (Inches)	Shape.	Monolithic Concrete.		Concrete Pipe.		Brick.	
		Laid from 1875 to Dec. 1, 1913. (Lin. ft.)	Laid from Dec. 1, 1913 to Dec. 1, 1914. (Lin. ft.)	Laid from 1875 to Dec. 1, 1913. (Lin. ft.)	Total laid to Dec. 1, 1914. (Lin. ft.)	Total all kinds laid from Dec. 1, 1913 to Dec. 1, 1914. (Lin. ft.)	Total all kinds laid to Dec. 1, 1914. (Lin. ft.)
24	Circular.	1,722	1,722				6,298
27	"	1,775	788	4,319	4,319	788	6,882
28	"						750
30	"	21,683	1,107	1,750	6,370	2,857	32,186
32	"	3,575	4,894	737	1,552	1,552	5,834
33	"	4,894					7,183
34	"						2,397
36	"	7,280		1,470	3,151	1,681	15,448
38	"			1,058	1,124	1,105	2,182
40	"			5,398	1,378	1,124	3,469
42	"	3,564	906		2,182	2,284	14,648
43	"	1,300					1,300
44	"						1,300
45	"	3,211	3,211				3,211
46	"	6,933	6,933				2,653
48	"						10,335
50	"	757	757				359
51	"						757
52	"	2,490	2,490				1,614
54	"	276	276				4,950
56	"	1,017	1,017				2,601
57	"						1,017
58	"	3,548	3,548				780
60	"	3,877	2,877				5,555
62	"	1,318	1,318				6,398
64	"	2,145	2,145				989
66	"						5,701
68	"						4,600
72	"						8,829
74	"						140
76	"						1,600
78	"						3,547
80	"						2,147
82	"						260
84	"						6,176

TABLE 4—Continued

LENGTH, SIZE AND MATERIALS OF TRUNK SEWERS LAID TO DECEMBER 1, 1914—Continued

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DEPARTMENT OF PUBLIC WORKS

Size (Inches)	Shape.	Monolithic Concrete.			Concrete Pipe.			Brick.		
		Laid from 1875 to Dec. 1, 1913. (Lin. ft.)	Laid from Dec. 1, 1913 to Dec. 1, 1914. (Lin. ft.)	Total laid to Dec. 1, 1914. (Lin. ft.)	Laid from 1875 to Dec. 1, 1913. (Lin. ft.)	Laid from Dec. 1, 1913 to Dec. 1, 1914. (Lin. ft.)	Total laid to Dec. 1, 1914. (Lin. ft.)	Total laid to Dec. 1, 1914. (Lin. ft.)*	Total all kinds laid from Dec. 1, 1913 to Dec. 1, 1914. (Lin. ft.)	Total all kinds laid to Dec. 1, 1914. (Lin. ft.)
87	Circular.		3,046	3,046					3,046	3,046
90	"							742		742
96	"	723		723						723
116	"							833		833
118	"							1,021		1,021
120	"							3,230		3,230
24x36	Egg Shaped.	6,947		6,947				1,527		8,474
26x39	"	1,320		1,320						1,320
26x39½	"	556		556						556
28x42	"							1,806		1,806
29x44	"							964		964
30x45	"							2,504		2,504
34x51	"							510		510
39x59	"							698		698
40x60	"							4,298		4,298
44x66	"							3,762		3,762
48x72	"							3,079		3,079
49x73½	"							3,780		3,780
54x81	"							3,678		3,678
60x84	"							3,984		3,984
59x88	"							1,828		1,828
64x96	"							1,815		1,815
60x96	"							2,147		2,147
72x67	Horse Shoe.	2,082		2,082						2,082
72x60	"	3,321		3,321						3,321
72x71	"	3,719		3,719						3,719
72x73	"	2,285		2,285						2,285
72x66	"	1,512		1,512						1,512
72x71½	"	3,081		3,081						3,081
90x73¾	"	851		851						851
90x80¾	"	2,940		2,940						2,940
90x85¾	"	3,990		3,990						3,990
45x38	"	78		78						78
45x42	"	5,689		5,689						5,689

54¾x60	"	1,487		1,487						1,487
60x62	"	3,776		3,776						3,776
48x58	"	791		791						791
48x50	"	401		401						401
48x43	"	1,212		1,212						1,212
40x40	"	2,767		2,767						2,767
Total.....		124,278	10,055	134,333	21,462	7,485	28,947	102,550	17,540	265,830

**No brick sewer built since 1909.

BUREAU OF SEWERS

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TABLE 5
LENGTH, SIZE AND MATERIAL OF PIPE SEWERS LAID TO
DECEMBER 1, 1914

Size (Inches)	Shape.	Vitrified Pipe.			Cement Pipe.		
		Laid from 1875 to Dec. 1, 1913. (Lin. Ft.)	Laid from Dec. 1, 1913 to Dec. 1, 1914. (Lin. Ft.)	Total laid to Dec. 1, 1914. (Lin. Ft.)	Laid from 1875 to Dec. 1, 1913. (Lin. Ft.)	Laid from Dec. 1, 1913 to Dec. 1, 1914. (Lin. Ft.)	Total laid to Dec. 1, 1914. (Lin. Ft.)
5	Circular	42,225	51,290	480,515	119,072	8,628	127,700
8	"	626,359	41,953	668,312	101,996	9,764	111,760
9	"	45,034		45,034			
10	"	287,586	24,224	311,810	37,774	4,966	42,740
12	"	296,672	10,586	307,258	21,268	2,169	23,437
14	"	116,497	5,736	122,233	12,475	1,848	14,323
15	"	20,144		20,144			
16	"	71,243	4,087	75,330	5,145	140	5,285
18	"	37,685	1,613	39,298	7,772	165	7,937
20	"	35,015	2,321	38,336	5,863	358	6,221
22	"	21,505	1,068	22,573	4,177		4,177
24	"	40,842	1,094	41,936	3,349		3,349
30	"		670	670			
Total		2,027,807	145,642	2,173,449	318,882	28,038	346,920

TABLE 6
MISCELLANEOUS OPERATIONS OF MAINTENANCE DIVISION,
FISCAL YEAR 1914
ROUTINE WORK DONE UNDER MONTHLY JOB NUMBERS

Kind of Work Done.	Amount.			Cost.	
	East Side.	West Side.	Total.	Total Cost.	Average Cost.
Catchbasins built, miscellaneous	43	26	69	\$ 3,271.29	\$ 25.55
Catchbasins built, to new radius	37	22	59		6.30
Catchbasins repaired	152	110	262	1,815.31	1.46
Catchbasins flushed	190	275	465	681.03	
*Catchbasin pipes opened to remove ob- structions	13	4	17	483.13	28.42
*New catchbasin pipes laid	18	15	33	642.10	19.45
Sewers flushed	60	41	101	545.88	5.40
Manholes repaired	245	57	302	1,923.34	6.37
Lamp hole and monument covers repaired	39	8	47	49.56	1.05
Settled trenches refilled	66	20	86	346.41	4.03
House laterals located for plumbers	30	2	32	533.91	16.65
House laterals repaired	30	0	30	354.07	11.80
House laterals constructed	12	1	13	454.52	34.97
*Sewers opened to remove obstruction	36	21	57	1,277.07	22.40
*Sewers dragged, lineal feet	500	13,520	14,020	393.09	.028
†New manholes built	6	3	9		
Total				\$12,700.71	

*No separate account kept for first four months of year.

†Cost of manholes not given, as they were built in connection with other work.

BUREAU OF SURVEYS AND DRAFTING

ORGANIZATION

The separation of survey and highway duties, which was finally effected on December 1, 1913, has shown the most happy results. All preliminary work in connection with surveys and drafting, except such as is distinctly a specialty, is now undertaken by the several units of the bureau. The organization as outlined in the former report has been strictly followed and the confusion and overlaps of the past have been overcome. Surveying and construction work are now carried on independently, without friction, and each branch of the service devotes its entire time to its specialty.

SURVEY DIVISIONS

General—Three survey districts have been established, one on the West Side and two on the East Side, the latter having a common boundary in the right-of-way of the Oregon-Washington Railroad & Navigation Company. The division now furnishes survey parties upon call of the bureaus (except the Bureau of Sewers), thus relieving the construction engineers of all details foreign to their particular operations. A precise measure of the work accomplished may not be given, but as an index of its extent, the following table is of interest. A large portion of the time of the survey parties is taken up in special work not included in the summary.

WORK OF DISTRICT SURVEY PARTIES, 1914

Nature—	Length in miles	Nature—	Length in miles
Cross-sections	72.6	Surveys for monuments	40.3
Preliminary grading stakes	54.3	Miscellaneous surveying	46.5
"Fine grading" stakes	25.6	Measuring contract work	14.3
Sidewalk stakes	72.9	General levels	13.1
Pavement gutter points	27.3	Resurveys	19.2
Profile levels	39.2	Subgrade points	4.2
Street extension surveys	7.4	Traverse line	1.8
Retracing street lines	89.9		

Bench Level Survey—In many localities the official elevations were known to be in error but the extent of the inaccuracies had never been inquired into. To clear away all doubt a re-survey of the whole city was ordered with the United States Geological Survey datum as a base; shift to the new system of elevations to be made later when the survey had been completely adjusted within itself, under the standards of the United States Geological Survey. For convenience in conduct of the survey, and to check the levels of small areas as the work progressed, the City was divided into thirty blocks or nets. The boundaries of these were run in forward and reverse directions and at intervals cross ties were made to more closely locate errors in field work and to serve as running checks. The field work commenced about the middle of March and was continued throughout the year, employing the greater portion of the time of five men.

Four standard forms of benchmarks were adopted and manufactured, viz:

- (1) Two sizes of cast bronze tablets set in cement.
- (2) Two sizes of wrought iron pipe with bronze cap, planted in the ground and embedded in concrete.

In addition to the above, comprising classes "A" and "B," many other benchmarks were established on available objects and are known as class "C."

During the work, elevations were also taken on numerous more or less permanent structures and upon many old city benchmarks to determine the equation between the systems. When marks were established on private property, written permission was in every case secured, 100 of such permits now being on file. At the end of the fiscal year, the work had extended to the determination of elevations as follows:

Benchmarks	Number	Average number per square mile	Avg. No. per mile of dedicated street	Avg. No. per mile of improved streets
Permanent—				
Standard "A" and "B" benchmarks..	831	....	....	....
Iron Pipe.....	117	....	....	....
Street monuments.....	129	....	....	....
Total.....	1,087	20.3	.90	1.46
Semi-Permanent—				
Standard "C" benchmarks.....	495	....	....	....
Old city benchmarks.....	139	....	....	....
Total.....	634	11.9	.53	.85
Temporary—				
Old city benchmarks.....	140	2.6	.12	.19
Grand total.....	1,861	34.8	1.55	2.50

The survey parties covered, in all, the following distances:

On main line levels.....	202.7 miles
On cross tie levels.....	169.7 miles
Total	372.4 miles

At the end of the year the cost of the work was:

Field parties.....	\$3,216.80
Benchmark setter.....	731.50
Bronze tablets (130 Class "A," 950 Class "B," 190 iron pipe).....	725.50
Equipment	435.58
Transportation	132.00
Miscellaneous expense.....	\$1.93
Total	\$5,223.31

The average cost of new marks set (1443) has therefore been \$3.69. The cost will be reduced in future work because of increased experience and the availability of the present equipment charged in the above statement.

Street Monument Surveys—The monuments marking street lines, though long admitted to be in error, had not been rechecked for twenty years. Many of them had been disturbed during street improvements and had never been reset. The difficulty arose from deficient strength of the footings and, to overcome this, a new standard form was adopted which should prevent further disturbance. The work thus far accomplished has been confined largely to the determination of errors in lines within the business and industrial districts on the West Side between Jefferson Street, the River, Raleigh and Twenty-third Streets, though some preliminary work has been done in the area between Prescott Street, the bluffs along the Willamette River, Killingsworth Avenue and Commercial Street, as a basis for a monument system for the East Side.

Miscellaneous Survey—The field work for the regrade along the right-of-way of the Oregon-Washington Railroad & Navigation Company, including lines, levels and cross-sections, was performed by the division. Great accuracy was demanded throughout this work and, as a result, many serious errors in recorded elevations were discovered. The precision of the bench level survey was demonstrated when check levels to the new benchmarks were found to be strictly consistent throughout.

Complete topographic surveys for the proposed extension of Willamette Boulevard along the east side of the Willamette River and for the large project of the regrade of Nicolai Street westward from Twenty-fourth Street, have been completed. In both cases the surveys were extended over large areas adjacent to the lines, to allow of full studies of the effect on lands not immediately abutting the construction.

A line survey of a proposed extension of East Burnside Street, covering a wide area for fuller discussion of alternate lines, has also been carried out, and a proposed diagonal extension of Stark Street from its junction with Burnside Street to Cornell Road has been surveyed. Active work on these projects must await the crystallization of public opinion, but it is quite certain that the latter project will not be strongly agitated for several years.

DRAFTING DIVISION

General—All drafting for the department, except that in connection with the design of sewers and bridges, is undertaken by this unit. The varied work imposed upon the drafting office is unusual as compared with the practice in other cities. In addition to the ordinary drafting work, the division undertakes a number of miscellaneous jobs for all the city departments, prepares the financial charts required under the Administrative Code, and performs the important work of redrafting all official forms. At the end of the year, the division had revised and drawn specifications for 382 of the total of 719 official forms in use.

Many improvements in administration have been made. All improvement proceedings have now attached detailed street maps; in support of the estimates and for field use. By this simple expedient the clerical work in connection with the estimates has been much

reduced and definite information regarding the character and extent of work has been furnished to the surveying and construction forces. In addition, this method has secured a large reduction in the amount of blueprinting. The adoption of the loose-leaf method of recording field notes has served to simplify the office computations and to remove the confusion which was constant in the department through use, in the field, of original notes contained in bound field books. The forms of final estimates and acceptances have been much simplified and made more intelligible.

The computing division is now in complete charge of preliminary estimates for street improvements and of final estimates for all improvements. As probably half of the proceedings initiated fail by remonstrance or withdrawal, the volume of work actually done may not be judged by the extent of work carried to completion. The following table, however, will be of interest:

COMPUTERS' WORK ON STREET AND SEWER ESTIMATES FOR 1914

Nature.	Number.	Tot. estimated contract cost.	Length in miles.
Street Improvements—			
Preliminary estimates.....	174	\$1,625,038.00	23.2
Final estimates.....	172	1,441,148.00	58.7
Sewer Improvements—			
Final estimates.....	52	360,751.00	52.3

STREET IMPROVEMENT PROCEEDINGS DEFEATED BY REMONSTRANCE DURING 1914

FIRST SIX MONTHS			SECOND SIX MONTHS		
Kind of improvement.	No.	Estimated contract cost	Kind of improvement.	No.	Estimated contract cost
Grading and walks.....	1	\$ 1,795.00	Grading and walks.....	2	\$ 8,361.00
Pavement	5	73,087.00	Pavement	17	142,885.00
Total.....	6	\$74,882.00	Total.....	19	\$151,246.00

The Council's declaration of the policy not to initiate proceedings except upon a petition aggregating forty per cent of the total assessable area, should have marked effect upon the extent of remonstrances in the coming year. Heretofore petitions aggregating only twenty per cent have been deemed sufficient to justify commencement of proceedings, but experience in the past year has clearly shown that such a liberal rule encourages initiation of projects which have small chance of success.

STREET EXTENSION DIVISION

The work performed by this division has been made more effective through adoption of a plan of holding informal conferences with the interests affected by a proposed extension, in which their

attitude towards the project is determined in advance of formal commencement of proceedings. This is a complete reversal of the former practice which was first to open the proceedings in the Council and thereafter to seek adjustment of difficulties through hearings before the Council. In the case of failure of the proceedings, all expenditure for the collection of field data and for the preparation of a provisional assessment, became a dead loss. In the conferences now held, it is the effort to have fullest discussion and thus to obtain a general expression of opinion. Only those projects which seem reasonably sure of successful issue are pressed. Thus far the cases have been rather simple, but the experience seems to indicate that a similar procedure might be of value in the treatment of major projects.

The code procedure for the opening of streets is badly in need of amendment since, upon the appearance of the slightest resistance, the whole matter must be carried to court under regular condemnation proceedings, except in those rare cases where the "Additional Method" may be employed. This latter method, while valuable in giving the City immediate possession of a street, would greatly disturb the finances of the City if generally employed and, except in the less costly openings, is unjustifiable. Continued draft upon the City's funds for the necessary court deposits to cover the costs of opening, would soon cause great embarrassment of the finances and the large sums thus incumbered for the many major projects now being urged upon the City would inevitably bring disaster. The section of the Improvement Code dealing with street openings should receive a thorough revision to fit the procedure for works of importance. The extreme complications and delays now arising in simple cases would make practically impossible the extension of such an important street as the Sandy Boulevard.

Following is a summary of the work accomplished:

DEEDS, WAIVERS, ETC., SECURED DURING FISCAL YEAR 1914

Nature of Instrument—	Number.
Deeds for streets.....	34
Waivers for slopes of embankments.....	6
Miscellaneous waivers and agreements.....	5
Mortgage releases.....	4
Right-of-way permits for sewers.....	19

STREETS OPENED, WIDENED OR EXTENDED IN 1914

Name	Limits.	Length in feet.	No. of Res. or Ord.
BY THE "ORDINARY METHOD"			
Macadam Street...	S. L. Sec. 10, T. 1 S. R. 1 E. to a point 408 ft. N.....	408	7,899
East 19th St.....	Killingsworth Avenue to Ainsworth Avenue .....	.....	8,091
East 47th St.....	East Salmon St. to E. 47th St. in Newton	160	8,092
East 38th St.....	Division Street to Woodward Avenue..	950	8,192
Union Avenue.....	S. line L. Love D. L. C. to Columbia Slough Road.....	2,843	8,249
East Main St.....	Connecting E. Main St. in Powers Tr. with E. Main St., east and west	450	8,322
East 52nd St.....	Halsey St. to S. line O-W. R. & N. right-of-way	2,100	8,339
		6,911	
Proceedings for the extension of the following streets are pending at the end of 1914 and will be completed in 1915:			
Union Avenue.....	Clinton St. to 50 feet south.....	50	.....
East 13th St.....	Rural Ave. to East 14th St. at Bybee Avenue.....	325	.....
54th St. S. E.....	42nd Ave. S. E. to 44th Ave. S. E....	330	.....
		705	
50th Ave. S. E....	From the east line of Firland to the west line of 82nd St. was held to be a highway or street by dedication and prescription after hearing before the Council on Sept. 4th.....	1,950	.....
East 28th St.....	Between Taggart St. and Woodward Ave. was widened by deed. Arrangements were made by the Street Extension Division for the collection, privately, of \$162 to pay bonded assessments	146	.....
"BY THE ADDITIONAL METHOD"			
Proceedings for widening or extending the following streets are pending at the end of 1914:			
Mill Street.....	16th St. to 110 feet west.....	110	.....
East Grant St.....	East line Chestnut Hill to E. 34th St.	300	.....
Broadway	Sandy Road to East 45th Street.....	1,350	.....
Broadway	Through block 3, E. Irving's Addition	80	.....
Benton St.....	Through block 54, Holladay's Addition	125	.....
E. Morrison St.....	East 20th Street to 155 feet east.....	155	.....
Powell St.....	Milwaukie Street to East 19th Street	1,925	.....
		4,045	
COUNTY ROADS TAKEN OVER AS CITY STREETS			
Marquam Hill Rd.	Sheridan St. to 1125 ft. S. and 788 ft. W..	1,250	28,717
Ravensview Dr....	Patton Road to Terrace Drive.....	1,300	29,442
Woodstock Ave....	50th Street S. E. to 52nd St. S. E....	700	29,722
		3,250	

ANNUAL REPORT

OF THE

DEPARTMENT OF PUBLIC AFFAIRS

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

DEPARTMENT OF PUBLIC AFFAIRS

WM. L. BREWSTER
COMMISSIONER

AUDITORIUM

OFFICE OF CITY ATTORNEY

WALTER P. LA ROCHE, City Attorney

BUREAU OF CITY HALL—

C. S. SIMMONS, Superintendent

BUREAU OF FREE EMPLOYMENT—

C. E. CHRISTENSON, Superintendent

FREE MUSEUM

BUREAU OF PARKS—

E. T. MISCHÉ, Superintendent (December, 1913, to September, 1914)

JAMES O. CONVILL, Superintendent (October and November, 1914)

BUREAU OF WEIGHTS AND MEASURES—

E. D. JONES, City Sealer

AUDITORIUM

A committee consisting of Messrs. F. C. Knapp, James B. Kerr, H. M. Haller, the Commissioner of Finance and the Commissioner of Public Affairs were appointed to consider the selection of a site for the Auditorium and to propose a type of building to be erected thereon. On February 11th, this committee made a report in which all joined, except the Commissioner of Finance, recommending that, if possible, Block 166, Portland, known as the Dolph Block and lying diagonally southwest across Fifth Street from the City Hall, be purchased as the site; that the building be constructed primarily for conventions, lectures, concerts and other meetings of a like nature, and only secondarily for exhibition purposes and that provision be made for the Oregon Historical Society until it can obtain permanent quarters in a building of its own.

The Council, however, while concurring in the purpose for which the building should be constructed, declined to follow the report as to the site and confirmed the selection of the Market Block at Third and Clay Streets, which had previously been selected by the old Public Auditorium Board.

The Council, moreover, were of the opinion that one block 200x200 feet would be sufficient and that it would not be necessary to buy any adjoining property. It will be remembered that the plans drawn for the Market Block site under the direction of the old board were for a plot of ground 200x360 feet. It therefore became necessary to have new plans drawn for the smaller parcel of land determined upon. Mr. Freedlander, the architect, came to Portland and negotiations were had as to the amount of money due him and although an agreement was approached, it finally fell through because Mr. Freedlander stipulated as a condition, that he should have the work of designing the smaller building.

It had previously become evident that measures must be taken to determine the title of the City to the Market Block, and, a suit having been started by owners adjacent thereto. Mr. Freedlander's condition could not be complied with and by mutual consent negotiations were discontinued until such time as the title to the Market Block could be determined. A decision was had in the Circuit Court favorable to the City, and an appeal has been taken and is now pending in the Supreme Court, upon which a decision may be expected about April 1, 1915.

In the event the City can use the Market Block for the Auditorium, about eight months must be consumed in drawing plans and letting of the contract, so that construction work cannot be commenced before December 1, 1915.

The Gypsy Smith Tabernacle, leased by the City in 1913, was used twice in December, 1913, for concerts with fair attendance at an admission fee of ten cents. While these concerts were a success from a musical point of view, yet each one meant a financial loss to the City and they were discontinued.

Early in January the building was opened as a lodging house for

unemployed men and conducted by the Commissioner of Finance until about April 15th. On an average about eight hundred men were housed there each night. The building was torn down and the lease terminated in August.

OFFICE OF CITY ATTORNEY

During the year 1914 there were rendered to the various departments of the City of Portland by the office of the City Attorney 678 formal written opinions and 1121 other official communications, and an average of 15 oral opinions each day by the members of said office.

There were prepared by this office 157 written contracts between the City of Portland and others transacting business with the City, and there have been approved as to form 1320 contracts and bonds, the examination of which consumes considerable time.

The following is a summary of the court work disposed of by this office during the year 1914:

Two cases were disposed of in the District Court of the United States for the District of Oregon, both of which were decided in favor of the City.

Sixteen cases were disposed of in the Supreme Court of the State of Oregon, nine of which were decided in favor of the City and seven adversely to the City.

One hundred and twenty-one cases were disposed of in the Circuit Court of the State of Oregon for the County of Multnomah, thirty-eight of which originated in said court and eighty-three of which were appealed from the Municipal Court. Of said thirty-eight cases twenty-nine were decided in favor of the City and nine against the City. Of said eighty-three cases appealed from the Municipal Court forty-six were decided in favor of the City and twenty-nine against the City and eight were dismissed.

There were tried in the Municipal Court during the year 1914, 11,142 cases.

At the present time there are pending in the various courts the following number of cases:

Three in the District Court of the United States for the District of Oregon, the most important of which is the case of the Schaw-Batcher Pipe Works Co. vs. The City of Portland, involving a claim of \$230,628.37 against the City, the trial of which will consume about three months time.

Two cases before the Railroad Commission of Oregon.

One case before the Superior Court of the State of California.

Tenty-one cases before the Supreme Court of the State of Oregon, important among which are the cases of Gordon Land et al vs. The City of Portland, involving the rights of the City in Block 132, City of Portland, commonly known as the Market Block; the case of The City of Portland vs. George W. Caldwell et al, involving a civil service question; the City of Portland vs. Portland Gas & Coke Co., and the City of Portland vs. Portland Railway, Light & Power Company, involving the right of the City to collect a three per cent gross receipt tax from said companies; also the case of Anna Humphrey vs. The City of Portland, involving the liability of the City for personal injuries resulting from defective sidewalks and streets.

In the Circuit Court of the State of Oregon for the County of Multnomah there are pending eighty-five cases in which the city is a party, sixty-four of which originated in said court and nineteen were appealed from the Municipal Court.

Considerable work was done during the year 1914 on cases now pending, many of which are ready for trial.

The office of City Attorney, consisting of the City Attorney, five deputies and four stenographers, is well organized, and an efficient system is maintained for expeditiously handling the large amount of city business which comes to this office from the various departments of the city government in order that such departments may not be impeded in their work by delays in this office.

In addition to the matters above mentioned, the City Attorney's office has supervised the revision of the Charter and the codification of the City ordinances.

I recommend that another deputy be provided who shall devote his time to the drafting of ordinances. At present this work is performed by the deputy who is least pressed by other work, and the result is that there is a wide variety in style of expression and, worse still, many overlapping ordinances full of contradictions. The City Attorney reports that the work of the office is more nearly up to date than formerly. This is true, but the deputies are overworked and should have relief, which will come if the above recommendation is followed.

BUREAU OF CITY HALL.

The remodelling of the lighting system at a cost of \$2,219.60 was completed in March. The bills for gas and electricity for nine months, as compared with the corresponding months of 1913, show a saving for that period of \$278.95 on gas and \$190.58 on electricity. The lower rate paid for electricity during 1914 would account for a saving of \$110, leaving a net saving of \$358.95 on gas and electricity. There has, moreover, been a great improvement in the illumination.

In the spring the west driveway was repaired and changes in the entrance were made which permit better access for vehicles. This work was done under the supervision and at the expense of the Department of Public Works from an appropriation in the 1914 budget.

There have been several changes in the rooms, and additional office space has been secured by cutting off hall space on the first and fourth floors.

FREE MUSEUM.

This has continued in charge of Mr. C. F. Wiegand, who has given the museum his constant care and attention and has done the most that is possible under the circumstances. Until larger quarters can be obtained for the valuable collection, it does not seem advisable to increase the museum to any great extent. It is being conducted now at a nominal cost and is a source of attraction to thousands of persons who otherwise would never visit the City Hall.

FREE EMPLOYMENT BUREAU.

A total of 10,022 positions were secured as against 17,659 for the eleven months of 1913 and 30,453 for 1912. This decrease is undoubtedly due to the fact that with the greater depression in business, fewer employers are in need of help and find plenty of persons who apply to them directly without asking the help of any employment agency.

This is the proper place to consider the part the City has taken in the question of unemployment, which should be more closely connected than it is with the work of this Bureau. Early in December, 1913, it became evident that there were a large number of men out of employment and that these men were coming in increasing number to the City. The first measure of relief adopted by the City was work provided in the Bureau of Water Works, in the Department of Public Works and in the Bureau of Parks, for men with dependent families, residents of Portland. The regulation city wage of \$3.00 per day was paid, but on account of the number of men concerned and the limited amount of work possible, only half time employment could be provided.

The work in digging ditches for water pipe and in concrete work on street corners, planting trees and a few other jobs of a like nature, obtained a net economic result to the City of about eighty per cent of the money expended. The grading of a road at Mt. Tabor was about forty per cent efficient. This depreciation in each case was due not to the fault of the men themselves but to the fact that the crews were changed as much as possible to give a large number of men employment. In the grading work the result must be compared with the same kind of a job done during the dry season with teams and scrapers.

In addition to the work above mentioned, the breaking of stone was commenced early in January on the Hillside Parkway. One dollar and fifty cents per cubic yard was the price and for the first few days the number of men ranged from thirty to seventy-five, but the men soon became expert and the number increased so that it became necessary to limit the amount each man could break to one-half a yard a day. This work lasted about six weeks and on the last days there were from 700 to 900 different men on the job. Over 5000 yards were paid for, but this shrank to 3814 yards when the City came to dispose of the stone to the contractor who paved the parkway.

During the summer various committees were at work to devise plans for the approaching winter, and the Commissioner of Public Affairs was authorized to employ a man to investigate the clearing of land and the cutting of cordwood. This investigation started in the middle of October and it soon became evident that the clearing of land would not be undertaken by land owners on account of the unwillingness or inability to invest money in an improvement which would make no return for an indefinite length of time. The cordwood on three different tracts was purchased and the first camp was established at Huber, in Washington County, in the middle of November. At the end of the fiscal year this work was in progress.

EMPLOYMENT FURNISHED

1914.	Male.		Female.		Total.
	In City.	Out of City.	In City.	Out of City.	
December (1913).....	1,078	59	149	12	1,296
January.....	936	27	115	14	1,092
February.....	729	28	90	17	864
March.....	598	78	126	27	829
April.....	573	12	109	18	712
May.....	560	20	110	24	714
June.....	611	28	132	21	792
July.....	854	35	120	16	1,025
August.....	745	111	105	11	972
September.....	659	18	101	8	786
October.....	438	9	67	16	530
November.....	260	60	63	9	410
Total.....	8,048	494	1,287	193	10,022

Classification as follows:

MALE HELP

71 woodchoppers, 23 cooks, 6656 common laborers, 40 teamsters, 177 farm hands, 180 carpenters, 5 carpenters' helpers, 318 concrete men, 398 housemen, 124 kitchen helpers, 19 dairymen, 27 men for land clearing, 81 gardeners, 55 painters, 26 janitors, 2 watchmen, 17 porters, 11 plasterers, 25 shinglers, 3 errand boys, 5 barn men, 13 hod carriers, 3 bakers, 7 bakers' helpers, 4 bricklayers, 5 machinists, 2 electricians, 2 elevator operators, 1 hospital orderly, 9 artists' models, 16 deck hands, 7 mill men, 12 plumbers, 4 plumbers' helpers, 5 lathers, 32 paperhangers, 8 engineers, 5 boilermakers' helpers, 4 firemen, 1 salesman, 12 cement finishers, 3 clerks, 13 kalsominers, 18 blacksmiths, 10 blacksmiths' helpers, 5 mason tenders, 6 waiters, 1 foundry man, 1 upholsterer, 4 solicitors, 7 flunkies, 2 factory men, 1 laundry man, 6 loggers, 3 pantrymen, 2 steamfitters, 8 berry pickers, 1 presser, 1 millwright, 1 stenographer, 3 cabinetmakers, 1 auto repairer, 4 checkers, 2 iron scalers, 1 bed maker, 2 chicken pickers, 9 tie makers, 1 tailor, 2 bindery men, 1 tinner, 2 planermen, 1 chimney sweep, 1 shoemaker, 1 broommaker, 1 lumber piler, 1 printer, 1 rope splicer.

FEMALE HELP

73 chambermaids, 621 day workers, 351 domestics, 102 housekeepers, 112 cooks, 51 waitresses, 84 kitchen helpers, 15 nurses, 7 nurse girls, 2 second girls, 11 factory workers, 11 janitresses, 4 office girls, 6 solicitors, 10 seamstresses, 2 clerks, 3 stenographers, 5 laundry workers, 1 pantry girl, 1 demonstrator, 4 telephone operators, 2 tailoresses, 2 artists models.

BUREAU OF PARKS

PARKS

Mr. E. T. Mische, who had been Superintendent for seven years resigned on October 1st and became the consulting landscape architect of the Parks, and Mr. James O. Convill, who had been Assistant Superintendent, became Superintendent.

It will be seen from the statistical reports attached hereto that the Park and Boulevard Fund, derived from the million dollar bond issue of 1907, has a balance remaining at the end of the year of \$9,096.83. During the past year about one-half the construction work was paid for from the Park and Boulevard Fund and the other half from general taxes. From this time on until a new bond issue, the permanent improvements must be paid for out of the tax money. It is a matter of great regret that more than ten per cent of the Park and Boulevard Fund was used in payment of street and sewer assessments. This appears to have been a diversion of the fund to purposes not contemplated by the voters.

As the budget is made up late in the fall and the final determination of the amount allowed is not settled until December 1st, no contracts for permanent work can be undertaken until such a late date that it forces the work well into the early spring. If it were known early in the fall what money would be available for the coming year, contracts could be made so as to give employment to contractors and their employees during the winter months, at a time when on account of slackness of other work better prices could be obtained for the city.

The attempt is being made in this Bureau to keep a permanent crew of men at work the year around, laying out the construction work for the winter and keeping the same men for maintenance during the summer months. In this way the men are benefited by all the year round employment and the City is benefited by a steadily improving body of employees.

The comfort stations cost the City \$7,164.14 for maintenance and had a use of 1,673,769 persons or a cost of about 38-100 of a cent for each person. A comparison of the stations at the Postoffice and the Library with those in other cities will convince any fair observer that this City can be proud of the conditions of these stations. The month of November, 1914, had about double the attendance for December, 1913. It is manifest from these figures and from an observation generally of the attendance that the station at the Postoffice is being used as much as it can be and that other places must be provided in the near future. Since the saloons will be out of business by the end of 1915, it is most necessary to provide as many stations as possible. A request was made to the Federal Government to provide space in the new Postoffice building upon the same terms that the City has with the Library, but the Postoffice authorities were unwilling to make any provision whatever. An attempt was also made to secure quarters under a similar arrangement with one of the new office buildings, but this failed. Stations should be installed somewhere in the neighborhood of the North Park blocks, near Third and Glisan streets, on lower Washington street, also in other localities

more remote from the business center but quite as much in need of these conveniences. I trust that plans can be devised so that progress can be made and actual results shown before the next annual report.

STREET DRINKING FOUNTAINS

The same reason for providing drinking fountains in the streets obtains as in the case of the comfort stations, and plans are now under way to provide a limited number in the more thickly settled parts of the City.

STREET TREES

About three miles of trees were planted early in 1914 and with the exception of two or three persons this action seems to meet with the approval of the public. When the Bureau plants the trees it takes care of them, and it is expected that this policy will be followed until the number of trees has been largely increased in neighborhoods otherwise entirely destitute of planting, and that the future will justify the small expense which is necessary for this limited work. No satisfactory plans as to this subject have been settled upon because of the large expense which would be necessary if the City undertakes to control the planting, care and removal of all the street trees in the City. In other parts of the United States municipalities spend as much as \$50,000 in the care of their trees; but while we may look forward to such a condition, at present it seems wise to limit ourselves to the planting and care of trees in the newer localities, waiting for a more enlightened and generous public opinion to permit the expenditure of large sums of money. It is, however, most desirable that a trained forester be obtained to care for what we have and this comparatively small expense, I believe, the public would approve.

MUSIC

Sixty concerts were provided by the City at a cost of \$9,261.58 with an attendance of 112,650 persons or an average cost per person of less than eight cents. This compares with forty-three concerts in 1913 at a cost of \$6000, with an attendance of 65,365 persons or about eleven cents per person.

The concerts are most successful in every way. It is somewhat difficult to arrange a schedule of places for the concerts, because while it is evident that the largest attendance is at the most centrally located parks, yet it seems unfair to neglect the outlying localities. An inspection of the record of attendance indicates that there has been no place where it was not worth while to give concerts. Some of the lowest figures are due to inclement weather.

MULTNOMAH FALLS

The only gift of park land during the year was one which is exceptional in its kind and of great importance to the City. Mr. Simon Benson has undertaken to give Multnomah Falls to the City of Portland, and although litigation is still pending, the proceedings are of such a nature that the outcome seems certain and the City will within a short time be in possession of this beautiful property. As is well known, the falls are about thirty miles from Portland on the Columbia Highway overlooking the Columbia River and within easy access by automobile, railroad and the river.

PARKS

Columbia, Firland, Governor's, Holladay, Kenilworth, Ladd's Circle, North Parks, Sellwood, South Parks and Terwilliger have all had the regular maintenance during the past year, but no permanent improvements of any importance.

At Columbia Park, it is proposed, during the coming year to provide lights and gravel walks, work on which is now under way. Holladay Park needs draining and lights and better paths. The bath building at Sellwood must be reconstructed within a short time. In Chapman Square, opposite the Court House, the mothers, wives and sisters of the members of Company "H," Second Oregon Volunteers, have presented to the City a stone drinking fountain of beautiful design. The generosity of these ladies is appreciated daily by those who use the fountain.

The Forestry Building was inspected and although some decay appears in the great logs, yet it does not seem to have done such damage as to cause any immediate anxiety. Measures are being taken, however, after obtaining the best expert advice available, to preserve the logs. A regrade of the street to the south of the building will somewhat change its setting for the worse, but unless the City was willing to expend more than \$30,000 in purchasing the frontage and going to more expense by diverting adjoining streets, there seemed to be no way to overcome this difficulty. The north half of Hillside Parkway was macadamized and the whole drive opened on August 4th with a band concert. More than 4000 people were on the driveway that evening. The total cost of the parkway is \$309,517.86 of which \$20,842.36 was paid out of taxes and the balance out of the Park and Boulevard Fund. The macadam has ravelled in a few places, but the expense of putting the road in shape for the coming season will be a comparatively small amount and it is most desirable that the fills be well settled before a hard surface is laid. Under the terms of gift, it will be necessary to hard surface the north end of the driveway before June 1, 1917. Planting will be carried on until the slopes are covered; a walk is to be constructed along the outside edge; some of the fills have to be mended and renewed, but all the time the public are obtaining an increasing use from it, and the future improvements can go on at the same time. Small parks and resting places can be made at various points along the drive, and even within the area which the City now owns, a most beautiful and satisfactory parkway is being developed. A better approach should be obtained on the north and Marquam Gulch must be filled as early as possible so as to make available an area of about eight acres west of the Fourth Street Bridge. The people at the south end are already asking for the extension of the driveway southwest and southeast.

At Laurelhurst the planting is nearly completed and an Administration Building is under construction. The lake bottom is cleaned and graded and the concert grove partially graded and planted. A successful community sing was held in this park during the summer and it seems worth while to repeat it during the coming year. Lights are now being installed and gravel paths will be made and the planting continued. The lake and rivulet will have to wait for another year.

Macleay Park has been supplied with a new trail from the Cornell

Road to the bottom of the canyon across the land of the Lewis-Wiley Company, and the flume on the north side of the canyon across the land of Messrs. Dolph and Burrell was reconstructed so as to furnish a sidewalk from the edge of the park to Willamette Heights. These two new trails give additional ways of entering and leaving the park.

The roads under construction at Mt. Tabor were graded and rolled and oiled, so that a fairly satisfactory use was obtained during the summer. The coming year the same method will be followed and for the summer months the roads will be in good shape.

The building at Peninsula was completed and the attendance there and in the Park itself has greatly increased. The walks in the rose garden were paved and during the coming year the wall around the rose garden will be completed.

In Washington Park some road work was commenced, which will be finished within a few months, and the lighting system so far as laid out was completed. The zoo in this park is still in most unsatisfactory condition. Plans are under way for changing the location to the south side of the park where the animals can remain for a few years. The buildings are in such condition that they must be destroyed, and it seems most advisable to change the animals to a place where convenience of the public will be combined with more spacious and healthful conditions for the animals.

PLAYGROUNDS

Mr. Botsford, the physical director of Reed College, was Superintendent for the first three months of the year, but other engagements prevented his permanent employment and he was succeeded by Mr. J. Lee Thompson, physical director of the Multnomah Club.

In order to obtain proper policing of the playgrounds, one of the park men was placed on duty during the early night hours. This was found to be a satisfactory method and put a stop to many of the disorderly acts which had occurred previously.

The playgrounds up to this time have been supplied with gymnasium frames, and other rather expensive equipment. I am coming to the belief that too much money is being expended on equipment of this nature and that more attention should be paid to providing tennis courts and baseball and football grounds. A beginning was made on the tennis courts in Washington Park, and although they were not in operation until the end of the summer, their use showed that they were wanted. More of these will be provided during the coming year in the other parks. Our park system has not provided anything like sufficient baseball facilities. This is rightly the most popular American game. It furnishes sport for a considerable number at one time and is an attraction to spectators. Diamonds were used last year at Columbia, Peninsula, Sellwood and Lents, and smaller fields were used at some of the other parks. It is becoming apparent that it will be necessary to exclude baseball from all the parks we now have. Columbia, Peninsula and Sellwood can be used during the coming season and possibly for a year or two more, but the throngs who wish to wander over the whole area of these parks will at last crowd out baseball.

The City is in great need of two large baseball centers, one in the north end and one in the south end, with four or five diamonds

in each. This would warrant the expense of a caretaker. The teams would always have a chance to get a game and they would become the centers for large numbers of spectators. It is hoped that during the coming year something can be accomplished along this line.

The school playgrounds are another unsettled problem, largely because of the division of authority and responsibility and also on account of the expense attached to maintaining any playground. It is not right to establish a playground where large numbers of children resort without providing supervision, drinking water, toilets, and care of the grounds. A playground can be equipped in fairly good shape for about \$1500. The supervision and incidental expense for about four months is about \$750.

The School Board is to be commended for the action it has already taken in supplying tennis courts, baseball grounds and in some cases a generous amount of land, and the City should do all in its power to help make the most of these advantages. In the two buildings now under construction the Board has also provided swimming pools, and there again the City should act with the schools in bearing a part of the expense of operation, provided the Board allows the use of the pools at certain hours and on certain days by the general public. It would be a mistake for the City under the pressure of the demand for more playgrounds to duplicate the efforts of the School Board by purchasing in districts where the School Board has sufficient areas to satisfy the public need.

Columbia Park had its largest crowds on July 4th and on the Play Festival in August. While this park is remote from the center of the city, yet it has an increased use and a unique character. With the thickening of population around it, this park is bound to become one of the most useful in the City.

At Kenilworth a wading pool and a sand court were constructed, which were the apparent cause of almost doubling the use of the park. It is advisable to move the girl's playground from its present location, near the wading pool, and leave the westerly end of the park to the boys and to tennis courts.

Lakeview will be about the same this year as it has been the last two years, but as soon as the fill has been made around the present playground, the much needed increase in area will be obtained. This playground lies in a neighborhood that stands in urgent need of just such a place and its advantages are thoroughly appreciated.

At Laurelhurst, some swings, see-saws, a slide and a sand box were installed for the children in the neighborhood. It was thought that this small amount of apparatus would require no supervision, but it was found that the large population to the south flocked to this spot, and before it was well under way, it became necessary to have two directors to take care of the children who sometimes numbered one thousand. This is one of the two localities, it seems to me, requiring a playground above all others in the city. The central east side is totally unprovided with a playground and the same is true of the Albina district. These are the two most thickly settled parts of the city on the east side of the river, and every effort should be made to provide space. Laurelhurst Park itself is not adapted to playgrounds at present and it is to be hoped

that it never will be changed so as to accommodate them. The charm of its rolling land and giant firs will be destroyed if the playgrounds are installed with the necessary leveling of the ground and destruction of trees. If it were possible to obtain an issue of bonds for these two districts, the effort should be made at once. On account of the present temper of the people, I am unwilling, however, to recommend any bond issue for the coming election.

At Lents, the boys' and girls' playgrounds were extended, and the ground somewhat improved. During the coming spring a wading pool will be installed ready for the summer use.

Lincoln Park opposite the Albina Homestead school is used all the year round on account of the nearness of the school building. Considerable rowdyism and destruction of property occurred in this park during the early part of the summer, but the special officer above mentioned put an end to it. A larger playground should be installed in this neighborhood. Thirty acres would not be too much.

A new playground was installed in Mt. Tabor Park near the north entrance. This was for small children, after the same plan as Laurelhurst, and proved so popular that a director was provided. This year a new playground will be provided at the northeast corner.

In the north park blocks the playgrounds were in constant use and the only difficulty was in keeping the older men out of the boys' part. It is not desired to prevent men using the apparatus or from otherwise exercising, but a playground is not a proper loafing place.

The house at Peninsula is in fairly complete condition. At the beginning of the year it was opened and although some trouble occurred in the management, yet the house was used to a large extent, and when it was opened in the fall it became apparent that it was to receive a greatly increased use. In addition to the two physical directors a social director was installed and she has been instrumental in increasing the attendance and making the work move more smoothly and in far more orderly fashion. In the early part of the year, private parties were allowed at the house but the plan was adopted in the fall of making a schedule which would take up all the time and in that way keep the house open to the public at all times. Dances are held Saturday nights under the general supervision of the social director but controlled and managed by committees. Great credit to all concerned is due for the large and orderly use of the house.

DISTRIBUTION OF EXPENDITURES, PARK BUREAU, DECEMBER 1, 1913-NOVEMBER 30, 1914

Park.	Improvement.		Maintenance.		Total.
	Pay Roll.	Material and Service.	Pay Roll.	Material and Service.	
Administration.....	\$ 6,510.00		\$ 4,790.00	\$ 1,125.17	\$ 12,425.17
Arboretum.....	397.70				397.70
Comfort Stations.....		257.00	5,024.05	1,787.77	7,068.82
All Parks.....			503.58	6,133.72	6,637.30
Chapman & Lowndale.....			1,639.25	174.68	1,813.93
Columbia Park.....	1,569.56	620.04	5,656.25	667.58	8,514.03
Firland.....			31.50		31.50
Forestry Building.....			1,236.43	196.08	1,432.51
Fountains, Street.....			450.38	112.68	563.06
Governor's Park.....			36.00		36.00
Hillside Parkway.....	12,762.95	286.61	2,369.50	905.17	16,324.23
Holladay Park.....			977.25	7.70	984.95
Kenilworth Park.....		228.24	1,230.50	52.60	1,511.34
Laurelhurst Park.....	2,952.26	*969.28	2,683.27	251.35	6,856.16
Ladd's Squares.....			1,505.25	127.72	1,632.97
Macleay Park.....		110.40	1,065.00		1,175.40
Mt. Tabor Park.....	7,837.44	804.93	6,973.83	1,377.25	16,993.45
North Parkway.....			962.75	45.55	1,008.30
Peninsula Park.....	92.00	1,160.72	5,491.84	1,158.21	7,902.77
Sellwood Park.....		16.50	2,241.88	88.64	2,347.02
Sellwood Playground.....		35.00			35.00
South Park.....	159.00	185.06	1,432.00	45.39	1,821.45
Terwilliger Park.....		165.68	333.00		498.68
Washington Park.....	1,113.72	66.00	13,971.45	1,248.96	16,400.13
Music.....				9,286.68	9,286.68
Street Trees.....	936.74	467.66	153.00	17.58	1,574.98
Miscellaneous.....	78.25	10.74	19.30	24.59	132.88
Multnomah Falls.....	6.00	171.50			177.50
Zoo.....			2,860.75	4,100.77	6,961.52
Total.....	\$ 34,415.62	\$ 5,555.96	\$ 63,638.01	\$ 28,935.84	\$ 132,545.43

*\$285.00 Additional paid from special fund of Council.

(Above statement includes expenditures account emergency work December, 1913, to February, 1914, as shown by detailed statement attached hereto.)

DISTRIBUTION OF EXPENDITURES, PARK BUREAU, DECEMBER 1,
1913-NOVEMBER 30, 1914

Playground.	Improvement.		Maintenance. Pay Roll.		Material and Service.	Total.
	Pay Roll.	Material and Service.	Supervi- sion.	Park Men.		
All Playgrounds.....		\$ 2,524.87	\$ 773.47	\$ 192.00	\$ 2,262.52	\$ 5,752.86
Brooklyn.....	36.00	101.10	576.18	1,240.00	103.22	2,056.50
Columbia.....	30.00	45.32	750.17	387.00	46.05	1,258.54
Failing School.....			521.62	30.00	16.20	567.82
Frazier Home.....	24.00					24.00
Kenilworth.....	226.00	224.51	647.67	428.00	33.38	1,559.56
Lakeview.....			802.64	438.00	50.23	1,290.87
Laurelhurst.....	40.00	30.71	414.56	261.00	22.80	769.07
Lents.....		127.40	657.46	751.50	117.56	1,653.92
Lincoln.....			638.27	1,206.00	46.80	1,891.07
North Mt. Tabor.....	31.50	28.32	188.88	85.00	22.95	356.65
North Park.....			899.31	379.00	20.80	1,299.11
Peninsula.....	60.00	1,277.15	2,784.63	3,071.00	1,834.25	9,027.03
Sellwood.....		716.50	914.52	1,065.25	796.82	3,493.09
South Mt. Tabor.....			553.05	377.00	28.37	958.42
Washington.....	627.00	724.18	662.87	745.00	86.46	2,845.51
Ainsworth School.....	24.00					24.00
Shaver School.....	25.50		44.52			70.02
Rose City.....	24.00		52.28			76.28
Terwilliger.....	13.50					13.50
Total.....	\$ 1,161.50	\$ 5,800.06	\$ 11,882.10	\$ 10,665.75	\$ 5,488.41	\$ 34,987.82

PARK AND BOULEVARD FUND, DECEMBER 1, 1913-NOVEMBER 30, 1914

Balance, November 30, 1913.....				\$ 70,773.81
Expenditures, as follows:				
Mt. Tabor Park, improvement.....			\$ 1,961.88	
Peninsula Park, improvement.....			2,064.54	
Laurelhurst Park, improvement.....			125.00	
Columbia Park, improvement.....			1,472.84	
Hillside Parkway, improvement.....	\$ 49,910.79			
Hillside Parkway, land.....	2,902.13		52,812.92	
Washington Park, improvement.....			3,330.00	61,766.98
Balance November 30, 1914.....				\$ 9,006.83

COMPLETE STATEMENT PARK AND BOULEVARD FUND, DECEMBER
1, 1908-NOVEMBER 30, 1914

RECEIPTS FROM \$1,000,000.00 BOND ISSUE OF 1907.

\$500,000.00, dated Dec. 1, 1908, sold to O'Connor and Kahler, at 102.189.....	\$ 510,945.00
\$250,000.00, dated July 1, 1911, sold to R. L. Day & Co., and Blodgett & Co., jointly, at 93.669.....	234,172.50
\$250,000.00, dated Oct. 1, 1912, sold to Morris Bros., at 93.44.....	233,600.00
Sale of houses (Hillside Parkway).....	1,090.00
Total.....	\$ 979,807.50

DISBURSEMENTS AS FOLLOWS:

Parks.	Land Purchases.	Improve- ment.	Total.
All Parks.....		\$ 1,266.46	\$ 1,266.46
Mt. Tabor Park.....		13,510.37	272,309.78
Peninsula Park.....	\$ 258,799.41	32,520.13	92,520.13
Sellwood Park.....	60,000.00	2,411.38	49,411.38
Kenilworth Park.....	47,000.00	14,436.83	29,736.83
Laurelhurst Park.....	15,300.00	802.85	93,284.95
Columbia Park.....	92,482.10	13,726.15	18,979.40
Brooklyn Playground.....	5,253.25	3,361.70	3,361.70
Fulton Park.....		12.30	12.30
Hillside Parkway.....	106,064.72	182,610.78	288,675.50
7th St. Playground.....		250.00	250.00
Washington Park.....		3,868.93	3,868.93
Chapman & Lowndale Squares.....		56.00	56.00
North Parkway.....		183.68	183.68
Lincoln Playground.....		2,224.95	2,224.95
Play Apparatus (All Playgrounds).....		16,395.83	16,395.83
Street and Sewer Assessments.....		97,632.85	97,632.85
Total.....	\$ 584,899.48	\$ 385,901.19	\$ 970,800.67
Balance November 30, 1914.....			\$ 9,006.83

**STATEMENT OF 1913 PARK FUND CARRIED OVER IN THE 1914 FISCAL
YEAR TO COMPLETE WORK STARTED IN 1913**

Balance Nov. 30, 1913.....		\$ 44,392.00
Credit by overcharge for blue printing.....		5.19
		\$ 44,397.19
Cancelled March 31, 1914.....	\$ 18,849.15	
Cancelled November 25, 1914.....	2,006.16	20,855.31
		\$ 23,541.88

DISBURSEMENTS AS FOLLOWS:

Parks.	Construction.	Maintenance.	Total.
Washington Park Street Assessment.....	\$ 2,229.95		\$ 2,229.95
Columbia Park.....	238.75	\$ 217.76	456.51
Zoo.....	68.84	269.69	338.53
Hillside Parkway.....	1,977.14		1,977.14
Peninsula Park.....	5,835.73	124.59	5,960.32
Brooklyn Playground.....	430.84		430.84
Mt. Tabor Park.....	2,311.71	9.00	2,320.71
Washington Park.....	367.74	55.08	422.82
Comfort Station.....		95.32	95.32
Band concerts.....		255.07	255.07
Laurelhurst Park.....	6,117.82		6,117.82
All Parks.....	2,484.19	190.61	2,674.80
All Playgrounds.....		93.05	93.05
1st and Gibbs St. Playground.....	134.00		134.00
Linnton Roadway.....	35.00		35.00
Totals.....	\$ 22,231.71	\$ 1,310.17	\$ 23,541.88

**ATTENDANCE PUBLIC COMFORT STATIONS DECEMBER 1, 1913-
NOVEMBER 30, 1914**

Month.	Library, Men.	6th & Yamhill, Men.	6th & Yamhill, Women.	Total.
December.....	34,202	49,970	15,649	99,821
January.....	39,505	60,068	14,443	114,006
February.....	45,733	68,930	17,068	131,731
March.....	51,361	74,454	20,373	146,188
April.....	49,573	79,847	19,463	148,883
May.....	50,386	93,772	22,465	166,623
June.....	60,014	111,956	33,053	205,023
July.....	53,699	104,291	20,715	178,705
August.....	56,021	91,235	21,002	168,258
September.....	50,126	84,470	24,347	158,943
October.....	54,808	91,256	26,299	172,363
November.....	65,799	93,310	24,116	183,225
Total.....	611,227	1,003,559	258,983	1,873,769

RECEIPTS SIXTH AND YAMHILL STREETS

Men.		Women.	
Dec. 22.....	\$ 16.61	Feb. 10.....	\$ 4.85
Jan. 15.....	9.65	May 18.....	8.71
Feb. 10.....	5.65	June 11.....	7.50
April 2.....	15.92	June 16.....	14.45
May 5.....	12.61	Oct. 3.....	20.21
June 1.....	12.00	Nov. 30.....	9.56
June 11.....	6.11		
July 3.....	13.36		\$ 65.28
Aug. 7.....	12.61		
Sept. 8.....	20.85		
Sept. 30.....	12.76		
Nov. 16.....	19.26		
Dec. 1.....	11.51		
	\$168.90		

**STATEMENT OF EMERGENCY WORK PERFORMED UNDER DIRECTION OF BUREAU OF PARKS
DECEMBER 1913-FEBRUARY 1914**

PARK.	Emergency Men.	Parkmen.	Special Services.	Tools, etc.	Teamsters.	Stationery.	Total.	Value to Park Bureau of work done.	Chargeable to Charity.
Hillside Parkway Rock Pile.....	\$ 8,610.95	\$ 786.00	\$ 139.43	\$ 292.33		\$ 25.00	\$ 9,853.71	\$ 4,200.00	\$ 5,653.71
Hillside Parkway, Paving and Drainage.....	350.00	30.00					380.00	380.00	
Tree Planting.....	435.99	45.00					480.99	480.99	
Columbia Park, Grubbing.....	441.56	24.00			109.31		574.87	574.87	
Laurelhurst, Drainage and Water System.....	914.82	343.50					1,258.32	1,258.32	
Mt. Tabor—									
Planting.....	1,076.52	75.00					1,151.52	750.00	401.52
Clearing and Grading.....	3,937.83	346.50		259.00			4,543.33	1,656.50	2,886.83
Washington Park, Grading.....	960.72						960.72	400.00	560.72
Peninsula Park, Cleaning Buildings and Grounds.....	81.76						81.76	81.76	
All Parks.....						16.50	16.50		16.50
Totals.....	\$16,810.15	\$ 1,650.00	\$ 139.43	\$ 551.33	\$ 109.31	\$ 41.50	\$ 19,301.72	\$ 9,782.44	\$ 9,519.28

PLAYGROUND ATTENDANCE SEASON 1914

Playground.	BOYS.						GIRLS.						Total Boys.	Total Girls.	Grand Total.
	Sr.	16-20	12-16	8-12	Kinder-garten.	Special.	Sr.	16-20	12-16	8-12	Kinder-garten.	Special.			
Brooklyn.															
May 16, Sept. 8.	389	2,141	2,387	1,341	1,046	5,781	75	628	1,713	2,070	1,288	3,815	13,085	9,589	22,674
Columbia.															
May 16, Oct. 11.	537	1,898	2,926	2,354	226	16,466	360	486	1,424	1,876	1,294	20,035	24,407	25,475	*54,882
Failing School.															
June 15, Sept. 12	371	1,259	1,802	1,404	42	290	163	474	1,376	2,895	2,853	134	5,168	7,895	13,063
Kenilworth.															
May 18, Sept. 11.	1,481	1,484	1,682	1,204	70	2,385	67	882	1,575	1,782	1,255	4,184	8,306	9,745	18,051
Lakeview.															
May 25, Oct. 31.	4,487	5,505	6,136	5,924	4,224	724	503	780	1,561	2,188	2,658	689	27,000	8,379	35,379
Laurelhurst.															
July 1, Oct. 9....							6,417	3,924	3,847	9,671	13,954	1,168	38,981	38,981	
Lents.															
May 26, Sept. 30	1,301	1,511	2,504	1,920	232	3,160	1,249	966	2,245	2,975	3,080	2,421	10,628	12,936	23,564
Lincoln.															
May 19, Sept. 15	1,071	1,637	2,466	2,245	10	474	944	889	2,524	3,618	3,201	366	7,903	11,542	19,445
North Mt. Tabor.															
July 1, Sept. 8....							1,072	196	630	1,946	2,023	1,559	7,426	7,426	
North Parkway.															
May 16, Oct. 31.	6,609	3,059	2,921	1,475	40	1,242	2,481	2,410	2,963	3,459	2,644	888	15,346	14,845	30,191
Peninsula.															
May 25, Sept. 30	20,435	4,724	10,767	5,537	1,468	25,438	562	177	1,154	1,077	267	16,971	68,369	20,208	**88,577
Rose City School.															
Aug. 25, Sept. 12	20	125	365	270		120							900		900
Sellwood.															
May 16, Sept. 8.	5,390	6,952	7,440	5,179	120	5,426	8,054	4,238	4,601	5,582	4,761	2,564	30,507	29,800	60,307
Shaver School.															
Aug. 25, Sept. 12	38	104	134	195	13								484		484
South Mt. Tabor.															
May 25, Sept. 8	575	1,015	1,140	944	18	1,009	545	563	1,054	1,423	726	365	4,701	4,676	9,377
Washington.															
May 16, Sept. 30	549	816	1,620	1,490	212	881	2,762	1,590	2,745	3,028	3,262	619	5,568	14,006	19,574
Totals.....	43,253	32,230	44,290	31,482	7,721	63,396	25,254	18,203	29,412	43,590	43,266	55,778	222,372	215,503	442,875

*Includes 5000 Festival, Aug. 22.

**Includes 10,000, June 9-10, Rose Festival.

Above totals also include Fourth of July attendance, all playgrounds, 57,233.

ATTENDANCE RECREATION BUILDING OCTOBER AND NOVEMBER

Classes for men and boys.....	2,055
Classes for women and girls.....	2,241
Games.....	1,949
Special.....	1,485

7,730

Sellwood tank, 85 days.....	29,360
Peninsula tank, 80 days.....	33,566

62,926

ATTENDANCE BAND CONCERTS 1914

June 14	Sellwood Park...	800	July 23	Washington Park	3,500
June 15	South Parkway...	1,500	July 24	Peninsula Park..	2,500
June 16	Brook'n Playgr'nd	1,500	July 26	Mt. Tabor Park..	1,500
June 17	Holladay Park...	1,500	July 27	South Parkway..	3,500
June 18	Washington Park	1,000	July 28	Williams Avenue	
June 19	Columbia Park...	650		and Morris St..	2,500
June 21	Laurelhurst Park	2,000	July 29	Holladay Park...	2,700
June 22	South Parkway...	600	July 30	Washington Park	2,000
June 26	Peninsula Park...	1,500	July 31	Peninsula Park..	3,000
June 28	Kenilworth Park..	1,250	Aug. 2	Kenilworth Park..	2,800
June 29	South Parkway...	1,700	Aug. 3	South Parkway..	1,800
June 30	Columbia Park...	900	Aug. 4	Hillside Parkway	2,500
July 1	Holladay Park...	1,500	Aug. 5	Holladay Park..	2,300
July 2	Washington Park	1,600	Aug. 6	Washington Park	1,500
July 4	Mt. Tabor Park..	2,000	Aug. 7	Peninsula Park..	2,600
July 5	Terwilliger Park..	500	Aug. 9	Sellwood Park...	900
July 6	South Parkway...	2,100	Aug. 10	South Parkway..	3,000
July 7	Lents	2,500	Aug. 11	Lents	1,500
July 8	Holladay Park...	2,350	Aug. 12	Holladay Park..	2,250
July 9	Washington Park	2,200	Aug. 13	Washington Park	1,600
July 10	Columbia Park...	1,000	Aug. 14	Peninsula Park..	3,000
July 12	Sellwood Park...	1,700	Aug. 16	Laurelhurst Park	2,000
July 13	South Parkway...	2,000	Aug. 17	South Parkway..	2,500
July 14	Rose City.....	1,600	Aug. 18	Terwilliger Park	700
July 15	Holladay Park...	2,100	Aug. 19	Holladay Park...	2,000
July 16	Washington Park	2,200	Aug. 20	Washington Park	900
July 17	Peninsula Park..	4,000	Aug. 21	Peninsula Park..	2,500
July 19	Laurelhurst Park	3,800	Aug. 23	Mt. Tabor Park..	1,800
July 20	South Parkway...	1,600	Aug. 26	Rose City.....	800
July 21	Forestry Building	600			
July 22	Holladay Park...	2,250			
			Sixty concerts.....		112,650

BUREAU OF WEIGHTS AND MEASURES

Efficiency depends more on inspection than on prosecution. Most merchants intend to observe the law and use correct weighing and measuring devices; some are careless, and a few purposely adopt methods to obtain short weight or measure. It is most desirable that for all these cases a frequent inspection be given, so that the honest merchant may have the protection to his good name which comes from dealing fairly with his customers. The careless and dishonest man needs inspection to protect the public.

An ordinance is being prepared which will increase the number of articles requiring inspection by the City Sealer, and for the above reasons it is necessary that another deputy be allowed as early as possible. The Sealer and his present deputy are unable to make the inspections and tests as often as required by the existing ordinances.

During this year the office has been employed in the testing of scales, weights and measures, the measurement of firewood, the investigation of complaints relative to short weight or measure and the prosecution of such cases as the facts warranted.

Most of the errors found in scales were due to lack of balance, cheap or worn construction, or dirt which interfered with the free movements of parts. In all cases where scales were found to be out of balance the attention of the proprietor was called to the same and he was cautioned to keep the scale in balance.

Where the error was due to cheap or worn construction the scale was either condemned outright or ordered repaired or replaced with a proper scale. In the case of scales found inaccurate through dirt which interfered with their free movement, the owner was requested to clean same at once; and in all cases an effort was made to follow up and see that instructions were complied with.

One of the difficulties heretofore encountered in the enforcement of the law relative to the use of accurate scales has been that until quite recently it was impossible to buy an accurate scale for a price that would bring it within the reach of the smaller dealers; now, however, through the co-operation of some of the large Eastern departments of weights and measures with scale manufacturers, a scale has been devised that complies with all the requirements of the law and which is sold at a figure which brings it within the reach of all.

The dealers in scales in Portland have all been visited and have promised to push the sale of only such scales as will bear inspection, and for the past few months a rapid elimination of all faulty scales has been going on and it is believed that within the next few months the old fashioned family scale and the straight front spring balance will be things of the past so far as commercial use in Portland is concerned.

The comparatively large number of faulty weights found during the year is due to the fact that for the first time a test was made of all prescription weights used in drug stores. Some of these weights were many years old and had become light through wear and through contact with acids and drugs with which they were used or cleaned. All light weights were confiscated and a great

many new weights were put in use to take the place of those found faulty.

A systematic test of all capacity measures, automatic pumps and tanks has been carried on throughout the year. In most cases the error found in these automatic devices was against the consumer, and while small in individual cases in the aggregate the amount lost by the consuming public was quite large. An effort was made to see that all users of these devices were provided with sealed capacity measures and they were urged to test the output frequently. It is believed that as the users of these pumps become more familiar with their proper use the percentage of defective pumps will be greatly lessened.

As in the case of pumps and tanks, most of the errors found in liquid capacity measures were against the consumer and were undoubtedly due to the manufacturer in the great majority of cases, as in quite a number of cases new measures bought to take the place of faulty ones condemned were found to be short and were also condemned.

A large amount of wood was measured for fuel dealers. Considerable discrepancies having been found between the measurement of the outside shipper and the measurements made by this bureau, an increasing number of fuel dealers called for measurement by this office, settlement being made on the basis of our measurement.

The Bureau has also, with the assistance of fuel dealers, taken up from time to time with the railroad companies and the State Railroad Commission the question of freight charges based on measurement, considerable misunderstanding existing as to the minimum capacity of cars loaded with wood, and it is believed that this inquiry has resulted in a considerable saving to the local dealers as well as a better understanding all round as to the proper method of loading cars.

A large number of complaints relative to the giving of short weight or measure have been investigated; purchases have been made in a number of cases, and a great many commodities in package form have been reweighed, resulting in a number of complaints being filed in the Municipal Court. In a number of cases where complaint was made in regard to giving short weight or measure and where investigation disclosed that there was no intent to defraud, settlement was made on the basis of weight or measure given by this bureau.

General conditions in the use of accurate weights and measures are showing a marked improvement from year to year, and it is only fair to state that the great majority of merchants show a disposition to comply with the requirements of the law and welcome the inspection of all apparatus in use by them. It is believed, however, that the early adoption of the recommendations of the National Bureau of Standards as to tolerances and as to the type of scales used, will do much to aid in the further advancement of the work.

Scales tested, found accurate and sealed.....	3,211
Scales tested, adjusted and sealed.....	150
Scales ordered repaired.....	310
Scales condemned.....	314
Total scales tested.....	3,985
Weights found accurate.....	3,961
Weights condemned.....	535
Total weights tested.....	4,496
Automatic pumps and tanks sealed.....	281
Automatic pumps and tanks ordered repaired.....	66
Automatic pumps and tanks adjusted or corrected before sealing.....	86
Automatic pumps and tanks condemned.....	7
Total automatic pumps and tanks tested.....	354
Liquid capacity measures sealed.....	841
Liquid capacity measures condemned.....	126
Total liquid capacity measures tested.....	967
Wood measured, cords.....	1,516
Sand measured, cars.....	2
Auto oil trucks measured.....	2
Auto sand and gravel trucks measured.....	7

COMPLAINTS FILED IN MUNICIPAL COURT

Short measure in wood.....	4
Found guilty and fined (one, \$25.00; one, \$50.00).....	2
Acquitted.....	1
Indefinitely continued.....	1
Short measure in ice cream.....	1
Found guilty and fined \$5.00.....	1
Short weight in sugar.....	1
Found guilty and fined \$10.00.....	1

CASE TRIED IN CIRCUIT COURT ON APPEAL

Short measure in wood.....	2
Acquitted.....	2

ANNUAL REPORT
OF THE
DEPARTMENT OF
PUBLIC UTILITIES

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

DEPARTMENT OF PUBLIC UTILITIES

WILL H. DALY
COMMISSIONER

BUREAU OF WATER WORKS—

L. S. KAISER, Superintendent
D. D. CLARKE, Engineer

BUREAU OF STREET CLEANING—

ALEX DONALDSON, Superintendent

BUREAU OF GARBAGE DISPOSAL—

WM. G. HELBER, General Foreman

MUNICIPAL LIGHTING—

C. F. WIEGAND, Clerk

BUREAU OF WATER WORKS

To the Mayor and Council:

The tabulations of properties acquired by the Bureau of Water Works shows that there are many parcels which are of little value or utility in connection with the Bureau.

In view of the fact that the City must plan in the near future to acquire additional reservoir sites on the higher elevations on the West Side, it is recommended that the property which can not be fully utilized by the Bureau of Water Works, be disposed of, and the funds thus derived invested in an additional reservoir site.

During the year 1914 a number of communities contiguous to Portland have organized water distributing associations and have contracted with the City to purchase water from its system at the regular rates prescribed by ordinance for consumers outside our boundaries. The delivery of this water is accepted by these associations at the city limits. All construction outside the City, together with the purchase and installation of meters, has been financed by the different associations, and, from observation, it is shown that their affairs are equitably administered and with satisfaction to their members.

The delivery of bills to water consumers by mail has been in a large part abandoned, and the same service, equally satisfactory, has been accomplished by the water inspectors. This change has proved a distinct economy, the saving as a result of such change during an eight months period, compared with a similar period during 1913, being approximately \$10,700 or 47.3 per cent. Under the quarterly billing plan the percentage saved will be increased.

An ordinance was adopted in the special November election, changing the method of billing from monthly prepayment to quarterly billing after service. This ordinance requires that the water service shall be billed to the premises, instead of the old method of billing to the consumer. The economy of this change must be apparent; two-thirds of the billing expense is eliminated; the expense of adjustments on account of the old method of prepayment is eliminated; and the great annoyance to consumers of paying the small accounts monthly has been reduced to a minimum. The quarterly billing plan applies only to domestic consumption, or bills amounting to less than \$20 per quarter. All services where the consumption is greater than \$20 per quarter are billed monthly.

The rates for water for domestic consumption for the year 1915 are approximately 20 per cent lower than for the past year. A system of consecutive billing has been adopted, wherein the City is divided into nine billing districts, each district being billed in sequence, in ten-day intervals, in order to provide steady employment for clerks in the billing division.

One of the most difficult problems facing the Bureau of Water Works for years is the peak load produced on the system by lawn sprinkling. This problem was more pronounced, probably, during the summer of 1914 than ever before.

In July, 1914, the number of flat rate sprinkling services was 14,857 which, together with about 5500 (estimated) metered lawn sprinkling services, gave us a total of more than 20,000. These 20,000 services in operation during restricted hours, together with the commercial and domestic consumption, in a number of districts reduced our pressures twenty to forty pounds.

The situation became so acute, that on July 29, 1914, an order was issued prescribing that the lawn sprinkling service should be used on alternate days, even-numbered buildings to sprinkle on the even dates and odd-numbered buildings to sprinkle on odd dates of the month. The immediate result of this rule, on account of the splendid co-operation of water consumers, was apparent, pressures being improved in those sections where the greatest shortage prevailed. This rule has been adopted, by ordinance, to govern during the year 1915, and it is confidently expected that more efficient service will be given during the coming year than for many seasons past.

It is difficult to make comparison between the year 1914 and the previous years in the number of services.

In all years prior to 1914 the number of consumers was computed. Beginning with this year's report, our calculations will be made on the number of services installed. While in the older portion of the system there are sections where two and more premises are served by a single service, our present calculation will show a decrease, which is only apparent and not real.

When the number of new services installed during the fiscal year (2540) and the number of services normally vacant from delinquency, leaks, etc., are deducted from the number of shut-offs, it will be apparent that the percentage is comparable with previous years.

During the years 1910-1911 water mains to the amount of \$505,263.44 were constructed, assessed to abutting property, and bonded under the Bancroft Bonding Act. A later amendment to the Charter provided that all water mains should be constructed from the water fund, and that the property bonded would be released and the owners reimbursed when such mains shall yield a revenue of 6 per cent on the cost of construction.

In 1912-1913 these liens, to the amount of \$284,469.32, were cancelled by the Water Board and the payment of the bonds and interest assumed by the Bureau of Water Works.

In 1914 the four-year retirement period was reached on these bonds to the amount of \$102,608.11, and this amount was paid from the Water Fund into the Improvement Bond Sinking Fund, together with \$60,000 interest on such bonds.

In the annual report of the Bureau of Water Works for the year 1913, it was recommended that the City immediately begin installing meters on all services, in order to correct waste and to equalize charges to consumers.

An ordinance authorizing the purchase of 5000 meters was adopted by the Council. This ordinance was by petition referred, and will appear on the ballot of the biennial election in June, 1915.

In order to give definite and detailed information as to the condition of the water system in this City, the Bureau will begin, on January 1, 1915, a survey of the entire system, giving minute

inspection to all service pipes, openings, etc., and tabulate, as near as may be, the amount of revenue escaping collection. It is believed that the additional revenue which will be apparent as a result of this survey will more than offset its entire cost. The survey will more than likely be completed during the year 1915. It is interesting to note that no survey of this character has been attempted for more than 25 years and, in the absence of meters and no other adequate method of control, its importance can not be over-estimated.

In past years the Bureau has depended largely on the return certificate of plumbers for its record of service connections and changing of fixtures. The most casual investigation is convincing that the delinquency of plumbers has been widespread. Certain ordinances impose penalties on plumbers who are delinquent on their returns, although very few prosecutions have been made for such offenses.

Our water supply is secured through two conduits of a combined maximum capacity of 67,000,000 gallons in twenty-four hours. This maximum has never been delivered to the City and can not be, until, by the construction of a dam at the headworks, the water supply shall be raised approximately thirty feet above its present level. It is planned to probably build such a structure in 1915. The estimates of the cost of this dam is about \$100,000, which is included in the budget estimate for the coming year.

Unusual tribute to the purity of the water supply of Portland is the announcement by the Federal Government that the Bull Run water shed will be exploited in moving pictures at the Panama Pacific fair as an ideal example of the value of forest conservation and protection.

So nearly does the clear stream of Bull Run conform to the dictionary definition of pure water that for purposes of analysis the experts of the water sources branch of the United States Geological Survey have found it necessary to figure in millionths to show the practically insignificant presence of dissolved mineral and vegetable solids.

The most recent Government analysis was made from samples taken from the stream, at intervals of ten days, between August 1, 1911, and August 1, 1912. This analysis shows the following averages:

	Parts per million
Turbidity	Tr.
Silica (S. 102)	9.00
Iron (Fe) .....	.03
Calcium (Ca)	2.70
Magnesium (Mg) .....	.53
Sodium (Na)	3.10
Potassium (K) .....	.50
Bicarbonate radicle (HC03)	12.00
Sulphate radicle (S04)	3.10
Nitrate radicle (N03) .....	.31
Chlorine (Cl)	1.30
Total dissolved solids	30.00

This analysis is practically the same as one made 25 years previously in 1887 and would in all likelihood be identical if modern methods of analysis had been in vogue at the earlier period. The remarkable fact that our water supply maintains the high standard

of purity of a quarter century ago is the result of the watchful patrol of the Bull Run forest reserve rigidly enforced by the Government of the United States through the co-operation of the City. This patrol has not only preserved the virgin forest on the water shed by minimizing the inroads of fire, but it has insured the sanitary perfection of the water by guarding the water sources against pollution, which is the inevitable result of a policy that permits hunting, fishing, camping and other trespassing. No one, not even an employe of the Government or the municipality, is permitted to enter the Bull Run reserve except on business. The cost of policing the reserve is trifling when the results are considered. The City was called upon for but \$1000 last year by the forest service, this money helping to pay salaries of guards stationed at various entrances to the water shed. In spite of every precaution, however, there have been several destructive fires in the reserve. These have resulted in a noticeable decrease in the average annual runoff as denoted in reports of the water engineer covering a period from 1910 to 1914 inclusive. Attention is called to this fact, as it serves to emphasize the necessity for a continuance of the present careful guard policy.

Bull Run river heads in a small lake formed by a morainal dam across an upland valley near Mt. Hood, but is separated from the glaciers by an elongated low lying ridge which prevents any glacial water reaching the river basin. Only at extremely high stages does the water from the lake flow through its surface outlet, the outflow being usually by seepage through the ages old boulders of the moraine.

The drainage basin of Bull Run comprises a densely forested area of about 168 square miles. The headworks are located at a point on the river about 24 miles distant from the Mt. Tabor reservoirs.

The condition of the flume of the Portland Railway, Light & Power Company near the Bull Run reserve is a matter of serious consideration to the Bureau of Water Works.

This flume was built by the Mt. Hood Railway & Power Company in 1911, and consists of an open conduit or flume of plank, possibly 7x9 feet in size, supported on timber trestles, and for a portion of the distance is built along steep hillsides, where the trestle foundations are carelessly prepared and have always been and still are very insecure, as has been shown by a number of breaks which have already occurred and which are undoubtedly due, as stated, to the careless and hasty methods of construction originally adopted.

At one point this flume crosses the property of the City for a distance of approximately 900 feet, and further west, for a distance of about 1000 feet, it practically parallels the City's conduits, the distance between the flume and conduit being between 200 and 300 feet horizontally and 50 to 100 feet vertically.

A surface slide occurred in this vicinity several years ago which covered the pipe line (Conduit No. 1) for a distance of about 80 feet. This was, however, merely a surface slide and did not extend deep enough to affect the pipe in any manner, the moving mass passing over the pipe and on down the river bluff. On investigation, the apparent cause for this movement was the possibility of drainage water from the hills to the south, which softened the

bank adjacent to the pipe, causing it to slough off at a point where the road excavation had been deepest. For that reason the flimsy construction adopted by the company for the flume line was viewed with suspicion from the first, and time does not serve to allay the fears then expressed.

On March 29th, 1913, a break occurred at a point about 100 feet from the west end of the flume, caused by a slide from the precipitous bank, along the foot of which the flume had been built.

On August 26, 1913, another break occurred near the same point. The water flowing from the breaks gullied out the road and, following the shallow ravine, crossed the conduit at a point where the pipes had been supported on concrete piers and afterwards covered with light sandy earth from the adjacent bank. The pipes were partially uncovered and a portion of the flood waters passed underneath, but the pipes were not injured. The railway company has constructed several plank aprons at the most dangerous points to protect the conduits.

On November 20th, 1914, another break occurred in the same locality, 60 feet of the flume having collapsed near the junction of the Ames and Phelps Roads. This caused a small washout under the trestle foundation, and considerable quantities of sand, gravel and boulders were carried down the hill and across the plank apron, one or more of the boulders having been over three feet in diameter and of sufficient size to fracture the braces across the tops of side posts. No harm was done to the pipe, although a portion of the water collected in the trench, which had been opened at that point for repairs.

On December 25, 1914, still another serious break in the flume occurred at a point about 800 feet south of Station 1398 of the conduit survey, or a short distance west of the Second Crossing Bridge. About 175 feet of the flume and its supporting trestles were washed out, but the resulting slide extended only a short distance, and the flood waters were safely conveyed over the pipe apron near Station 1387.

The general condition of this flume at this time is a matter of alarm to the City. Its planking is in such condition that a great quantity of water is leaking from its crevices, so saturating the hillside that it will, undoubtedly, in the near future, cause a disturbance and settlement of our conduits, and the consequent breaks from such strain will interrupt our water supply and place the City in a precarious situation.

With the increased dangers to our water supply in mind, it is deemed wise that the City endeavor to induce the railway company to abandon its flume on this north hillside and, by tunneling, place their construction on the opposite side of this ridge, which would eliminate any danger to the water supply of the City of Portland.

FINANCIAL STATEMENT

Available Balance of Water Fund November 30, 1913		\$ 193,775.76
Cash Receipts for water sold		853,648.00
Interest on Daily Balances		4,411.20
\$460,000 Water Bonds sold		432,513.00
Accrued Interest on above		1,274.43
Sale of Old Water Pipe, etc.		1,544.80
Employees' Voucher for Jury Fees		18.00
Transferred from 1913 Water Bond Interest Fund		2,800.00
Sale Tank and Standpipe		17.00
Rent of Municipal Garage		187.10
Interdepartmental credits, etc.		538.28
Warrants Cancelled as per Auditor's Report	\$ 369.65	
Warrants issued in lieu thereof	366.73	2.92
		\$1,490,730.49
DISBURSEMENTS DURING FISCAL YEAR		
Interest on Bonds	\$282,760.00	
Payments into Sinking Fund*	254,460.00	
Operation, Maintenance, etc.	255,550.02	
Construction, Extending Mains, Improvements, Hydrants, etc.	500,084.71	
Interest on Improvement Bonds	60,000.00	
Improvement Bond Sinking Fund, for redemption of bonds on account of mains laid by assessment	102,608.11	
Tools and Equipment Purchased	8,334.72	
Meters Purchased	6,666.84	\$1,470,464.40
Available Balance of Water Fund November 30, 1914		\$ 20,266.09

*\$125,480 of this amount was placed to the credit of the Water Bond Sinking Fund on December 15, 1913, after the fiscal year was changed to December 1st.

Increase of water revenue over 1913, 5.38 per cent. Said increase due to the growth of the City and an improved system of collection of water revenue.

INVENTORIES—REAL ESTATE

Name.	Location.	Area in Acres.	Value of Land.	Value of Improvements.
Old reservoir site	All of Blk. 32, Carruthers Add., Broadway and Lincoln Sts.	.92	\$ 100,000	\$ 1,000
Portland Heights reservoir site	Blk. "K" Greenway Add.	.51	5,000	11,114
Repair and meter shop	S. E. ¼ of Blk. 150, Portland, 4th & Market Sts.	.25	125,000	1,000
East Side Water Office	Lot 8, Blk. 139, East Portland, E. 7th and E. Alder Sts.	.11	8,500	23,415
Site of old Irvington standpipe	Lots 5 and 6, Blk. 257, Holladay Add., E. 13th and Schuyler Sts.	.22	4,500	
Former pumping station	Tract foot of Sherman St.	.50	12,000	
Bull Run conduit No. 1 and 2	Tract foot of Stephens St.	.60	7,500	
Reservoir No. 3 and 4	Adjoining Washington Park	63.10	189,000	569,000
Water tanks	Portland Heights	.04	600	
Water tanks	Willamette Heights	.06	500	2,500
Albina warehouse	Blk. 73, Albina, Randolph and Loring Sts.	1.00	40,000	5,000
Albina water office, shop and stable	Part of Blk. 25 and 26, Albina, Russell St., between Williams Ave. and Rodney Ave.	.29	7,000	32,310
Old Highland tank site	Lot 4, Blk. 6, Maegly Highland, Union Ave. between Wygant and Going St.	.10	2,500	
Old tank site, Brown's system	E. 16th and Foster Rd.	.08	700	
Old tank site, Brown's system	Lot 1, Blk. 1, Pomona Add.	.08	300	
Old tank site, Brown's system	Lot in School Park Add.	.01	50	
Old tank site, Brown's system	Lot 5, Blk. 22, Saginaw Heights	.10	300	30
Vernon stand pipe	Tract E. 20th and Prescott	2.34	11,000	12,000
Palatine pump station		21.00	60,000	10,000
High service reservoir (No. 1)	Mt. Tabor	5.75	28,000	134,000
Low service reservoir (No. 2)	Mt. Tabor	10.00	50,000	121,000
Reservoir 5 and 6	Mt. Tabor	45.17	150,000	690,000
Standpipe	Near Lusteds	.50	100	
Headworks	Clackamas & Multnomah Counties	4320.00	150,000	92
Standpipe	Council Crest	.25	900	2,000
Pump station	Old Kinzel Park pump station, E. 76th and Yamhill Sts.	1.00	2,000	200
Tract for water tanks	East. 19th St. 100 ft. south	.025	500	

PERSONAL PROPERTY ON HAND

Material for mains		\$151,575.26
Material for Bull Run conduit		2,289.15
Material for submerged pipe		28,048.80
Meters		8,982.68
Tools and portable property, Nov. 30, 1914	\$ 55,227.07	
Tools and portable property, Nov. 30, 1913	52,401.34	2,825.73
Total expenditure for operation and maintenance, 1914	255,550.02	
Less increase of material on hand shown by inventory	2,825.73	
Net cost of operation and maintenance, 1914	252,724.29	

of purity of a quarter century ago is the result of the watchful patrol of the Bull Run forest reserve rigidly enforced by the Government of the United States through the co-operation of the City. This patrol has not only preserved the virgin forest on the water shed by minimizing the inroads of fire, but it has insured the sanitary perfection of the water by guarding the water sources against pollution, which is the inevitable result of a policy that permits hunting, fishing, camping and other trespassing. No one, not even an employe of the Government or the municipality, is permitted to enter the Bull Run reserve except on business. The cost of policing the reserve is trifling when the results are considered. The City was called upon for but \$1000 last year by the forest service, this money helping to pay salaries of guards stationed at various entrances to the water shed. In spite of every precaution, however, there have been several destructive fires in the reserve. These have resulted in a noticeable decrease in the average annual runoff as denoted in reports of the water engineer covering a period from 1910 to 1914 inclusive. Attention is called to this fact, as it serves to emphasize the necessity for a continuance of the present careful guard policy.

Bull Run river heads in a small lake formed by a morainal dam across an upland valley near Mt. Hood, but is separated from the glaciers by an elongated low lying ridge which prevents any glacial water reaching the river basin. Only at extremely high stages does the water from the lake flow through its surface outlet, the outflow being usually by seepage through the ages old boulders of the moraine.

The drainage basin of Bull Run comprises a densely forested area of about 168 square miles. The headworks are located at a point on the river about 24 miles distant from the Mt. Tabor reservoirs.

The condition of the flume of the Portland Railway, Light & Power Company near the Bull Run reserve is a matter of serious consideration to the Bureau of Water Works.

This flume was built by the Mt. Hood Railway & Power Company in 1911, and consists of an open conduit or flume of plank, possibly 7x9 feet in size, supported on timber trestles, and for a portion of the distance is built along steep hillsides, where the trestle foundations are carelessly prepared and have always been and still are very insecure, as has been shown by a number of breaks which have already occurred and which are undoubtedly due, as stated, to the careless and hasty methods of construction originally adopted.

At one point this flume crosses the property of the City for a distance of approximately 900 feet, and further west, for a distance of about 1000 feet, it practically parallels the City's conduits, the distance between the flume and conduit being between 200 and 300 feet horizontally and 50 to 100 feet vertically.

A surface slide occurred in this vicinity several years ago which covered the pipe line (Conduit No. 1) for a distance of about 80 feet. This was, however, merely a surface slide and did not extend deep enough to affect the pipe in any manner, the moving mass passing over the pipe and on down the river bluff. On investigation, the apparent cause for this movement was the possibility of drainage water from the hills to the south, which softened the

bank adjacent to the pipe, causing it to slough off at a point where the road excavation had been deepest. For that reason the flimsy construction adopted by the company for the flume line was viewed with suspicion from the first, and time does not serve to allay the fears then expressed.

On March 29th, 1913, a break occurred at a point about 100 feet from the west end of the flume, caused by a slide from the precipitous bank, along the foot of which the flume had been built.

On August 26, 1913, another break occurred near the same point. The water flowing from the breaks gullied out the road and, following the shallow ravine, crossed the conduit at a point where the pipes had been supported on concrete piers and afterwards covered with light sandy earth from the adjacent bank. The pipes were partially uncovered and a portion of the flood waters passed underneath, but the pipes were not injured. The railway company has constructed several plank aprons at the most dangerous points to protect the conduits.

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Interest on Improvement Bonds.....	60,000.00	
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Site of old Irvington standpipe.....	Lots 5 and 6, Blk. 257, Holladay Add., E. 13th and Schuyler Sts.....	.22	4,500	
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Tools and portable property, Nov. 30, 1913.....	52,401.34	2,825.73
Total expenditure for operation and maintenance, 1914	255,550.02	
Less increase of material on hand shown by inventory	2,825.73	
Net cost of operation and maintenance, 1914.....	252,724.29	

DISTRIBUTION OF WATER RECEIPTS

Operation and maintenance.....	29.60%
Interest on bonds.....	33.12%
Deposited in the Sinking Fund.....	29.85%
Available for Improvement, etc.....	7.43%

CHARGES FOR WATER DURING 1914

Flat rate, ordinary dwelling, per annum.....	\$9.00
Meter rates, minimum, per annum.....	9.00
Meter rates, first 4,500 gallons, per 1,000 gallons.....	.16 2-3
Meter rates, next 150,000 gallons, per 1,000 gallons.....	.13 1-3
Meter rates, over 154,500 gallons, per 1,000 gallons.....	.10 2-3

During the year plans were perfected providing for a minimum flat rate charge of \$6.00 per annum and a minimum meter charge of \$6.00 per annum. Also the following meter rates:

First 20,000 cubic feet, per 100 cubic feet.....	\$0.10
Over 20,000 cubic feet, per 100 cubic feet.....	.08

SERVICES—NOVEMBER 30, 1914—DETAILED STATEMENT

Dwellings.....	44,211
Apartment Houses.....	342
Hotels, Lodging Houses, etc.....	573
Manufactories.....	234
Stores.....	2,135
Saloons.....	323
Office Buildings, Banks, etc.....	173
Churches.....	153
Schools (Public and Private).....	116
Fire Protection.....	354
Miscellaneous.....	1,802
Total number actually paying water rates for November, 1914.....	50,416

New services installed.....	2,540
Vacant and Cut-off and Temporarily Discontinued Services—	
Dwellings.....	5,904
All other places.....	957
	6,861

Total services November 30, 1914.....	57,277
Total services metered.....	13,976
Percentage of all services metered.....	24.4
Dwellings served.....	50,115
Percentage of dwellings metered.....	20.92
Places other than dwellings metered.....	7,162
Percentage of places other than dwellings metered.....	48.75

Dwellings metered are those where water is likely to be wasted and all places on higher elevations supplied by pumping system.

SUMMARY OF RECEIPTS AND EXPENDITURES OF THE WATER BUREAU DURING THE PAST 28 YEARS OF MUNICIPAL OWNERSHIP AND OPERATION

Gross earnings.....		\$11,797,486.50
Due from the City for water for fire protection, sprinkling, etc.....		\$23,589.35
Cash receipts for water sold.....		\$10,973,897.15
Miscellaneous receipts.....		59,530.16
Bonds sold by City of Portland 1886 to Nov. 30, 1914.....	\$ 7,449,000.00	
Less discount on Bonds sold.....	12,647.60	7,436,352.40
EXPENDITURES		\$18,469,779.71
Private water works purchased and improved....	\$ 1,107,854.45	
Gravity system and improvements.....	5,548,776.94	
Extending mains, etc.....	4,691,812.68	
Material available for extending mains.....	181,913.21	
Meters, tools, etc., on hand.....	129,012.64	
Total cost of property.....	\$11,659,369.92	
Operation and repairs.....	2,373,799.53	
Interest on Bonds.....	3,677,884.17	
Payments into Sinking Fund.....	738,960.00	\$18,449,513.62
Available balance on hand November 30, 1914....		\$ 20,266.09

DISTRIBUTION OF WATER RECEIPTS

Operation and Maintenance.....	21.62%
Interest on Bonds.....	33.51%
Deposited in Sinking Fund.....	6.73%
Improvements and Extensions.....	38.14%

PRESENT BONDED INDEBTEDNESS

Jan. 1, 1887	Jan. 1, 1917	5%	Purchase of water works.....	\$ 700,000
July 1, 1893	July 1, 1923	5%	Construction of Bull Run System	2,200,000
Jan. 1, 1911	Jan. 1, 1936	4%	Construction of additional pipe line and purchase of property	500,000
Mar. 1, 1911	Mar. 1, 1936	4%	Construction of additional pipe line and purchase of property	500,000
Oct. 1, 1911	Oct. 1, 1936	4%	Construction of additional pipe line and purchase of property	500,000
Mar. 1, 1912	Mar. 1, 1937	4%	Construction of additional pipe line and purchase of property	500,000
Nov. 1, 1912	Nov. 1, 1937	4%	Construction of additional pipe line and purchase of property	250,000
June 1, 1913	June 1, 1938	4%	Construction of additional water mains and purchase of property	242,000
Aug. 1, 1913	Aug. 1, 1938	4%	Construction of additional water mains and purchase of property	75,000
Sept. 1, 1913	Sept. 1, 1938	4%	Construction of additional water mains and purchase of property	250,000
Nov. 1, 1913	Nov. 1, 1938	4%	Construction of additional water mains and purchase of property	22,000
Dec. 1, 1913	Dec. 1, 1938	4%	Construction of additional water mains and purchase of property	265,000
Feb. 2, 1914	Feb. 2, 1939	4%	Construction of additional water mains and purchase of property	175,000
May 1, 1891	May 1, 1921	6%	Construction of water mains....	250,000

Total Bonded Indebtedness..... \$ 6,449,000

PRESENT PLANT VALUE

Total appraised value of Water Bureau property, 1903.....	\$ 6,516,000.00
Improvements and extensions to Nov. 30, 1914.....	3,774,618.77
Reservoir Improvements	242,496.17
Submerged pipe across Willamette River.....	119,789.55
Purchase of Water plants (private).....	121,368.98
Purchase of property, erecting building and improvement of real property	99,205.72
Bull Run Conduit No. 2 and Reservoirs 5 and 6.....	2,291,851.34
Preliminary work on new headworks and reservoir alter.....	31,761.88
Lowering submerged pipe across Willamette River.....	34,845.37
Dwellings and headquarters Bull Run Headworks.....	10,395.31
Redemption of bonds for water main assessments.....	102,608.11
	<u>\$13,894,941.20</u>

CAPACITY INCREASE

	Gallons.	Increase Gallons.
Capacity of conduits 1903.....	22,500,000	
Capacity of conduits November, 1914.....	67,500,000	55,000,000
Reservoir capacity 1903.....	67,500,000	
Reservoir capacity November, 1914.....	192,000,000	125,000,000

CONSTRUCTION

DISTRIBUTION MAINS

The work of laying water mains has been continued during the year on a liberal scale, although the magnitude of the work accomplished does not quite equal the average for the past six years.

The following table shows the net increase in water mains, 4 inches diameter and over, since January 1, 1909, and it also indicates the rapid growth of the City in recent years:

	Miles.	Total Miles.
Total miles of mains, 4 inches in diameter and over, in use January 1, 1909.....	5.072	252.329
Laid during 1909.....	49.151	261.402
Laid during 1910.....	80.350	310.553
Laid and purchased during 1911.....	65.894	390.903
Laid during 1912.....	49.912	456.797
Laid during 1913.....		506.709
	<u>254.380</u>	

or an average of 50.876 miles of mains per year, while the mileage of mains 4 inches diameter and over laid and purchased during the year just closed is 40.511 miles.

In addition to the foregoing there has been laid a considerable mileage of galvanized pipe, mostly 2 inches in diameter, for the reinforcement of the supply in the outlying and unimproved districts,

where the streets are not graded and where there will probably be little increase in building during the next few years.

During the year 10.025 miles of these pipes have been added, making a total mileage in use of pipes less than 4 inches in diameter 128.223 miles, and a grand total of all sizes, 671.279 miles, not including the 56.290 miles of steel and cast iron pipe, 24 inches to 52 inches in diameter, in use for the main supply conduit between headworks and the reservoirs at Mt. Tabor and the City Park.

The largest main laid during the year was the 2.161 lineal feet of 30-inch pipe and 8.128 lineal feet of 24-inch pipe laid from Reservoir No. 1 southerly along Reservoir Street, Division and East 71st Streets and 72nd Street to 55th Avenue, S. E., a total distance of 1.95 miles, at a cost of \$54,975.00.

By means of this 30-inch and 24-inch main the supply for the Woodstock, Woodmere and Lents Districts has been reinforced to such an extent as to remove danger of an immediate water shortage in the localities named, except so far as the supply may be limited by the small pipes in the streets in the outer margin of these districts.

Short stretches of 12-inch mains have been laid in several districts of the City where street pavements were proposed and where the plans for permanent water mains called for larger sizes than 6-inch and 8-inch pipes.

Of the 6-inch and 8-inch mains laid during the year approximately 25% were laid in streets where contracts had been let for hard surface pavements, the remainder being laid in unpaved streets in response to petitions and largely for fire protection purposes. As had been stated, 2-inch pipes have been laid in unimproved streets and where the probable growth of the City will not be likely to require a larger size pipe for a term of years.

In this manner a considerable saving has been made in the cost of installation, so far as immediate outlay is concerned. The economy of this procedure will, of course, depend upon the length of time that will elapse before larger mains will be required, but it now appears probable that the saving in interest charges will offset the cost of the small pipes long before they will be outgrown.

During the year but few water mains have been laid by private parties under the provisions of the Charter permitting such work to be done and later taken over by the Water Bureau. Total mains so laid, 0.277 miles.

Of the mains laid in former years by private parties there have been taken over by the Water Bureau during the past year a total of 2.77 miles.

The extensions proposed for the coming year include the completion of the new 30-inch main for the reinforcement of the Peninsular district, completed in 1913 as far as East 59th and Fremont Streets. It is now planned to extend this main as far as the Vernon Standpipe, a distance of 14,500 feet, or 2.746 miles, at an estimated cost of \$113,000.

The extension of the 16-inch East Side Intermediate Service into the North Albina district has also been under consideration. The major part of the pipe required for this 16-inch main is now in stock.

The quantity of pipe of smaller sizes which will be required will depend largely upon the street improvement work which will be undertaken.

The total estimate for extension of mains of all sizes, based upon work done during the past year, is \$370,000 for both materials and labor. There are materials now on hand available for this work, the estimated cost of which is \$85,000, leaving a balance of \$285,000 as the estimated additional outlay required.

EXTENSIONS OF MAINS PROPOSED BY NATIONAL BOARD OF FIRE UNDERWRITERS

Progress has been made each year since 1910 in laying the reinforcement mains recommended by the National Board of Fire Underwriters.

Owing to a change in the East Side Service districts some of these mains are no longer essential to the permanent service, and others have already been laid or have been paralleled in adjacent streets. Of the original list the following only remain to be considered:

WEST SIDE.

16-inch—Cornell and 24th Sts., Washington to Lovejoy.
12-inch—5th St., Morrison to Alder (Already estimated upon).
12-inch—Ankeny and Ash, Front to 7th.
12-inch—12th St., Yamhill to Stark.

EAST SIDE.

16-inch—Stark St., E. 12th to E. 28th.
16-inch—Everett St., E. 1st to E. 12th.
16-inch—E. 1st, Holladay to Hancock.

Owing to new service district the need for these mains, as originally planned, no longer exists. Reinforcement mains to answer same purpose have been planned and, in part, laid.

REPAIRS TO MAINS

There have been but few broken mains repaired during the year. Such breaks as have occurred have been chiefly in the smaller sized pipes and have occasioned little inconvenience and expense.

One break, in the 20-inch main at East Stark and East 20th Sts., was occasioned by an accident in handling a branch tee which was being installed at that point. The tee was allowed to strike a corporation cock in the 20-inch main, which resulted in splitting a section of the main. The break occurred at 8:30 A. M. July 23rd and was repaired at 3:30 P. M. In the meantime the service was maintained through other mains and, with the exception of the higher altitudes, the service was interrupted for a short time only.

Owing to the settlement of the north side of Morrison Street along the south side of the new Meier & Frank building, the 6-inch main in Morrison Street broke at 9:20 A. M. Sept. 7th. The water was shut off at 10:02 A. M.

A gate valve was cut in on the main just west of the break and service was resumed in the afternoon.

The settlement of the street which caused the break in the water main, and in the sewer as well, was undoubtedly due to the failure of the retaining wall for the basement of the new Meier & Frank building now being erected.

PIPE STORAGE YARD

Present facilities for the storage of pipe and other construction materials are at widely separated, and not altogether convenient, points.

The main yard is at the old Albina pump station, where unloading facilities have been installed along the railway switch, but the available space is inadequate.

The grounds occupied for storage at Reservoir No. 2 and at the Vernon Standpipe are in the outskirts of the City, and in the case of new materials it is necessary to incur an extra expense for hauling in order to utilize them.

The only other available yard now in use is at East 7th and East Alder, but that is on leased ground.

The need for additional storage facilities at some central point where railroad facilities can be secured becomes increasingly apparent with each passing year and should receive early consideration.

TRANSPORTATION

The table submitted herewith shows the cost of hauling pipe materials, etc., in connection with construction and maintenance work. The cost of repairs to the motor apparatus has been excessive largely owing, it is believed, to the system under which such work has been handled.

COST OF HAULING PIPE MATERIALS FOR THE FISCAL YEAR

	PACKARD. 3-Ton Truck. No. 1. Cost: \$4,025.00. Operated 11 Mos.	KELLY. 3-Ton Truck. No. 2. Cost: \$3,450.00. Operated 4 Mos.	LOCOMOBILE. 5-Ton Truck. No. 6. Cost: \$4,025.00. Operated 12 Mos.
Driver and Helpers.....	\$ 1,948.25	\$ 767.80	\$ 2,499.40
Gasoline at 13 cents.....	1185 gal. 154.05	542 gal. 70.46	2709 gal. 352.17
Oil at 28 cents.....	114 gal. 31.92	77 gal. 21.56	81 gal. 22.68
Repairs.....	1,336.68	69.03	81.38
Tires.....	318.86	45.93	360.77
Interest at 5 per cent.....	188.50	172.50	201.25
Totals.....	\$ 3,978.26	\$ 1,147.28	\$ 3,517.65
Total miles run.....	6,287	2,303	8,301
Total number tons hauled.....	2,691	792	4,494
Cost of repairs per mile.....	\$ 0.21	\$ 0.03	\$ 0.01
Cost of tires per mile.....	0.05	0.02	0.04
Miles run per gal. gasoline.....	5.5	4.3	3.
Miles run per gal. oil.....	56	30	100
Cost per ton.....	\$ 1.48	\$ 1.45	\$ 0.78
Cost per mile.....	0.063	0.50	0.42

Average cost per ton for the year, \$1.09.

SERVICE PIPES

The matter of handling the installation of service pipes and maintaining a record of same has been under consideration for some time. Heretofore there has been difficulty in securing proper reports from the plumbers doing the work, and in consequence the record of such work is faulty at present.

If some change in methods could be arranged by which this office could have notice of permits issued in time to inspect same be-

fore the work is completed and covered it would be possible to make necessary surveys and records so as to definitely fix the location of such pipes and their connections with street mains.

It is hoped that a survey of existing services may be made in connection with the general inspection of all buildings planned for the ensuing year. This could be arranged by the detail of a man from this office to accompany each inspection party.

It is also believed that by having the Water Department install all service pipes, the property owner paying the cost of same, the quality of the work would be improved without increasing the cost, and in that way the making of a proper record of all work done would be secured and the expense of inspection avoided.

RESERVOIRS

The following is a list of the reservoirs now in use:

	Material.	Elevation.	Gallons Capacity.	When Built.
Reservoir No. 1, Mt. Tabor...	Concrete	411.6	17,000,000	1894
Reservoir No. 2, Mt. Tabor...	Brick	229.2	20,500,000	1894
Reservoir No. 3, City Park...	Concrete	229.7	16,400,000	1894
Reservoir No. 4, City Park...	Concrete	229.7	17,600,000	1894
Reservoir No. 5, Mt. Tabor...	Concrete	411.6	50,000,000	1911
Reservoir No. 6, Mt. Tabor...	Concrete	395.0	75,000,000	1911
Portland Heights	Concrete	865.0	600,000	1908
Kings Heights	Concrete	865.0	200,000	1911
South Portland	Concrete	475.0	60,000	1907
Willamette Heights	Concrete	445.6	60,000	1907
Tabor Heights	Concrete	590.0	200,000	1912
Vernon Standpipe	Steel	343.6	360,000	1906
Council Crest Standpipe.....	Steel	1,096.5	60,000	1909
Burlingame Standpipe.....	Steel	635.0	113,400	1912
Total.....			193,153,400	

Several of the reservoirs listed above have been subjected to slight repairs during the year. The principal work of this character was done at Reservoir No. 2, Mt. Tabor—a brick-lined reservoir built in 1894. The original lining has never been satisfactory, even from the first, the seepage having been excessive. It was therefore decided to treat the surface of the old lining by an application of two coats of asphalt in which a layer of burlap was imbedded.

Further tests will have to be made to determine the full value of this treatment.

Expenditures during the year account of this work are as follows:

Labor	\$ 6,642.15
Tools and materials.....	5,276.35
Engineering and superintending.....	1,336.22
Total.....	\$13,254.72

At Reservoirs Nos. 5 and 6 the joints in the lining have been treated by the application of a narrow strip of burlap with two coats of asphalt placed directly over the joint. This work was completed early in the summer and these basins have since been in use. This treatment has been successful in reducing the seepage loss: at Reservoir No. 5 from 2,300,000 gallons per day to 315,000 gallons; at Reservoir No. 6 (N. basin) from 1,400,000 gallons per day to 103,000 gal-

lons; at Reservoir No. 6 (S. basin) from 850,000 gallons per day to 37,000 gallons.

It is believed that even the present leakage will be largely reduced by the gradual silting up of the small cracks still existing in the concrete lining, but this process will be slow owing to the small amount of sediment carried in Bull Run water.

Expenditures during the year on account of this work amount to:

Labor	\$2,961.85
Materials	4,707.69
Engineering and Superintending.....	1,990.58
Total.....	\$9,660.12

The changes and repair of gate valves at Reservoirs 1, 2, 3 and 4, authorized one year ago, have been but partially completed. At Reservoir No. 2 this work is about done but the remainder will be carried over until another year.

Reservoirs 5 and 6, and the Willamette Heights and the South Portland tanks have been emptied and cleaned during the year.

ADDITIONAL RESERVOIRS

The necessity for additional reservoirs, especially for storage purposes for the West Side district, is becoming increasingly apparent with each passing year and this matter should receive consideration at an early date.

The present storage on the West Side is but a trifle over thirty-five million gallons—or not more than two days' supply for the district. This would be entirely inadequate in case of a failure of the supply through a breakage of the submerged pipe lines. While this is a very remote possibility and very improbable yet the safeguard of additional storage facilities should not be overlooked or indefinitely postponed.

DRAINAGE TUNNELS AND SLIDING LAND WEST OF RESERVOIRS 3 AND 4, CITY PARK

Observations of the drainage from the tunnels under the sliding land west of Reservoirs 3 and 4 have been taken at intervals during the year—14 observations in all.

The maximum flow observed was January 5, 1914, being at the rate of 144,000 gallons per day. Minimum flow August 27, 1914, 14,400 gallons per day.

Measurements of the movement of the slide were taken in January, April, July and October. Total movement for the year, 0.035 inch, the same being the average at 47 stations along a central belt 100 feet wide extending from the western to the eastern margin of the slide.

Number of stations observed.....	230
Number of observations taken.....	823
Recorded movement for 1913, inches.....	0.040

SUBMERGED PIPE LINES

The work of lowering the submerged pipes—28-inch cast iron and 24-inch steel mains—under the contract awarded A. C. U. Berry on June 30th, 1913, was completed and accepted April 22nd, 1914, a final payment of \$2,602.50 having been made October 22nd, 1914.

Total expenditures under this contract between June 30th, 1913, and October 22nd, 1914, \$80,785.14.

The 28-inch line was not relaid, the unbroken pipes now being stored in the yard at Reservoir No. 2. The 24-inch line was replaced in an 8-foot trench below the proposed 30 foot channel, as was done in the case of the 30-inch line laid in 1911. The submerged pipes now available for the supply of the West Side district are the 30-inch and 24-inch, both entirely independent steel pipes laid far below the required channel depth.

PUMPING STATION

The following power pumps are in use for the supply of the higher districts of the City:

Location	Style of motor.	Elevation.	Elevation supplied.	Gallons per day capacity.
City Park	Hydraulic	230	445	1,000,000
City Park	Electric	230	865	500,000
City Park	Hydraulic	230	865	500,000
Greenway, Portland Heights.	*Electric	865	1,096.5	220,000
Fulton	*Electric	230	865	250,000
Reservoir No. 2	Hydraulic	305	596	375,000

*Automatic.

The pump at Reservoir No. 2 used for the supply of Tabor Heights became disabled on July 23rd. This pump is a Smith-Vaile triplex single-acting plunger pump with a cast steel crank shaft. It was the breaking of this shaft, causing an injury to the frame and connecting rods and cross-heads, which disabled the pump on the date named. This pump has been in service for eight years and was overhauled two years ago.

Upon an examination of the break a flaw was found in the shaft which greatly reduced its effective area.

At the time the break occurred it became necessary to employ a fire engine for 24 hours to furnish a supply to the Tabor Heights tank until a temporary steam pump could be installed at Reservoir No. 2 for use while the water power pump was being repaired. This temporary plant consisted of a 50 H. P. boiler and a duplex 12x7x10 inch pump and was installed at 7:00 P. M. July 24th and operated until August 29th, at which time the repairs of the hydraulic pump were completed and it was again put into operation.

The plant installed at Greenway Reservoir, Portland Heights, for the supply of the Council Crest standpipe, has been improved by replacing the 500 volt D. C. 15 H. P. motor with a 220 volt A. C. 15 H. P. motor. This operates better than when the power was taken from the Railway Company's circuit.

AUXILIARY STEAM PLANT

The Palatine Hill Plant is in practically the same condition as one year ago, excepting that the upper 25 feet of the brick chimney has been removed and a galvanized iron cap fitted in place, thus removing the danger to the building formerly existing. The dwelling,

sheds and fences connected with the Station are in need of repair and painting.

At the Broadway and Lincoln Street Station the high service pump is still maintained ready for emergency use.

In November, 1912, the Water Board voted that the Council might use for a city repair shop and garage such portions of the reservoir block at this point as were not needed for water works purposes—or about seven-eighths of the entire area. No steps have yet been taken to utilize the property for such a purpose.

PRESSURE REGULATORS

On account of the steep slopes and the variation in the elevation of the several districts of the City, especially on the West Side, it has been found expedient to install pressure regulators at a number of points. These regulators are located as follows:

Location.	Size, inches.	Elevation.	PRESSURES	
			High, lbs.	Low, lbs.
E. 38th and Woodstock.....	8	206	78	20-25
E. 30th and Ainsworth.....	3.5	146	82	40
E. 13th and Holman.....	8	160.8	78	38-40
5th and Witham Streets.....	4	387.4	105	40
Kelly and Custer Streets.....	3.5	252	95	40
17th and Elizabeth Streets.....	4	640	100	40
Myrtle and Chapman.....	4	512	93	35
21st and Clifton.....	3.5	497.5	100	40
Chula Vista and Hermosa.....	4	654.8	95	30
Macleay and Melinda.....	4	506	90	30
Fairview and Rutland.....	3.5	492	95	40
Fairview and Ally.....	4	639.7	100	40

These regulators are inspected periodically in order that they may be kept in proper working order.

The regulator at East 38th and Woodstock Ave. is for temporary service only—until additional intermediate service mains are laid in that vicinity.

PRESSURE GAGES

Two Bristol Automatic Recording Gages were installed in the Superintendent's Office in the City Hall, at the time the Bull Run Gravity service was first inaugurated: one connected with each of the two gravity services on the West Side. The value of these gages has been shown upon several occasions when a break in a main occurred at any point in the service, the exact time of the break being noted in each instance, as also the time when the flow was re-established.

In order that the same information may be available in other districts similar automatic gages have been installed at the following points:

	Service.	Static Pressure, lbs.
East 7th and East Alder Streets.....	Reservoir No. 2	81
Albina Office.....	Reservoir No. 6	63.7
Vernon (High Pressure).....	Reservoirs Nos. 1 and 5	73
Vernon (Low Pressure).....	Standpipe	43.6
Northern Sub-Station P. Ry. Co., Lombard St. Branch.....	Standpipe	84.7
57th Avenue and 77th St., S. E.....	Reservoir No. 1	74.2
Engine House No. 20, Sellwood.....	Reservoir No. 2	47.2

These gages are also useful in recording the hour when excessive draft upon the mains occurs in any district.

VENTURI METERS

The following Venturi Meters are now installed and in use in connection with Conduit No. 2 from Bull Run, and the 24-inch and 30-inch mains leading from Reservoirs Nos. 1 and 6 at Mt. Tabor:

- 52-inch—Conduit No. 2, at Headworks.
- 44-inch—Conduit No. 2, at Mt. Tabor, Reservoir No. 1.
- 24-inch—Highland Main, at Mt. Tabor, Reservoir No. 1.
- 30-inch—Southeastern Supply, at Mt. Tabor, Reservoir No. 1.
- 30-inch—East Side Intermediate Supply, at Mt. Tabor, Reservoir No. 6.

In view of the proposed completion of the 30-inch Highland main to the Vernon Standpipe the location of the 24-inch meter on the 24-inch Highland main should be changed to a point near East 60th Street.

As these meters automatically record the rate of flow, as well as the total volume passed each day, they afford valuable information regarding the operation of the service which can be obtained in no other way. By means of the data they afford it is possible to analyze present conditions much more accurately than without them, and hence they aid greatly in designing and estimating for future extensions.

It is now planned to install these meters upon all of the largest distribution mains in the several districts of the City as soon as the necessary arrangements can be made.

BULL RUN CONDUITS

Bull Run Conduit No. 1, consisting of:

- 10.022 miles of 42-inch steel riveted pipe
- 7.772 miles of 35-inch steel riveted pipe
- 6.505 miles of 33-inch steel riveted pipe

a total of 24.299 miles, was completed in 1894.

The metal of which this pipe was made is largely No. 6 BWG plate, or less than ¼-inch thick. The pipe was originally dipped in a preparation of asphalt as a protection against corrosion. It was observed, however, that after the lapse of ten years' time leaks began to occur in certain sections of the pipe due to the pitting of the

plates from external corrosion of the metal. These leaks were of small size, not usually exceeding ¼-inch diameter, and were easily and quickly repaired by means of steel plugs driven or screwed into the plates from the outside without having to shut down the flow in the Conduit. In a few cases, however, it was necessary to reduce the pressure on the pipe and to make needed repairs by means of a steel band, caulked with lead.

It was soon noticed that these leaks were much more frequent or, it may be said, occurred almost entirely in a heavy clay soil, impervious to water and in locations where provisions had not been made for the drainage of the pipe trenches, notably for a distance of about one mile just east of the Town of Gresham, and for a lesser distance near Kelly Creek—a point some three miles further east.

In these two named localities have occurred probably 75 per cent to 90 per cent of all the leaks which have been repaired during the nearly 20 years the pipe has been in service.

It being apparent that the pipe was attacked entirely from the outside it was determined to uncover the sections where the worst conditions prevailed and to clean and paint the outside for the purpose of arresting the corrosion and prolonging the life of the pipe.

For this purpose an appropriation was made in the budget for the year 1914. The work was commenced June 20th and completed October 30th, at an expense of \$14,125.16, the work done covering 5,000 feet of pipe east of Gresham, and 400 feet of pipe at Kelly Creek, or an average cost of \$2.62 per lineal foot. A large number of pits were plugged where the metal had not been entirely eaten through as a matter of additional insurance. The work has been well done: two and, in places, three coats of Ferrubron paint having been used after the surface of the plates and all pits had been thoroughly cleaned. This treatment should prolong the life of the pipe for a considerable period.

Additional work of this character should be undertaken the coming season at Kelly Creek and eastward in the vicinity of Lusteds on the Sandy River. It is estimated that a small outlay each year for work of this character will materially prolong the serviceable life of the Conduit.

For the first time in eighteen years there has just been completed an examination of the interior of this conduit throughout its entire length.

This examination revealed a number of small pit holes at various points, which have been repaired. It has also indicated the points where leaks are likely to occur and where the next cleaning and painting work should be undertaken. This examination has also confirmed the opinion previously held that the interior of the pipe is in good condition, not having been corroded in any appreciable degree, and that the asphalt coating still largely adheres to the pipe in a satisfactory manner.

Mention should here be made of the examination undertaken during the year by the U. S. Bureau of Standards for the purpose of determining if the pitting of Conduit No. 1 was due to stray electric currents from the electric railways operating in the vicinity of Gresham. This examination was brought about through the representations of one of the Fire Insurance Bureaus of this City.

The report of the U. S. Bureau of Standards, a copy of which has

just been received at this office, does not confirm the contention that the pitting of the pipes heretofore observed is due to stray currents from the railway systems, but rather that it has been caused by local soil and drainage conditions, and defective pipe coatings.

Since the establishment of the Portland Railway, Light & Power Company's power plant at Bull Run in 1911 conditions have changed, and it may be necessary to take remedial measures at an early day to protect the pipe.

The following extract from the report of Mr. E. B. Rosa, Acting Director of the Bureau of Standards, Washington, D. C., dated October 1914, is submitted as showing the extent and character of the additional protective measures to be employed.

The report in question consists of 21 pages of typewritten text, 4 blue print charts and 9 photographs, and gives a detailed description of the condition of the conduit as it had been observed and recorded by the employees of the City and the survey undertaken by the Bureau of Standards to determine present electrical conditions and a remedy therefor, and closes with the following "Recommendations":

"The mitigation of corrosion naturally divides itself into two branches: that dealing with deterioration due to local electrolytic action and soil corrosion, and that due to stray currents. The first kind of corrosion must be taken care of by proper surface insulation and protection while that due to stray currents must be reduced by bringing about the proper electrical conditions.

"The remedy which has already been applied in the way of surface cleaning and painting has proved so satisfactory and beneficial that a continuation of it is strongly recommended for regions requiring attention. This treatment when supplemented with such drainage as may be possible to reduce excessive moisture around the pipes will no doubt insure them for a long period of years against further injury due to soil corrosion.

"In the light of the history of the corrosion trouble and the experimental data at hand, it is extremely doubtful if stray currents have in the past played any appreciable part in the pitting of the conduit; nevertheless, in view of the apparent tendency of the current to leave the conduits at Gresham and other points, which has no doubt been augmented by the recent installation and operation of the Mt. Hood Railway, it would be wise to take such precautions as might tend to forestall any possible trouble from this source in the future.

"Although the investigations of the Bureau have shown that, in general, pipe drainage is not satisfactory as the principal means of electrolysis mitigation, there are nevertheless special conditions under which this method is very effective and by far the most economical remedy that can be applied. Pipe drainage is objectionable in systems having high resistance or insulating joints as the currents are shunted around such places with deleterious effects. Moreover, in congested districts having several systems of pipes and cables, an attempt to drain one pipe system is likely to result in a change of potentials which will be detrimental to the other systems or to certain parts of the system being drained unless precautions are taken to limit the drainage currents to a safe value.

"In the case of the Bull Run Conduits these objections are entirely absent. The double riveted steel joints make the pipes prac-

tically continuous electrical conductors and the absence of other underground pipes and cables in the vicinity leaves no reason why pipe drainage should not be resorted to. The infrequent car schedule and the long feeding distances on the suburban lines do not warrant the addition of the large amount of copper for return feeders that would be required to assure protection to the conduits. In consequence of the above facts we would recommend that the conduits be tied into the railway returns at several points. Referring again to Chart No. IV it is seen that current is apparently leaving the conduits in the regions of the Gresham Substation and the Bull Run Substation. Ties should therefore be made at these points. At Gresham the tie could be made to the aerial cable which feeds the Mt. Hood Railway. Care should be exercised in making these ties that sufficient resistance be inserted in the circuit to guard against an excessive flow of current. It is quite possible, however, that no extra resistance will be necessary. The work should be done under the direction of a competent engineer.

"These ties will be vastly more effective in draining the pipes than are the ground plates to which reference has been made. These latter were installed at points where the rail is strongly positive to the pipes at times. The tendency, therefore, would be for the plates to aid in collecting the current rather than in discharging it and if they are allowed to remain after tying the pipes to the rail at other points, might give rise to additional current flow in the conduits. Moreover, a copper plate in contact with carbon and metallically connected to the pipe will set up a difference of potential of about 0.6 volt tending to send a current from the pipe through the soil and back to the carbon. It is possible for this continuous action to eventually result in a deterioration of the pipe near the ground plate. In view, therefore, of the possible harm that might result from these plates, and their inability to be of any material benefit, it is recommended that they be removed.

"It is hardly necessary to state that good rail bonding is the first requisite for the prevention of stray currents. Both rails on all lines should be well bonded and frequently inspected and repaired.

"It must be understood that any considerable extension or change in the railway system, or the addition of substations, should be followed by a new electrolysis survey. Such changes are likely to result in a readjustment of potentials which would require that the pipes be drained from other than the two points here mentioned.

"We are convinced that if the above recommendations are followed there need be no fear of the deterioration of the pipe lines, either from soil corrosion or stray current electrolysis for years to come."

It is gratifying to note the approval given to the remedial measures adopted and applied during the present season, and the assurance that with the system outlined "there need be no fear of the deterioration of the pipe lines, either from soil corrosion or stray current electrolysis for years to come."

As has been stated, the Bull Run power plant, now operated by the P. Ry., L. & P. Co., was built in 1911, the flume supplying the same being located near, and at a considerable elevation above, Conduits Nos. 1 and 2 for a distance of from 1,000 to 2,000 feet immediately east of the Bull Run store and postoffice, or the present site

of the power plant forebay, the flume being within 200 to 300 feet of the conduits horizontally, and from 50 to 100 feet vertically. Upon two occasions this flume has broken, but fortunately the water was safely conducted over the pipe lines, causing but little damage.

It appears that the breaking of the flume, due to the settlement of the trestle supporting the same, must have been caused by the saturation of the ground by the excessive leakage from the flume, which has never been watertight.

This seepage water has also been the cause of a slight settlement of Conduit No. 2 at two points as shown by leaks in two of the circular seams. These leaks have been repaired, but the saturation of the ground still continues as is shown by the water which drains away from the pipe trenches. The Railway Company appears to be alive to its responsibilities in this matter and is seeking to remedy present conditions. The most satisfactory solution would be either to rebuild the flume in a more permanent manner, or else to remove it to another and more remote location.

HEADWORKS

In anticipation of the early construction of a new dam and intake at Headworks on Bull Run it was considered advisable to relocate the houses occupied by the gate men in charge. These buildings consisted of the original log cabin built for construction use more than 20 years ago, with board additions, and one other temporary structure, and all entirely unsuitable for comfortable habitation.

It was therefore decided to erect a small 5-room cottage for each of the three gatemen and his family, and also a building to be used as an office and a bunk house for the use of extra men at a point about $\frac{1}{4}$ of a mile below the intake, and upon the opposite side of the river from the present buildings. A contract for these buildings was awarded C. A. Thomson August 19th, 1914, for the sum of \$9,585.00, the work to be completed on or before December 14th, 1914.

These buildings are now well advanced towards completion and will be ready for occupancy early during the coming year.

The work of clearing and grading the grounds and constructing water supply and sewerage pipes for the new buildings has occupied a small force of men during the past four months, at an outlay to date of approximately \$10,395.31 for buildings and grading grounds.

During the year there has been expended the sum of \$2,874.67 on account of road construction and repairs between the railway station at Bull Run and the Headworks, for the purpose of expediting the construction of new dwellings and dam. This work consisted in grading and planking a half-mile section of road immediately east of the station, and in planking a few short stretches at other points. The experiences of the past season with the hauling for the buildings now under construction has demonstrated the necessity for additional work of this character before the new construction is undertaken. Estimated cost of planking required, \$8,000.00.

Plans and estimates for the proposed new dam and intake have been in course of preparation for some months, and it is expected to have them ready for the letting of contracts early in the coming year if it shall be deemed an appropriate time for undertaking the work.

An appropriation of \$100,000.00 for this work has been asked for the budget for the year 1915. This sum will cover the outlay needed

next year, but the completion of the entire work, including the clearing of the basin above the dam will exceed that sum.

Total expenditures during the year account Headworks improvements, \$15,059.11.

BULL RUN RESERVE

The additional surveys required to develop necessary data for determining the available storage and power resources of the Reserve have not yet been completed. The only work of this character undertaken during the year has been to secure measurements of stream flow at certain points for use in connection with, and supplementary to, the data regarding the flow of the main streams as collected by the Water Resources Branch of the U. S. Geological Survey. This work should be continued during the coming year.

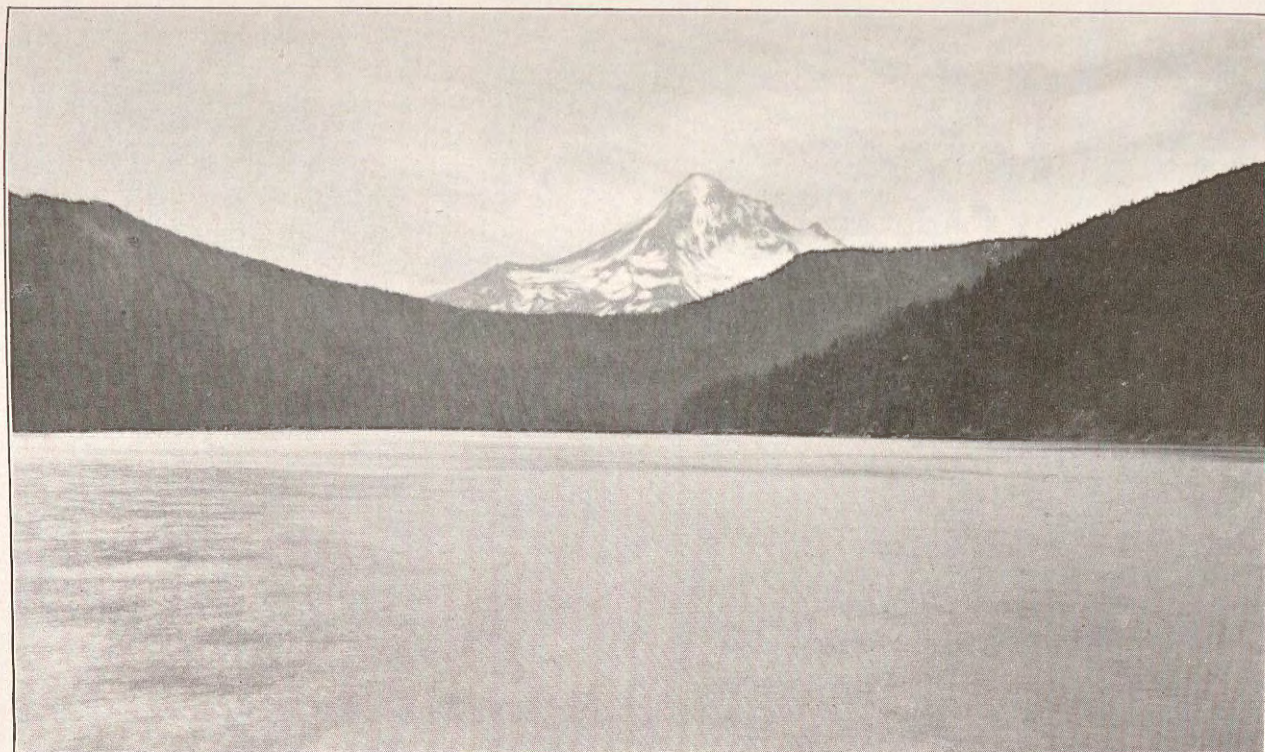
Tables showing the flow in the Bull Run River, as compiled by the Government under the direction of F. F. Henshaw, District Engineer, are submitted herewith. (See page 184.)

CHARACTER OF WATER

In the Engineer's Report for the year 1912 it was stated that the Water Resources Branch of the U. S. Geological Survey had undertaken an exhaustive study of waters of certain rivers of the State and had requested the Water Board to furnish samples of Bull Run water for analytical purposes.

BULL RUN WATERSHED—TABLE SHOWING "RUN-OFF" BY YEARS
(Discharge in Second-Feet)

MONTH.	1910			1911			1912			1913			1914		
	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.	Max.	Min.	Mean.
January.....	4,520	244	1,010	5,080	408	933	10,400	160	2,090	4,610	489	1,300	5,230	274	1,470
February.....	4,272	191	933	1,120	260	480	4,240	561	1,560	2,870	359	853	2,240	473	1,000
March.....	9,490	545	2,090	1,340	240	700	583	270	416	5,980	326	1,150	2,480	551	1,130
April.....	2,060	510	970	1,050	388	601	1,070	416	577	1,680	711	1,260	2,480	520	1,030
May.....	1,550	244	619	2,680	622	1,150	1,580	494	869	1,590	594	1,120	541	256	407
June.....	555	182	249	942	298	460	811	311	477	1,000	390	647	853	274	414
July.....	191	91	132	396	135	203	444	132	238	760	180	357	260	100	152
August.....	102	80	88.7	142	83	117	1,640	92	249	178	107	141	102	72	86.5
September.....	91	72	83	784	80	260	1,220	156	421	847	107	247	841	72	307
October.....	1,340	171	426	926	148	335	1,630	215	630	2,800	129	698	Average:—October, 1913, October, 1914.		
November.....	4,100	180	1,350	5,230	126	1,610	4,520	394	1,410	3,330	288	860			
December.....	2,120	328	1,050	1,880	388	851	4,270	463	1,070	1,240	250	439	5,230	72	667
For the Year...	9,490	72	749	5,230	80	642	10,400	92	838	5,980	107	755			



BULL RUN LAKE AND MT. HOOD. LOOKING SOUTH. (F. T. DODGE, 1891.)

In compliance with this request samples of water were taken from the river at the Headworks at intervals of about ten days from August 1, 1911, to August 1, 1912—36 samples in all.

The printed report, showing the results of this analysis of Bull Run water was received at this office in October of the present year. This report, prepared by Walter Van Winkle in co-operation with J. H. Lewis, State Engineer, has been printed by the U. S. Geological Survey as "Water Supply Paper 363," from which I quote as follows:

"Bull Run River flows from a small lake formed by a morainal dam lying across an upland valley near Mt. Hood. The lake discharges through its surface outlet only at high stages, the usual outflow being by seepage through the bowlders of the moraine. The outflowing stream flows northwestward a few miles, then southwestward to its junction with Sandy River. A long, low rise separates this basin from the Mt. Hood glaciers, and no glacial water reaches the river. The basin comprises 168 square miles, of which the greater part is heavily forested.

"The mean annual precipitation at Bull Run postoffice, which is 647 feet above sea level and above which there are 96 square miles of the drainage basin, is 76 inches. Much of this falls as snow in winter, but storage in the lake tends to equalize the run-off somewhat and to increase the volume of the low-water flow.

"The annual run-off from the drainage basin probably averages more than 100 inches in depth over the area.

"The quality of the water of this river is important because the City of Portland diverts water from it near the town of Bull Run through two lines of pipe for a municipal supply. The entire drainage basin above the intake of the pipe lines is included in the Bull Run Forest Reserve, and trespass is prevented by efficient policing. Because of the remoteness of upper Bull Run basin and the ideal sanitary conditions and effective patrol in it, Portland's water supply may be considered primarily pure and above criticism.

"Samples of water for analysis were collected daily during the period covered by the investigations through the courtesy of the water board of Portland. The water is always clear, largely because of lake storage and underground flow. It is very slightly mineralized and is not subject to great changes in mineral content, as shown by the following analyses:

"The water typically represents surface water flowing over igneous rocks in a heavily forested region of large rainfall. It is characterized by primary alkalinity as a result of its origin among volcanic rocks, and it is alkaline carbonate in type—that is, alkalies are present in excess of alkaline earths—and carbonate comprises more than 72 per cent of the acidic radicles. It is soft and nonscaling. One of the largest laundries in Portland finds it cheaper to buy Bull Run water from the city than to use Willamette River water, which may be obtained without cost, the saving in cost of soap more than counterbalancing the cost of the water. The water will not corrode boilers or pipes as a result of its mineral content, but it may, unless first heated in an open heater, cause corrosion and rusting because of its content of dissolved carbon dioxide and oxygen. Any natural water of great mineral purity is likely to do the same, however, and it is by no means a peculiarity of Bull Run water. The water is

very slightly colored and its appearance is exceptionally attractive. The pride of the city in its water supply appears to be amply justified by the facts."

In addition to the foregoing, a detailed analysis of each sample of water is given, showing the following averages:

	Parts per million.
Turbidity	Tr.
Silica (SiO ₂)	9.00
Iron (Fe) .....	.03
Calcium (Ca)	2.70
Magnesium (Mg) .....	.53
Sodium (Na)	3.10
Potassium (K) .....	.50
Bicarbonate radicle (HCO ₃)	12.00
Sulphate radicle (SO ₄)	3.10
Nitrate radicle (NO ₃) .....	.31
Chlorine (Cl)	1.30
Total dissolved solids	30.00

Upon comparing the foregoing with the analysis made by Faulknan & Reese of the State Assay Office, San Francisco, in December, 1887, (printed in former reports from this office) certain minor differences are noted, although, in the main, it may be said there is a close agreement between the two.

During the 27 years that have elapsed since the first analysis was made there has been a marked advance in the science of water analysis, the approximate methods then in vogue not being considered suitable for securing the detailed and accurate results required for present-day use.

The total of dissolved solids, however, is given in the first analysis as 2.70 per 100,000 parts by weight, while the Government analysis gives the total dissolved solids as 30 per million, or 3.00 per 100,000—a very favorable showing in either case.

POPULATION SUPPLIED

The population of the City in 1910 was reported by the U. S. Census Bureau as 207,214.

The dwelling connections reported on December 31st, 1910, numbered 41,175. This gave an average of 5.03 supplied for each residence service installed throughout the entire City on that date.

Assuming "5" to be a proper multiplier for the year 1914 as it was for December 31st, 1910, and the service connections in use November 30th, 1914, at 50,416 (the number actually paying for water on that date), this gives a total of (50,416 x 5) 252,000 as being supplied at the end of the fiscal year 1914.

WATER CONSUMPTION

Total number of services listed as per Water Bureau ledgers	57,277
Number actually in use November 30, 1914	50,416
Vacancies, Shut-offs and Discontinued Services	6,861
Meters installed, all sizes	13,976
Average number in actual use	13,687
Total consumption through 12,585 metered services, of all sizes, gallons	2,528,000.000
Total consumption per day, gallons	7,023.600

The following table shows the consumption in the several districts of the City:

WATER CONSUMPTION THROUGH METERS NOVEMBER 30, 1913, TO NOVEMBER 30, 1914

Districts.	Flats.	Average Number of Meters in Use.	Total Consumption Through Meters per Day in Gal.	Population Supplied by Meters.	Average Gallons per Day per Capita.
West Side.					
Low Gravity	(7483)	3077	3,638,925	15,385	236.5
High Gravity	(3138)	2259	1,043,162	11,295	92.3
Pump, N. of Jefferson St.	161	71,014	805	88.2	
Pump, S. of Jefferson St.	(37)	102	45,885	510	90.0
Portland Heights	477	179,707	2,385	75.4	
Council Crest	40	13,837	200	69.2	
Burlingame Standpipe	68	19,302	340	56.8	
East Side.					
Low Gravity	(6486)	1063	676,425	5,315	127.3
Intermediate Gravity	(9176)	3571	946,385	17,855	53.0
High Gravity S. of Division ..	(6063)	116	25,885	580	44.6
North of Division	(4197)	235	51,686	1,175	44.0
Vernon Standpipe	(6926)	1329	278,625	6,645	41.9
Pump, Tabor Heights	(96)	87	32,784	435	75.3
Totals	(43602)	12,585	7,023,622	62,925	111.6
Or, excluding W. Side and E. Side Low Gravity Services	4134		4,315,350	20,670	
Totals		8451	2,708,272	42,255	64.1

From the foregoing it appears that there is quite a variation in the per capita rate in the several districts of the City, the lowest of all being in the Vernon district—41.9 gallons per day—while the highest rate is found in the West Side Low Service District—236.5—and in the East Side Low Service District—127.3. Both of these districts contain a number of manufacturing establishments, the consumption at such places not being segregated from the total of the district.

Omitting from the total the registration of the meters in these two districts, the average per capita rate of the metered services in exclusively residence districts is 64 gallons per day, or practically 50 per cent of that estimated for the City as a whole, including flat rate and metered services.

Diagram No. 1 has been prepared from the record of the readings of the 30-inch Venturi Meter, attached to the main supplying the East Side Intermediate Gravity Service district, during the month of July, 1914.

The minimum flow observed was on July 12th—4,220,000 gallons; maximum temperature, 76 degrees; maximum consumption, 7,750,000 gallons on July 18th; maximum temperature, 94 degrees. Average daily consumption, 6,089,000 gallons.

This diagram illustrates the fact that the rate of consumption during the evening sprinkling hours largely exceeds that at any other hour of the day. Instead of this being a uniform rate of consumption of the maximum of 7,750,000 gallons per day, it appears that at 5:00 P. M. the rate of consumption is 16,700,000 gallons, or more than double that amount, and in consequence of such excessive use the mains are often unable to supply the demand, and hence complaints arise.

For the purpose of remedying this difficulty a new rule was pro-

mulgated July 29th, providing that sprinkling might be done at any time between 2:00 and 12:00 P. M. on alternate days. The effect of this rule was to modify former conditions to an appreciable degree.

It is anticipated that with a more extended use of meters the difficulty caused by the excessive "peak load" during sprinkling hours will be almost entirely obviated.

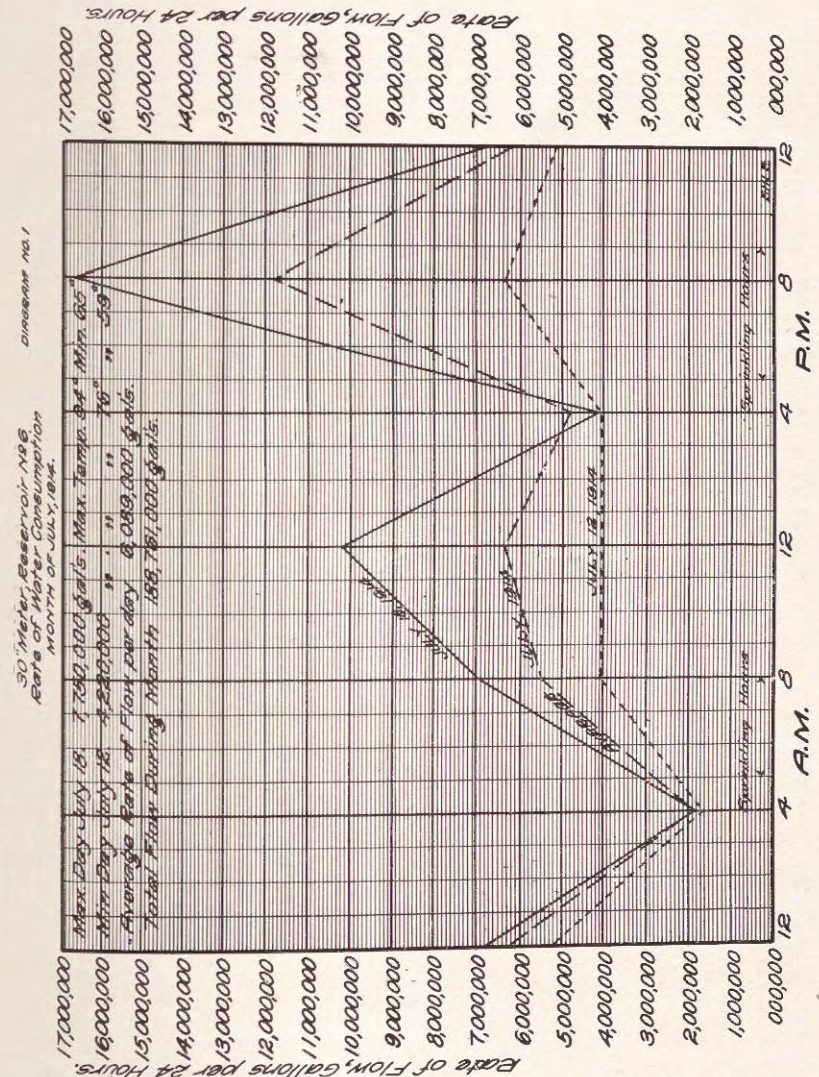
STATISTICS

The accompanying tables show the water mains laid in the several districts of the City during the year and the total mileage now in use.

A summary has also been prepared for the year ending November 30th, 1914, using therefor the form recommended by the New England Water Works Association for the compilation of data relating to water works maintenance and operation.

WATER MAINS IN USE NOVEMBER 30, 1914

Size.	WEST SIDE.			EAST SIDE.			
	C. I.	Steel or W. I.	Total Miles.	C. I.	Steel or W. I.	Wood.	Total Miles.
30"	0.871	4.282	5.153	4.674	1.800		6.474
24"	2.289	4.630	6.919	7.030	2.481		9.511
20"	5.143	0.667	5.810	2.116	0.586		2.702
18"	0.089	0.596	0.685		0.587		0.587
16"	4.181		4.181	9.350			9.350
14"	3.176		3.176	3.469			3.469
12"	8.884	1.088	9.972	16.930		1.788	18.718
10"	10.500	0.737	11.237	3.942		0.297	4.239
8"	23.122		23.122	134.633			134.633
7"						0.230	0.230
6"	40.310	1.733	42.043	56.484		1.772	58.256
5"						0.189	0.189
4"	15.913		15.913	16.040	1.166	3.620	20.826
Total 4" and over..	114.478	13.733	128.211	254.668	6.620	7.896	269.184
3 1/2"					0.052		0.052
3"	0.567		0.567		2.890	2.571	5.461
2 1/2"		0.182	0.182		1.418	0.313	1.731
2"		1.815	1.815		30.167	2.206	32.373
1 1/2"		0.110	0.110		28.792		28.792
1 1/4"		0.029	0.029		10.684		10.684
1"		0.461	0.461		9.708		9.708
3/4"		0.129	0.129		3.017		3.017
1/2"		0.061	0.061		1.105		1.105
Total under 4".....	0.567	2.787	3.354		87.833	5.090	92.923
Total all sizes.....	115.045	16.520	131.565	254.668	94.453	12.986	362.107



WATER MAINS IN USE NOVEMBER 30, 1914—Continued

Size.	ALBINA.				TOTALS.			
	C. I.	Steel or W. I.	Wood.	Total Miles.	C. I.	Steel or W. I.	Wood.	Total Miles.
30"					5.545	6.082		11.627
24"	2.143			2.143	11.462	7.111		18.573
20"	1.094			1.094	8.353	1.253		9.606
18"					0.089	1.183		1.272
16"	3.544			3.544	17.075			17.075
14"	2.290			2.290	8.935			8.935
12"	12.142			12.142	37.956	1.088	1.788	40.832
10"	1.023	0.050		1.073	15.465	0.787	0.297	16.549
8"	78.838	0.263	0.339	79.440	236.593	0.263	0.339	237.195
7"							0.230	0.230
6"	30.255	3.152	0.023	33.430	127.049	4.885	1.795	133.729
5"							0.189	0.189
4"	6.795	3.710		10.505	38.748	4.876	3.620	47.244
Total 4" and over.....	138.124	7.175	0.362	145.661	507.270	27.528	8.258	543.056
3½"						0.052		0.052
3"		0.794		0.794	0.567	3.684	2.571	6.822
2½"			0.757	0.757		1.600	1.070	2.670
2"	19.812	0.293	20.105		51.794	2.499		54.293
1½"	2.384		2.384		31.286			31.286
1¼"	0.662		0.662		11.375			11.375
1"	6.095		6.095		16.264			16.264
¾"	1.050		1.050		4.196			4.196
½"	0.099		0.099		1.265			1.265
Total under 4".....		30.896	1.050	31.946	0.567	121.516	6.140	128.223
Total all sizes.....	138.124	38.071	1.412	177.607	507.837	149.044	14.398	671.279

BULL RUN CONDUITS

	Miles.	Total Miles.
CONDUIT NO. 1—HEADWORKS TO MT. TABOR.		
42-inch steel (riveted).....	10.022	
35-inch steel (riveted).....	7.772	
33-inch steel (riveted).....	6.505—	24.299
CONDUIT NO. 2—HEADWORKS TO MT. TABOR.		
52-inch steel (lock-bar).....	10.018	
44-inch steel (lock-bar).....	14.742—	24.760
MT. TABOR TO CITY PARK.		
24-inch steel (submerged).....	0.887	
30-inch steel (submerged).....	0.387	0.774
32-inch cast iron (shore connections).....	6.020	
30-inch cast iron (shore connections).....	0.437—	6.457
Grand Total.....		56.290

PIPE ACQUIRED BY PURCHASE DURING THE FISCAL YEAR ENDING
NOVEMBER 30, 1914
EAST SIDE.

	Size.	Kind.	Length feet.	Total cost.
Gliese's Addition— E. 32nd St., Hawthorne Ave. to Market St...	8-inch	C. I.	450	\$567.81

Summary.

Size.	Kind.	Length feet.	Length miles.	Total cost.
8-inch.....	C. I.	450	0.085	\$567.81

PIPE ACQUIRED BY PURCHASE DURING THE FISCAL YEAR ENDING
NOVEMBER 30, 1914
ALBINA

	Size.	Kind.	Length feet.
Beaumont District—			
E. 41st St., The Alameda to Fremont St.....	8-inch	C. I.	1,030
E. 42nd St., The Alameda to Fremont St.....	12-inch	C. I.	1,030
E. 44th St., The Alameda to Fremont St.....	8-inch	C. I.	1,655
E. 37th St., S. L. Beaumont Add. to Wistaria Ave.	8-inch	C. I.	1,257
E. 38th St., S. L. Beaumont Add. to Wistaria Ave.	8-inch	C. I.	1,275
E. 39th St., S. L. Beaumont Add. to Beaumont St..	8-inch	C. I.	1,484
E. 40th St., S. L. Beaumont Add. to Stanton St.	8-inch	C. I.	763
E. 41st St., S. L. Beaumont Add. to Stanton St.	8-inch	C. I.	670
E. 42nd St., S. L. Beaumont Add. to Stanton St.	8-inch	C. I.	633
E. 44th St., S. L. Beaumont Add. to Wistaria Ave.	6-inch	C. I.	344
Total.....			10,141

Summary.

	Kind.	Length feet.	Length miles.	Total cost.
6-inch.....	C. I.	344	0.065	
8-inch.....	C. I.	8,767	1.660	
12-inch.....	C. I.	1,030	0.195	
Totals.....		10,141	1.920	\$14,333.76

RECAPITULATION
PIPE EXTENSIONS COMPLETED DURING THE FISCAL YEAR ENDING
NOVEMBER 30, 1914, BY DEPARTMENT FORCES

Size.	West Side. (Miles)	East Side (Miles)	Albina. (Miles)	Total (Miles)
1½-inch.....	.....	0.067	.....	0.067
2 -inch.....	0.219	3.441	2.816	6.476
2½-inch.....	.....	0.085	.....	0.085
Total Miles (under 4-in. dia.).....	0.219	3.593	2.816	6.628
4 -inch.....	0.125	0.217	.....	0.342
6 -inch.....	0.269	3.749	1.062	5.080
8 -inch.....	0.985	16.535	7.653	25.173
12 -inch.....	0.122	1.744	1.893	3.759
16 -inch.....	.....	0.775	.....	0.775
24 -inch.....	.....	1.540	.....	1.540
30 -inch.....	.....	0.410	.....	0.410
Total Miles (4-in. dia. and over)...	1.501	24.970	10.608	37.079

PIPE EXTENSIONS ACQUIRED BY PURCHASE DURING THE FISCAL
YEAR ENDING NOVEMBER 30, 1914

Size.	West Side. (Miles)	East Side. (Miles)	Albina. (Miles)	Total (Miles)
6-inch.....	0.065	0.065
8-inch.....	0.085	1.660	1.745
12-inch.....	0.195	0.195
Total Miles.....	0.085	1.920	2.005

PIPE EXTENSIONS ACQUIRED BY BILL OF SALE DURING THE FISCAL
YEAR ENDING NOVEMBER 30, 1914

Size.	West Side. (Miles)	East Side. (Miles)	Albina. (Miles)	Total (Miles)
½-inch.....	.....	0.041	0.020	0.061
¾-inch.....	0.033	0.189	0.020	0.242
1 -inch.....	0.014	0.250	0.040	0.304
1¼-inch.....	.....	0.151	0.077	0.228
1½-inch.....	.....	0.601	.....	0.601
2 -inch.....	0.600	1.133	0.228	1.961
4 -inch.....	.....	0.334	.....	0.334
6 -inch.....	0.718	0.095	.....	0.813
8 -inch.....	0.280	.....	.....	0.280
Total Miles.....	1.645	2.794	0.385	4.824

TOTALS

Size.	West Side. (Miles)	East Side. (Miles)	Albina. (Miles)	Total (Miles)
1/2-inch	.....	0.041	0.020	0.061
3/4-inch	0.033	0.189	0.020	0.242
1-inch	0.014	0.250	0.040	0.304
1 1/4-inch	.....	0.151	0.077	0.228
1 1/2-inch	.....	0.668	.....	0.668
2-inch	0.819	4.574	3.044	8.437
2 1/2-inch	.....	0.085	.....	0.085
4-inch	0.125	0.551	.....	0.676
6-inch	0.987	3.844	1.127	5.958
8-inch	1.265	16.620	9.313	27.198
12-inch	0.122	1.744	2.088	3.954
16-inch	.....	0.775	.....	0.775
24-inch	.....	1.540	.....	1.540
30-inch	.....	0.410	.....	0.410
Total Miles	3.365	31.442	15.729	50.536

PIPE REMOVED OR ABANDONED DURING THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

Size.	West Side. (Miles)	East Side. (Miles)	Albina. (Miles)	Total (Miles)
1/2-inch	.....	0.144	.....	0.144
3/4-inch	.....	0.127	0.008	0.135
1-inch	.....	2.723	.....	2.723
1 1/4-inch	.....	1.423	0.046	1.469
1 1/2-inch	.....	1.900	0.313	2.213
2-inch	.....	1.876	1.077	2.953
2 1/2-inch	.....	0.047	.....	0.047
3-inch	.....	0.255	.....	0.255
4-inch	.....	1.608	0.320	1.928
6-inch	0.008	0.157	.....	0.165
8-inch	0.123	.....	.....	0.123
10-inch	.....	1.948	.....	1.948
Totals	0.131	12.208	1.764	14.103

RECAPITULATION—DISTRIBUTION SYSTEM—FISCAL YEAR ENDING
NOVEMBER 30, 1914

Mains, 4 inches in diameter and over, laid and mains taken out or abandoned, showing Net Increase.

	4-in.	5-in.	6-in.	7-in.	8-in.	10-in.
West Side—						
Laid or acquired	0.125	.....	0.987	.....	1.265	.....
Removed or abandoned	.....	.....	0.008	.....	0.123	.....
Net increase	0.125	.....	0.979	.....	1.142	.....
East Side—						
Laid or acquired	0.551	.....	3.844	.....	16.620	.....
Removed or abandoned	1.608	.....	0.157	.....	.....	1.948
Net increase	-1.057	.....	3.687	.....	16.620	-1.948
Albina—						
Laid or acquired	.....	.....	1.127	.....	9.313	.....
Removed or abandoned	0.320	.....	.....	.....	.....	.....
Net increase	-0.320	.....	1.127	.....	9.313	.....

	12-in.	16-in.	24-in.	30-in.	Total Miles.
West Side—					
Laid or acquired	0.122	.....	.....	.....	2.499
Removed or abandoned	.....	.....	.....	.....	0.131
Net increase	0.122	.....	.....	.....	2.368
East Side—					
Laid or acquired	1.744	0.775	1.540	0.410	25.484
Removed or abandoned	.....	.....	.....	.....	3.713
Net increase	1.744	0.775	1.540	0.410	21.771
Albina—					
Laid or acquired	2.088	.....	.....	.....	12.528
Removed or abandoned	.....	.....	.....	.....	0.320
Net increase	2.088	.....	.....	.....	12.208

Total miles of pipe laid or acquired, 4 in. diameter and over. 40.511 miles
Total miles of pipe, 4 in. diameter and over, removed or abandoned 4.164 miles

Net increase, 4 inches diameter and over. 36.347 miles

RECAPITULATION—DISTRIBUTION SYSTEM—FISCAL YEAR ENDING NOVEMBER 30, 1914

Mains Laid, under 4-in. diameter, taken out or abandoned, showing net increase.

	½-in.	¾-in.	1-in.	1¼-in.	1½-in.
West Side—					
Laid or acquired.....	.....	0.033	0.014	.....	.....
Removed or abandoned.....	.....	.....	.....	.....	.....
Net increase.....	.....	0.033	0.014	.....	.....
East Side—					
Laid or acquired.....	0.041	0.189	0.250	0.151	0.668
Removed or abandoned.....	0.144	0.127	2.723	1.423	1.900
Net increase.....	-0.103	0.062	-2.473	-1.272	-1.232
Albina—					
Laid or acquired.....	0.020	0.020	0.040	0.077	.....
Removed or abandoned.....	.....	0.008	.....	0.046	0.313
Net increase.....	0.020	0.012	0.040	0.031	-0.313

	2-in.	2½-in.	3-in.	Total Miles.
West Side—				
Laid or acquired.....	0.819	.....	.....	0.866
Removed or abandoned.....	.....	.....	.....	.....
Net increase.....	0.819	.....	.....	0.866
East Side—				
Laid or acquired.....	4.574	0.085	.....	5.958
Removed or abandoned.....	1.876	0.047	0.255	8.495
Net increase.....	2.698	0.038	-0.255	-2.537
Albina—				
Laid or acquired.....	3.044	.....	.....	3.201
Removed or abandoned.....	1.077	.....	.....	1.444
Net increase.....	1.967	.....	.....	1.757

Total miles pipe laid or acquired under 4 inches diameter..... 10.025 miles
 Total miles pipe removed or abandoned under 4 inches diameter... 9.939 miles
 Net increase under 4 inches diameter..... 0.086 miles

STATEMENT OF PIPE LAID BY PRIVATE CONTRACTS, UNDER 1910 CHARTER AMENDMENT, DURING THE FISCAL YEAR ENDING NOVEMBER 30, 1914, AND NOT TAKEN OVER BY THE CITY

	Size (Ins.)	Length (Feet)	Estimated Cost.
Cactus Drive et al—			
Green Ave., Park Ave. to 257 ft. N. N. L. Cedar Ave.	6	418	\$.....
Cactus Drive, Green Ave. to Cedar Ave.....	6	943	.....
Cedar Ave., 2 ft. W. E. L. City Park to 100 ft. E...	6	103	.....
Total length.....		1464	\$2,632.00
Georgian Court, Patton Road to 631 feet north.....	6	631	775.00

SUMMARY.

Size (Inches)	Length (Feet)	Length (Miles)	Estimated Cost.
6	2095	0.397	\$3,407.00

STATEMENT OF ALL PIPE LAID BY PRIVATE CONTRACT, UNDER
1910 CHARTER AMENDMENT, TO NOVEMBER 30, 1914

Date.	Size (Inches)	Length (Feet)	Estimated Cost.
1911 Benedictine Heights.....	8	2264	\$ 3,313.60
Buehner's Addition.....	8	1548	
	6	1426	3,739.30
Murraymead Addition.....	8	1170	
E. 40th St., Thompson to S. L. Beaumont	8	1742	3,990.70
Beaumont Add. (South Section).....	8	753	950.00
	6	9206	
E. 39th St., E. Stark to E. Ankeny.....	6	2106	16,200.00
E. 17th St., Holgate St. to 50 ft. N. N. line of Mall.....	8	1521	2,300.00
	8	445	650.00
Beaumont Addn. (North Section).....	8	6515	
	12	2465	15,000.00
Garfield, Alberta to Killingsworth.....	8	1310	1,990.00
Colonial Hts. Addn.....	8	2736	
	6	2369	6,300.00
Mallory Addition.....	8	2568	
E. 31st St., Oregon St. to Sandy.....	6	1281	5,200.00
Knott St., E. 24th to E. 28th Sts.....	8	1188	1,765.00
	8	1087	1,640.00
Kings Heights Addn.....	8	2987	
	6	1105	6,631.07
1912 Morningside Addition.....	6	2315	
	8	79	2,900.00
Knott St. Addition.....	8	1108	1,640.00
Holgate St. Addn.....	8	4873	
	6	647	7,880.00
E. 26th St., Harrison to Stephens.....	8	461	600.00
Knott St., E. 28th to E. 29th Sts.....	8	195	360.00
Euclid Heights.....	8	1745	
	6	1188	4,140.00
Gleneyrie Addition.....	8	2347	
	16	952	6,300.00
E. 25th St., 102 ft. S. S. L. to 338 ft. N. N. L. Stanton Street.....	8	500	700.00
Alameda Park Addn.....	8	3969	4,700.00
Fairfax Terrace, Weslover Road to 942 ft. W.....	6	942	1,200.00
Hollywood Addn.....	8	6439	
Cumberland Road, Fairfax Ter. to 390 ft. S.....	4	1230	11,900.00
	6	390	475.00
Kings Hts. Addition.....	8	1724	
	6	3792	7,000.00
Eastmoreland Dist. (Part of).....	8	37541	
	6	634	56,950.00
1913 10th St., Witham to Hume.....	8	2115	3,050.00
Arlington Heights.....	6	13781	
	8	4046	24,000.00
Eastmoreland District (Part of).....	6	896	5,950.00
Dixon Place.....	8	3227	10,200.00
	8	6749	
E. 22nd St., E. Grant to E. Harrison...	6	1718	
E. Lincoln St., E. 20th to E. 22nd Sts..	8	809	3,350.00
E. 20th St., E. Harrison to E. Grant Sts.			
E. Grant St., E. 20th St. to W. L. Mur- raymead Addition.....			
1914 Cactus Drive et al.....	6	1464	2,632.00
Georgian Court, Patton Rd. to 631 ft. N..	6	631	775.00

SUMMARY

Size (Inches)	Length (Feet)	Length (Miles)	Estimated Cost.
4	1,230	0.233	\$.....
6	38,427	7.278	.....
8	113,225	21.444	.....
12	2,465	0.467	.....
16	952	0.180	.....
Totals.....	156,299	29.602	\$226,371.67

STATEMENT OF ALL PIPE LAID BY PRIVATE CONTRACT, UNDER
PROVISIONS OF 1910 CHARTER AMENDMENT, AND TAKEN OVER
BY THE CITY TO NOVEMBER 30, 1914

Date.	Size (Inches)	Length (Feet)	Estimated Cost.
1913 Murraymead Addition.....	8	1170	
	6	1742	\$ 3,471.42
Mallory Addn.....	8	2568	
	6	1281	5,022.33
E. 40th St., Thompson to S. L. Beaumont	8	753	919.58
E. 17th St., Holgate to 50 ft. N. N. L. Mall.....	8	445	650.00
	6	344	
1914 Beaumont District (Part of).....	8	8767	
	12	1030	14,333.76

SUMMARY

Size (Inches)	Length (Feet)	Length (Miles)	Estimated Cost.
6	3,367	0.637	\$.....
8	13,703	2.595	.....
12	1,030	0.195	.....
Totals.....	18,100	3.427	\$24,397.09

SUMMARY OF PIPE LAID BY PRIVATE CONTRACT UNDER CHARTER
AMENDMENT OF 1910, NOT YET TAKEN OVER BY CITY
(Not Included in Foregoing Summaries of Pipe in Use.)

Size (Inches)	Length (Feet)	Length (Miles)	Estimated Cost.
4	1,230	0.233	\$.....
6	35,060	6.641	.....
8	99,522	18.849	.....
12	1,435	0.272	.....
16	952	0.180	.....
Totals.....	138,199	26.175	\$201,974.58

SUMMARY OF STATISTICS FOR YEAR ENDING NOVEMBER 30, 1914—
IN FORM RECOMMENDED BY NEW ENGLAND WATER WORKS
ASSOCIATION

MUNICIPAL WATER WORKS

City of Portland, Multnomah County, State of Oregon.

GENERAL STATISTICS.

Population by census of 1910: 207,214.
Date of construction: 1893-4. Additions in 1910-11.
By whom owned: The City of Portland.
Source of supply: Bull Run River.
Mode of supply: Gravity and pumping.

PUMPING STATISTICS.

1. Builders of pumping machinery:

- 2 Reidler pumps, Fraser & Chalmers, Chicago, Ill.
(1—1,000,000 gallons capacity per 24 hours.)
(1—500,000 gallons capacity per 24 hours.)
- 3 Gould pumps, Gould Mfg. Co., Seneca Falls, N. Y.
(1—540,000 gallons capacity in 24 hours.)
(1—220,000 gallons capacity in 24 hours.)
(1—250,000 gallons capacity in 24 hours.)
- 1 Smith & Vaile, Platt Iron Works, Dayton, Ohio.
(1—375,000 gallons capacity in 24 hours.)

In reserve:

- 3 Holly-Gaskell compound pumps, Holly Mfg. Co., Lockport, N. Y.
(1—10,000,000 gallons capacity per 24 hours.)
(1—2,500,000 gallons capacity per 24 hours.)
(1—500,000 gallons capacity per 24 hours.)
 - 2 Worthington pumps, Henry R. Worthington, N. Y.
(2—5,000,000 gallons capacity per 24 hours.)
2. Description of fuel used:
- (a) Kind: Wood and electricity.
 - (b) Brand of coal: Pelton wheel and electric motor for operating plants; cordwood for reserve plants.
 - (c) Average price of coal per gross ton, delivered \$.....
 - (d) Percentage of ash,
 - (e) Wood: Price per cord, \$.....
3. Coal consumed for the year, pounds.
4. (Pounds of wood consumed) divided by 3 equals equivalent amount of coal, lbs.
5. Total equivalent coal consumed for the year (3) - (4) lbs.
6. Total pumpage for the year: 260,000,000 gallons.
7. Average static head against which pumps work, 175 to 585 feet.
8. Average dynamic head against which pumps work: 150 to 570 feet.
9. Number of gallons pumped per pound of equivalent coal (5) ...
10. Duty—gallons pumped (6) x 8.34 (pounds) x 100 x dynamic head (8)
- Total fuel consumed (5)
Cost of pumping, figured on pumping station expense, \$.....
11. Per million gallons pumped, \$.....
12. Per million gallons raised one foot (dynamic), \$.....

FINANCIAL STATISTICS

Receipts.

Balance brought forward.....	\$ 193,775.76
(a) From ordinary (maintenance) receipts.....	
(b) From extraordinary receipts (bonds, etc.).....	
Total	\$ 193,775.76
From Water Rates:	
A. Fixture rates	\$ 406,124.70
B. Meter rates	412,406.35
C. Total from consumers.....	\$ 818,531.05
D. For hydrants	
E. For fountains	
F. For street watering.....	
G. For public buildings.....	
H. For miscellaneous use.....	27,316.70
I. General appropriation	
J. Total from municipal department.....	725.38
K. From tax levy.....	
L. From bond issues.....	433,787.43
M. From other sources.....	16,594.17
N. Total	\$ 1,490,730.49

EXPENDITURES.

Water Works Maintenance:	
AA. Operation (management and repairs).....	\$ 255,550.02
BB. Special	
CC. Total maintenance	\$ 255,550.02
DD. Interest on bonds.....	342,760.00
(CC and DD)	
EE. Payment on bonds.....	
FF. Sinking fund	357,068.11
Water Works Construction:	
GG. Extension of mains, etc.....	380,955.71
HH. Extension of services.....	13,073.42
II. Extension of meters.....	6,666.84
JJ. Special: Tools, equipment and stock material.....	20,375.50
Office and other buildings.....	10,395.31
Water works property purchased.....	
Improvement of real property.....	2,524.48
Reservoir No. 5.....	3,798.95
Reservoir No. 6.....	4,008.72
Lowering submerged pipes Nos. 1 and 2.....	63,054.82
Clearing and roads.....	2,874.67
Bull Run Conduit No. 2.....	3,445.48
New Headworks	1,789.13
Surveys and explorations.....	2,123.24
KK. Total construction	1,470,464.40
LL. Unclassified expenses	
MM. Balance (aa) ordinary	
(bb) extraordinary	
Net balance.....	20,266.09
N. Total	\$ 1,490,730.49
Disposition of balance:	
O. Net cost of works to date.....	\$11,659,369.92
P. Bonded debt at date.....	7,449,000.00
J. Payments into Sinking Fund to date.....	788,960.00
R. Average rate of interest.....	4, 5 and 6%

STATISTICS RELATING TO DISTRIBUTION SYSTEM.

Mains.

1. Kind of pipe: Cast Iron, Steel, Wrought Iron and Wood.	
2. Sizes: From 1 inch to 30 inches.	
3. Extended—	
4 inches, and over, in diameter, miles.....	40.511
Under 4 inches diameter, miles.....	10.025
Total, miles.....	50.536

DEPARTMENT OF PUBLIC UTILITIES

4. Discontinued, miles.....	14 103
5. Total now in use, miles.....	671.279
6. Cost of repairs per mile.....	\$.....
7. Number of leaks per mile.....	.....
8. Length of pipes less than 4 inches in diameter, miles.....	128.223
9. Number of hydrants added during the year (public and private)	346
Number added on mains owned by the City.....	344
Number added on mains laid by private parties under City supervision, not yet taken over by City.....	2
Total.....	346
10. Number of hydrants, public and private, now in use.....	4904
11. Number of stop gates added during the year:	
Number added on mains owned by City.....	395
Number added on mains laid by private parties under City supervision, not yet taken over by City.....	2
Total.....	397
12. Number of stop gates now in use.....	6569
13. Number of stop gates smaller than 4 inches in diameter.....	502
14. Number of blow-offs.....	263
15. Range of pressures on mains: 20 pounds to 80 pounds.	

SERVICES

16. Kind of pipe: Galvanized iron.	
17. Sizes:	
18. Extended, feet.....	
19. Discontinued, feet.....	
20. Total now in use, miles.....	
21. Number of service taps added during the year.....	2540
22. Number now in use.....	50,416
23. Average length of service, feet.....	.....
24. Average cost of service for the year.....	\$.....
25. Number of meters added.....	578
26. Total in use.....	13,976
Average number in actual use.....	13,687
27. Percentage of dwelling services metered.....	20.9%
28. Percentage of receipts from metered water (B ÷ C).....	.....
29. Number of motors and elevators added.....	.....
30. Number now in use.....	.....

STATISTICS OF CONSUMPTION OF WATER

1. Estimated total population to date.....	.....
2. Estimated population on lines of pipe.....	286,000
3. Estimated population supplied.....	252,000
4. Total consumption for the year, gallons.....	12,079,000,000
5. Total passed through meters.....	2,528,000,000
6. Percentage of consumption metered.....	20.9%
7. Average daily consumption.....	33,000,000
8. Gallons per day to each inhabitant.....	.....
9. Gallons per day to each consumer.....	116
10. Gallons per day to each tap.....	580
11. Cost of supplying water per million gallons, figured on total maintenance (Item CC).....	\$.....
12. Total cost of supplying water per million gallons, figured on total maintenance, plus interest on bonds.....	\$.....

BUREAU OF STREET CLEANING

BUREAU OF STREET CLEANING

	1913	
Number of miles of hard surfaced street.....	323.38	
Number of miles of Macadam street.....	128.52	
	1914	
Number of miles of hard surfaced streets.....	355.27	
Number of miles of Macadam street.....	129.22	
Increase in hard surfaced streets.....	31.89	

As will be seen by the above tabulation, there was a considerable increase in miles of hard surfaced street to be cleaned by this Bureau, although no additional equipment for handling this increase was purchased during the past year, with the exception of one motor-driven street sweeper, which was put into commission in November, 1914. However, the Bureau has managed, by cleaning some of the least traveled streets less frequently and extending the routes into the new districts, to keep the number of complaints down to the minimum.

From experience so far with the motor sweeper, it is a demonstrated success and will relieve the situation somewhat, as we will be able to give better service in the outlying districts.

Keeping in mind the constant increase in improved street area, it is deemed wise to confine all future purchases of street cleaning mechanism to the motor-driven type, believing that by such conversion the frequency of cleaning streets will be increased without additional expense to the City. From information at hand, the fact is established that horse-driven apparatus is excessively expensive to the City.

The appropriation for conducting the Bureau of Street Cleaning and Sprinkling during the year 1915 has been reduced to a minimum and, in order to give the same degree of efficiency in the service as has been rendered in the past, some legislation should be enacted restraining citizens from throwing the debris into their streets which is gathered in cleaning the yards and sidewalks. Also, the occupant of the premises should be expected to clean up rubbish and debris commonly left in the gutter by delivery of fuel. In many instances, immediately after a street has been cleaned, it has been found littered up by deposits of debris from yards and lawns, and sawdust and chips.

In former reports considerable emphasis has been placed on the importance of securing convenient dumping places. While there are many gulches within the City which are natural depositories for street cleanings and could be used without inconvenience or nuisance, provided care is taken with them, the Bureau is constantly receiving remonstrances against their use. The remonstrators fail to appreciate the loss to the City in hauling street cleanings great distances, and seem to have an exaggerated fear of insanitary conditions. When it is understood that more than one-fifth of the time of our pick-up carts is wasted in long trips to these isolated dumping places, some idea of the expense to the Bureau may be formed.

During the year 1914, it was decided that the Bureau of Street Cleaning should oil the Macadam and gravel streets, and the con-

tract method was abandoned. This was accomplished, and during the year a saving of \$4400 was made and in addition the result was much more satisfactory, as the complaints from dust on Macadam streets were reduced fully 75 per cent.

The following statement will show the frequency with which the several districts throughout the City are cleaned:

WEST SIDE NIGHT CREW

Cleaned Every Night

All streets East of 14th, from Yamhill to Burnside.
All streets East of 9th, from Burnside North, except Front street, from Glisan North, and 7th Street, from Johnson North.
All streets East of 5th, from Yamhill to Jefferson.
All streets East of 4th, from Jefferson to Mill.
And the main thoroughfares running out from the business center as follows: Alder, to Lownsdale; Washington, to 20th; Burnside, to 16th; Everett, to 12th; Flanders, to 12th; Front, to Hall; 1st, to Arthur; and 2nd, to Montgomery.
This area contains 454 blocks.

WEST SIDE DAY CREW

Cleaned Three Times Each Week

District lying between 9th and 14th, and Burnside and Hoyt.
This area contains 40 blocks.

Cleaned Twice Each Week

All streets west of 5th, from Yamhill South, except King's and Portland Heights.
All streets west of 14th, from Yamhill to Overton, except those main thoroughfares cleaned every day and mentioned above.
This area contains 600 blocks.

Cleaned Every Four Days

All streets North of Overton.
All streets South of Mill, except those main thoroughfares cleaned every day and mentioned above.
Fifth, from Jefferson South; 7th, from Johnson North, and Front, from Glisan North.
This area contains 375 blocks.

EAST SIDE NIGHT CREW

Cleaned Every Night

All hard surfaced streets lying between Ellsworth and Holliday, from Grand to the River; including the Willamette River Bridges.
Also the following individual streets: Union, to Alberta; Grand, to Broadway; Russell, from Williams to Gantenbein; McMillan, from Williams to Crosby; Larrabee, from Holliday to McMillan; Burnside, from Grand to 10th; Broadway, from Union to 8th; Williams, from Broadway to Alberta; Fargo, from Williams to Vancouver; Knott, from Union to Vancouver; Milwaukee, from Holgate to Hawthorne; Division, from 10th to 21st; 21st, from Division to Powell; Hawthorne, from Grand to 14th; and Belmont, from Grand to 30th.
This area contains 296 blocks.

Cleaned Three Times a Week

Crosby, from Holliday to McMillan; 3rd, Holliday to Weidler; Larrabee, from McMillan to Hancock; Williams, from Holliday to Broadway; Multnomah, from 1st to Grand; Wasco, from Union to Grand Avenues; Hassalo, from Larrabee to Grand; Burnside, from 10th to 24th; Broadway, from 8th to 20th; Holliday, from Grand to 13th; Schuyler, from 1st to 9th; 2nd, from Hancock to Broadway; Russell, from Gatenbein to Goldsmith; Borthwick, from Stanton to Russell; Albina, from Page to River; Mississippi, from Stanton to Goldsmith; Commercial, from Knott to Russell; Milwaukie, from Bybee to Holgate; 21st, from Division to Bush; Hawthorne, from 14th to 30th; 14th, from Hawthorne to Belmont; Morrison, from Union to 20th; Union, from Salmon to Hawthorne; 11th, from Brooklyn to Frederick; and 13th, from Hawthorne to Morrison.
This area contains 173 blocks.

Cleaned Once Each Week

Sixteenth, from Holgate to Powell; 16th, from Division to Brooklyn; 15th, from Division to Ellsworth; 14th, from Division to Clinton; 13th, from Division to Clinton; and Ivon, from 12th to 16th.
This area contains 31 blocks.

EAST SIDE DAY CREW

Owing to the large area to be cleaned by this crew, comprising approximately 200 miles, and the lack of equipment, it is impossible to have regular routes. The crew cleans about 26 miles per day.

There are 134 miles of Macadam and Gravel streets in the City, which must be cleaned. With the present crew we clean an average of 1.3 miles per day.

The following table comprises the employees for the operation of the Street Cleaning Bureau:

Superintendent	1	Foreman Repair Shop.....	1
Clerk	1	Repairmen	2
District Superintendents	3	Broommakers	2
Foremen	2	Horseshoer	1
Chauffeurs	3	Hostlers	10
		Laborers	207

The West Side Day District Superintendent has 1 truck chauffeur and 54 laborers, who work as follows:

Nine men operate two horse-brooms, one sprinkling wagon and three carts, and clean an average of 104,000 square yards (5 miles) per day.

Twelve men operate five flushing machines and two carts, and clean 202,000 square yards (9¾ miles) per day.

Eighteen men, each with a patrol cart and dressed in a white suit, patrol the main business thoroughfares during the day, keeping them free of horse-droppings, paper and all unsightly rubbish, which accumulates constantly during the day. These same streets are cleaned every night by the night crew, but patrolling them during the day aids materially in keeping them in a presentable condition. They patrol an average of eight blocks each, four times per day.

Three men clean Macadam and Gravel streets, by scraping up the mud and rubbish, which is then hauled away. These men also handsweep the hard surfaced streets in those districts which are

too hilly to take our apparatus. As these hard surfaced streets are not travelled much, owing to the grades, they never become very dirty. These men clean an average of 6240 square yards (3-10 miles) Macadam and Gravel streets per day.

Three men, with one horse and cart, remove and haul away the dirt from catch basins. These men clean an average of 50 catch basins each day, removing about five yards of dirt.

One man levels and keeps the dumps in a safe condition for dumping.

Two men work as hostlers in the barn, and 1 removes the manure and hauls it away from the barn.

One chauffeur and 2 laborers, with a 3-ton auto truck, haul away the rubbish collected by the patrol cart men, and the dirt from the Macadam and Gravel streets. This truck does the work which formerly required four men and four horses to perform.

In order to give the men their annual vacation, it is necessary for this crew to have 3 men for vacation relief.

The West Side Night District Superintendent has 42 laborers, who work as follows:

Thirty-one men operate 6 horse-power brooms, 2 sprinkling wagons, and 10 carts, and clean an average of 384,800 square yards (18½ miles) each night.

Six men operate 3 flushing machines and clean an average of 93,600 square yards (4½ miles) per night.

Three men, with one horse and cart remove and haul away the dirt from catch basins in the business district. These men clean an average of 50 catch basins each night.

In order to give the men their annual vacation, it is necessary for this crew to have 2 men for vacation relief.

The East Side District Superintendent has 2 truck chauffeurs and 65 laborers, who work as follows:

Twelve men operate three horsepower brooms, one sprinkling wagon and four carts, and clean an average of 192,400 square yards (9¼ miles) per day.

The new motor Sweeper, which has just been put into service, requires one chauffeur and one laborer, with the use of a man with a horse and cart, a portion of the day. This machine cleans an average of 72,800 square yards (3½ miles) per day.

Twelve men operate five flushing machines and two carts, and clean an average of 197,600 square yards (9½ miles) per day.

Six men operate two Squeegee machines and two carts, and clean an average of 140,400 square yards (6¾ miles) per day. These machines can be used successfully only on perfectly smooth pavements, but do very effective work on that class of streets.

One man with a Patrol cart, patrols the business section in the vicinity of Williams Avenue and Russell Streets. He patrols 30 blocks, twice each day.

Five men, employed sweeping crosswalks in the residence districts, clean an average of 200 crosswalks per day.

Four men, with two horses and carts, remove and haul away the dirt from catch basins. These men clean an average of 95 catch basins per day, removing about 12 yards of dirt.

One man levels and keeps the dumps in a safe condition for dumping.

Three men work as hostlers in the barns.

Fourteen men clean Macadam and Gravel streets, by scraping up the mud and rubbish, which is then hauled away. These men clean an average of 20,800 square yards (1 mile) per day.

Two chauffeurs and four laborers, with two 5-ton auto trucks are employed at carting away the dirt which has been scraped up on the Macadam and Gravel streets by the hoeman.

In order to give the men their annual vacation, it is necessary for this crew to have 3 men for vacation relief.

The East Side Night Foreman (Hancock Barn Division) has 21 laborers, who work as follows:

Sixteen men operate three horse-power brooms, one sprinkling wagon and five carts, and clean an average of 176,800 square yards (8½ miles) per night.

Four men operate two flushing machines and clean 76,960 square yards (3 7-10 miles) per night.

In order to give these men their annual vacation, it is necessary to have one man for vacation relief.

The East Side Night Foreman (Brooklyn Barn Division) has 25 laborers, who work as follows:

Eighteen men operate 3 horse-power brooms, 1 sprinkling wagon and 7 carts, and clean an average of 197,600 square yards (9½ miles) per night.

Six men operate three flushing machines and clean an average of 97,760 square yards (4-7/10 miles) per night.

In order to give the men their annual vacation, it is necessary for this crew to have one man for vacation relief.

Following is a statement of the average cost of cleaning by the various methods:

	Per 1000 sq. yds.	Per mile.
Average cost of horse-broom sweeping.....	\$0.31½	\$ 6.56
Average cost of motor-broom sweeping.....	.13	2.70
Average cost of flushing.....	.24	4.98
Average cost of squeegee sweeping.....	.14½	2.96
Average cost of hand patrol sweeping.....	.33 3-5	7.00
Average cost of cleaning macadam and gravel.....	2.97	61.92
Average cost of cleaning crosswalks, each.....	.07½	
Average cost of cleaning catch basins, each.....	.17½	

The Bureau oiled 131.45 miles of City streets during the summer season, at a cost of \$8,891.53. Following is a statement of the distances oiled in the various widths:

42 feet wide.....	.1 miles or	.7 miles 6 feet wide
36 feet wide.....	1.9 miles or	11.4 miles 6 feet wide
30 feet wide.....	8.55 miles or	42.75 miles 6 feet wide
24 feet wide.....	92.15 miles or	368.6 miles 6 feet wide
18 feet wide.....	21.45 miles or	64.35 miles 6 feet wide
12 feet wide.....	7.2 miles or	14.4 miles 6 feet wide
6 feet wide.....	.1 miles or	.1 miles 6 feet wide
	131.45	502.3

Average cost per six-foot mile, \$17.70.

Following is a statement of the appropriations and receipts, expenditures, and unincumbered balances, in the Street Cleaning account for the year ending November 30, 1914:

	Appropriations, including Trans- fers, Credits, etc.	Incumbrance	Unincumbered Balance
Personal Service.....	\$235,580.49	\$214,592.16	\$20,988.33
Supplies	50,791.17	44,090.79	6,700.42
Material	1,670.28	1,505.72	164.56
Equipment	9,978.00	9,788.04	189.96
Construction and Extension.....	50,000.00	42,662.44	7,337.56
Repairs	4,917.75	4,436.14	481.61
Transportation and Communication..	4,693.50	3,467.33	1,226.17
Contingencies	2,083.12	735.93	1,347.19
Totals	\$359,714.31	\$321,278.51	\$38,435.80

Some of the above is estimated, as we have not received returns from the Purchasing Bureau.

REAL PROPERTY OWNED BY THIS BUREAU

Lots 5, 8, 9, 10, 11, and 12, Block 1, Davenport Addition, with old wagon shed and repair shop and a 2-story barn under construction.

Lots 1, 2, 7 and 8, Block 251, Holliday Addition, with 2-story frame barn.

Parcel 112x200 feet at Milwaukie and Powell Streets, with 2-story brick barn.

STATEMENT OF LIVESTOCK OWNED BY THIS BUREAU

Horses on hand December 1, 1913.....	164	
Horses received during the year.....	2	166
Horses sold during the year.....	4	
Horses died during the year.....	2	
Horses killed during the year.....	2	8
Horses on hand November 30, 1914.....		158

HORSESHOEING

During the year 1914 horseshoeing for this Bureau has been performed by our own employees at the respective barns, resulting in a distinct economy, not only in actual saving in dollars and cents, but in the time lost per horse as compared with previous years. Under the commercial shop method the average time lost per horse was four hours. Under our present method the time lost is one and one-half hours per horse.

Below will be found a comparative table, which shows the difference in horseshoeing cost of this Bureau:

Total cost shoeing 164 horses Nov. 30, 1911, to Dec. 1, 1912.....	\$6,072.75
Total cost shoeing 165 horses Nov. 30, 1912, to Dec. 1, 1913.....	6,506.85
Total cost shoeing 158 horses Nov. 30, 1913, to Dec. 1, 1914.....	4,024.43
Average cost per horse for year 1912.....	37.03
Average cost per horse for year 1913.....	39.44
Average cost per horse for year 1914.....	25.47
Saving per horse in 1914 over 1913.....	13.97
Total for year.....	2,482.42

The increase in 1913 over 1912 was due, mainly, to the use of rubber on a greater number of the horses.

BUREAU OF GARBAGE DISPOSAL

The activities of the Bureau of Garbage Disposal for the year 1914 were confined to the operation of the destructor located on the five-acre tract at Guild's Lake.

This destructor, which is of the Smith type, was accepted in December, 1911. Its guaranteed capacity was 150 tons per day of twenty-four hours. The guaranteed cost per ton, under full capacity, was 50 cents.

Since the acceptance of this plant in 1911, the amount of garbage and rubbish destroyed has gradually increased, until at the present time the plant is operating far beyond its capacity. The increase in garbage during the three years of the operation of the destructor and the consequent deterioration of the plant, rendered it imperatively necessary that it be shut down to make extensive repairs.

Early in September, in order to relieve the strain on the plant, it was determined to take advantage of this condition to experiment with the dumping of garbage. A dump was established in the upper end of Marquam Gulch, and was continued for about six weeks, when it was abandoned.

In this connection it is well to state that the experiment in this city was unsuccessful, due largely to the fact that in the present system of collection, the percentage of ashes received is very small. Late in October, both units of the destructor having been repaired, the entire plant was put in commission, and is now in splendid condition.

It is wise at this time to take up, definitely, the matter of increased facilities for destruction, in order that we may install a municipal collection system of garbage. Taking as a basis the most conservative estimate of garbage and refuse collected by other cities, namely, $1\frac{1}{4}$ tons per thousand of population, it is evident that the City of Portland is collecting less than 50 per cent of the garbage and refuse in the city, yet, under present conditions and our facilities for destruction, it is folly to contemplate municipal collection until we have increased our capacity for the destruction of garbage.

It is suggested and recommended that bonds be immediately sold for acquiring a site and construction of an additional destructor of not less than 150 tons capacity. This should be followed immediately by the organization of a municipal garbage collection system to embrace the entire city.

While a number of sites for garbage destructor have been submitted, we feel that to operate a municipal collection system economically, the length of haul should be a governing consideration, and the city should not make the mistake of locating its plant at an extreme point in the suburbs or outside of the city limits. Experience of other cities has shown that one of the greatest elements of cost in collection is the haul from the collection district to the plant.

Modern incineration has, in a great measure, changed the public attitude in regard to these plants, and a number of cities have handsome buildings located near their center, the collection wagons are hermetically sealed and sanitary and give little or no offense to the immediate neighborhood.

There is a bond authorization available, in the amount of \$200,000, for acquiring a site and constructing a garbage destructor. There is also available a bond issue of \$75,000 for the purpose of establishing a municipal collection system. The latter authorization is conditional that the system shall be operated on a revenue basis, requiring fee from the householder for the service. It would be far more economical, (and in fact most cities have adopted this plan) to perform the service at general expense, as the bookkeeping expense and collection of revenue greatly increases the cost of the service to the public.

There are a number of elements that render the collection of revenue for the service of gathering garbage awkward and expensive. In other utilities compulsory payment is accomplished by discontinuing service until arrearages are paid. The collection of a fee for gathering garbage can not be enforced in this way, as the health of the community is at stake, and the collection must be continued so that the only alternative—the collection of fees through police authority—must be resorted to. The experience of other cities shows that those cities which gather garbage at general expense, maintain the cleanest and most sanitary conditions.

It is suggested that a measure be submitted at the coming election repealing the \$75,000 bond authorization and substituting therefor a charter amendment providing for the collection of garbage at public expense.

During the past year the old crematory was entirely removed, the building, brick and fire brick salvaged, and the excavations filled and the site is now ready for parking. A portion of the property is now used as a playground. This year about one acre in addition has been brought to grade and put in lawn and about $\frac{1}{4}$ -acre more is ready to plant. Through the courtesy of the Bureau of Parks, we were able to plant about 200 rose bushes, the Bureau of Parks having furnished the plants.

It is desired that the general public visit the Guild's Lake plant whenever possible and inform itself of the conditions surrounding a modern, sanitary garbage destructor, and much of the old antagonism and antipathy toward garbage destructors will be dispelled.

Following are tables showing the amount of garbage incinerated, percentage of each class of refuse, cost per ton, average per ton, animals incinerated, number of loads received and average for the year, operating expense, financial statement with the monthly payroll and list of employees, and other tables, segregating by months the classes of garbage and refuse:

	Tons.
Garbage incinerated	38,350
Trash	5,878 $\frac{3}{4}$
Manure	1,299 $\frac{3}{4}$
Total	45,528 $\frac{1}{2}$

PERCENTAGE OF EACH CLASS OF REFUSE INCINERATED

Garbage	84 $\frac{1}{2}$ %
Trash	12 $\frac{1}{2}$ %
Manure	3 %

COST OF INCINERATION PER TON

Labor	\$.30 1/4
Supplies and repairs.....	.03 1/2
Total	\$.33 3/4
Average refuse incinerated per day, tons.....	146 1/2

ANIMALS INCINERATED

Horses	119
Colts	2
Cows	29
Dogs	1,281
Calves	7
Hogs	5
Sheep	4
Bear	2
Goats	1
Elk	2
Total	1,452

ANIMALS HAULED BY CITY'S TEAM

Horses	84
Cows	12
Total	96

Number of loads received from Scavengers.....	32,834
Number of loads received from Private Teams.....	3,563
Total number of loads received.....	36,397
Number of loads received per day.....	117
Average weight per load, pounds.....	2,502
Percentage delivery from Scavengers.....	90%
Percentage delivery from private teams.....	10%

OPERATING EXPENSE OF INCINERATOR

Salaries	\$13,804.91
Supplies and Repairs.....	1,577.77
Total	\$15,382.68

OPERATING EXPENSE OF DUMPS AND GROUND INCLUDING WATCHMAN

Salaries	\$ 5,931.50
Supplies	170.74
Total	\$ 6,102.24

OPERATING EXPENSE OF BARN

Salaries	\$ 942.75
Supplies and repairs.....	300.18
Horseshoeing	28.14
Total	\$ 1,271.07

Complete total for the fiscal year 1914..... \$22,755.99

STATEMENT OF EXPENDITURES AND APPROPRIATIONS NOVEMBER 30, 1914

Appropriations including transfers.....	\$26,594.58
Total Incumbrance	22,755.99
Unincumbered Balance.....	3,838.59

TOTAL AMOUNT INCINERATED

	Garbage tons.	Manure tons.	Trash tons.	Total tons.
December	3,090 1/2	160 3/4	514 1/2	3,765 3/4
January	2,968 1/2	118 3/4	515 1/4	3,602
February	2,729 3/4	74	419	3,222 1/4
March	3,230 3/4	106	439 3/4	3,776 1/2
April	3,463 3/4	122 1/2	465 1/2	4,051 3/4
May	3,459 1/2	169 3/4	487 1/2	4,116 1/4
June	3,618 1/4	257 1/2	477	4,352 3/4
July	3,685	120 1/2	592 3/4	4,398 1/4
August	3,645 1/4	70 3/4	538 3/4	4,254 3/4
September	3,669 3/4	63	495	4,227 1/4
October	2,689 3/4	31	490 3/4	3,211
November	2,100 1/4	6 1/4	443 1/2	2,550
Total	38,350	1,299 3/4	5,878 3/4	45,528 1/4

OPERATING EXPENSE OF INCINERATOR

	Salaries.	Supplies and Repairs.	Total.
December	\$ 1,091.00	\$ 131.20	\$ 1,222.20
January	1,123.91	49.25	1,173.16
February	1,151.00	284.66	1,435.66
March	1,209.00	29.21	1,238.21
April	1,209.00	65.52	1,274.52
May	1,205.75	43.82	1,249.57
June	1,209.00	365.31	1,574.31
July	1,238.00	46.07	1,284.07
August	1,209.00	30.81	1,239.81
September	1,209.00	43.77	1,254.77
October	926.50	338.02	1,264.52
November	1,023.75	148.13	1,171.88
Total	\$13,804.91	\$1,577.77	\$15,382.68

NUMBER OF ANIMALS INCINERATED

Month.	Horses.	Cows.	Dogs.	Colts.	Calves.	Hogs.	Sheep.	Bear.	Goats.	Elk.
Dec.....	22	3	104							
Jan.....	25	2	128	1	1	1	1			
Feb.....	26	2	100	1						
March.....	11	5	115					2	1	
April.....	5	4	79		2		3			1
May.....	8	3	149		1					
June.....	7	1	79		2					
July.....	4	1	100							
August.....	6		107		1	3				1
Sept.....	4	1	102			1				
Oct.....			104							
Nov.....	1		114							
Totals..	119	22	1281	2	7	5	4	2	1	2

EXPENSE OF BARN

Salaries	\$ 942.75
Supplies and Repairs	300.18
Horseshoeing	28.14
Total	\$1,271.07

COST OF MAINTAINING THE DUMPS, GROUNDS AND WATCHMAN

Salaries	\$5,931.50
Supplies	170.74
Total	\$6,102.24

NUMBER OF ANIMALS HAULED BY CITY'S TEAM

Horses	84
Cows	12
Total	96

STATEMENT SHOWING THE DATES OF HEAVY WORKING DAYS AT THE INCINERATOR

1912		1914	
	Tons.		Tons.
June 28.....	183½	May 25.....	184¼
July 22.....	187	June 8.....	189
Aug. 19.....	182¾	June 15.....	211¼
		June 19.....	185½
		June 22.....	215
		June 26.....	188
		June 29.....	181¾
June 23.....	189¼	July 13.....	183¾
June 24.....	181½	July 27.....	187¾
Sept. 8.....	185½	Aug. 17.....	183¾
Sept. 29.....	185½	Aug. 31.....	181½
Oct. 27.....	184½	Sept. 14.....	183¾
Nov. 10.....	184½	Sept. 21.....	188
Dec. 26.....	181¾	Oct. 5.....	184¼

MUNICIPAL LIGHTING

EXPENDITURES

Arc Lighting	\$174,147.86
Patrol Service Arc Lighting.....	178.63
Incandescent Lighting.....	9,222.00
Total	\$183,548.49

ARC LIGHT SERVICE

Overhead arcs in service Nov. 30, 1913.....	2,887
New Arcs installed.....	263
Changed from underground to overhead.....	47
Total overhead arcs Nov. 30, 1914.....	3,197

Underground arcs in service Nov. 30, 1913.....	216
Changed from underground to overhead.....	47
Underground arcs discontinued.....	9
Total underground arcs in service Nov. 30, 1913.....	160

Total arcs in service Nov. 30, 1914.....	3,357
Total arcs in service Nov. 30, 1913.....	3,103
Increase during 1914.....	254

Total expense Arc Service for 11 months ending Nov. 30, 1913	\$158,730.16
Total expense Arc Service corresponding months of 1914.....	159,043.74
	\$ 313.58

The foregoing shows that 254 additional arcs were maintained during 1914, at an additional cost of but \$313.58, a saving of approximately \$12,000 as compared with the cost of maintaining the same number of lights during 1913. The cost of incandescent service has been reduced 10 per cent, a result that is undoubtedly pleasing to the tax-paying public.

ANNUAL REPORT
OF THE
DEPARTMENT OF
FINANCE

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

DEPARTMENT OF FINANCE

C. A. BIGELOW
COMMISSIONER

BUREAU OF PURCHASES—

J. R. WOOD, Purchasing Agent.

OFFICE OF CITY TREASURER—

WM. ADAMS, City Treasurer

BUREAU OF PUBLIC MARKETS—

J. A. EASTMAN, Market Master

BUREAU OF LICENSES—

J. S. HUTCHINSON, Inspector of Licenses

BUREAU OF PURCHASES AND STORES

On January 1, 1915, the Bureau of Purchases completed the eighteenth month of its existence. From its organization at the time the commission form of government was established until the present time its force has remained practically unchanged. Its efficiency has steadily increased in the general routine of the office and substantial results are being shown every day in low prices obtained, due to the keen competition constantly encouraged among the trade. Some requisitions for supplies require several hours attention and some several days work before the necessary competition can be secured and we are reasonably sure that we have obtained the best possible prices.

The centralization of the purchase of materials and supplies and the centralization of all its functions constitutes a new idea in municipal government. Most of the large corporations in Portland have a system of purchasing practically the same in all essentials as the one now used at the City Hall. A recent tabulation of reports from many of the most progressive cities of the country show a general adoption of some form of centralized purchasing of supplies and the installation of a system like the one now in use in the Bureau of Purchases of this City.

The accompanying cut shows the route of a requisition and order from requisitions in the several bureaus through the Bureau of Purchases to the respective vendors.

In the stationery division a substantial saving has been made over the former method of purchasing in small quantities by the several bureaus. Some few weeks ago we were told to expect a rise in price of onion skin paper, due to the war. Having a rotary account to draw on we could purchase several months' supply at once, as this kind of paper is used by all the bureaus, thereby making a substantial saving. If we had not been purchasing direct from the paper houses we might never have known of the expected advance. We have standardized on many other articles thus enabling us to buy in large quantities at low prices. From data gathered from the old records a continuous saving of over 33 1-3 per cent is being made on printing and stationery alone.

During the past year the fire boat "George H. Williams" was overhauled and new boilers installed. Estimates were first obtained on letting a contract on the entire job. After receiving these estimates it was decided to have the greater part of the work done by the shop under the direction of the Purchasing Agent. After reckoning up the cost it was found to have saved the City fifty per cent based on the estimated cost by contract.

In the purchasing of all supplies and material an average saving of fifteen per cent has been made. On some purchases a saving of from forty to fifty per cent has been shown.

The Bureau of Purchases has written 12,888 orders during the period from December 1, 1913, to December 1, 1914, being an average of forty-three orders per working day, giving an average of ten minutes to each order. The total amount of money on the books of the

OFFICE OF CITY TREASURER

LIST OF IMPROVEMENT BONDS SOLD DURING THE FISCAL YEAR
1914, TOGETHER WITH RATE OF PREMIUM THEREON

Issue of \$438,084.04, sale held December 19, 1913, sold as follows:		
\$ 900.00	.....	3%
8,000.00	.....	2.75%
429,184.00 (City Treasurer)	.....	Par
Issue \$444,362.13, sale held January 20, 1914, sold as follows:		
\$15,000.00	.....	2.9%
51,500.00 (City Treasurer)	.....	Par
4,000.00	.....	3%
500.00	.....	102.75
3,700.00	.....	2.75%
1,000.00	.....	3 1/2 %
25,000.00	.....	2.66%
75,000.00	.....	2.76%
25,000.00	.....	2.66%
12,662.13	.....	2.56%
20,000.00	.....	2.631
20,000.00	.....	2.761
20,000.00	.....	2.881
20,000.00	.....	2.931
20,000.00	.....	3.041
20,000.00	.....	3.131
20,000.00	.....	3.261
20,000.00	.....	3.381
20,000.00	.....	3.431
20,000.00	.....	3.521
20,000.00	.....	3.681
11,000.00 (Public Utilities)	.....	Par
Issue \$375,739.82, sale held February 17, 1914, sold as follows:		
\$375,739.82	.....	103.52
Issue \$112,924.85, sale held March 17, 1914, sold as follows:		
\$112,924.85	.....	104.99
Issue \$424,611.90, sale held April 7, 1914, sold as follows:		
\$424,611.90	.....	104.15
Issue \$63,448.82, sale held May 19, 1914, sold as follows:		
\$43,448.82	.....	104.11
5,000.00	.....	104.35
15,000.00	.....	4.25%
Issue \$17,524.65, sale held June 16, 1914, sold as follows:		
\$6,524.65	.....	104.26
5,000.00	.....	104.35
6,000.00	.....	4.26%
Issue \$166,571.35, sale held July 14, 1914, sold as follows:		
\$166,571.35	.....	104.51
Issue \$269,500.00, sale held August 18, 1914, sold as follows:		
\$ 30,000.00	.....	2.26%
127,454.87 (City Treasurer)	.....	Par
(Other bids rejected.)		
Issue \$71,545.13, sale held August 18, 1914, sold as follows:		
\$25,000.00	.....	2.50%
2,000.00	.....	2%
44,545.13 (City Treasurer)	.....	Par
Issue \$200,000.00, sale held September 22, 1914, sold as follows:		
\$ 15,000.00	.....	1.01%
500.00	.....	2 1/2 %
2,500.00	.....	1.02%
4,500.00	.....	1 1/2 %
37,500.00	.....	\$8.83
14,500.00	.....	15.00
5,500.00	.....	1/4 %
200,000.00	.....	50.00
4,000.00	.....	1/2 %
16,000.00	.....	1/4 %

Issue \$162,917.95, sale held October 22, 1914, sold as follows:

\$19,500.00	2%
5,000.00	101.60
5,000.00	101.65
5,000.00	101.70
5,000.00	101.80
5,000.00	101.90
5,000.00	102.00
10,500.00	102.01
2,000.00	101.75
10,000.00	1.76
60,000.00	1.56
1,500.00	2.1
7,000.00	1.75
22,417.95 (City Treasurer)	Par

Issue \$92,984.92, sale held November 17, 1914, sold as follows:

\$ 500.00	3%
15,000.00	3.05%
1,500.00	2.1%
2,000.00	2 1/4%
35,000.00	102.16
25,000.00	102.55
13,984.92	102.03

CITY TREASURER'S REPORT.

Balance in Treasury Nov. 30, 1913	\$ 2,339,819.22	
Balance in New York Nov. 30, 1913	13,880.00	
Received from all sources	10,858,489.55	
Charged off—Ordinance No. 29219		\$ 51.40
Disbursed		11,695,351.89
Balance in Treasury Nov. 30, 1914		1,504,050.48
Balance in New York Nov. 30, 1914		12,735.00
	\$13,212,188.77	\$13,212,188.77

GENERAL FUND

Balance per report Nov. 30, 1913	\$	277,768.61
Receipts—		
Building Permits		16,770.25
Fines Municipal Court		30,763.25
Pound Fees		2,369.80
General Licenses		69,411.02
Dog Licenses		12,830.00
Milk and Cream Licenses		1,440.50
Vehicle Licenses		27,331.30
Blue Prints		740.19
Miscellaneous Costs		2,483.52
Certified Copies		164.55
Interest on Daily Balances		23,339.14
Liquor Licenses		372,179.51
Cutting Weeds		436.86
Sidewalk Permits		1,108.60
Emergency Fund, H. R. Albee, Mayor		400.00
Taxes, 1914		1,758,353.36
Premium on Bonds		64,397.54
Contractors Penalties		725.00
Costs Engineering		172,116.89
Rental Morrison Bridge		15,322.71
Rental Broadway Bridge		8,207.61
Rental Burnside Bridge		14,215.02
Rental Steel Bridge		14,582.30
Rental Hawthorne Bridge		68,774.63
Repair of Sidewalks		5,380.41
Rounding Curb Corners		723.25
Labor—Municipal Shops		49.72
Transfer Liquor Licenses		440.00
Rent Municipal Shops		237.00
Franchise O.-W. R. & N. Co.		351.00
Franchise Oregon Electric Co.		1,285.00
Franchise Pacific Tel. & Tel. Co.		1,000.00
Franchise United Railway Co.		2,300.00
Franchise Southern Pacific Co.		3,000.00
Franchise Portland Central Heating Co.		5.00
Franchise Central Heating Co.		50.00
Franchise Home Tel. & Tel. Co.		3,646.71
Franchise Portland Ry. Co.		8,120.00
Death Certificates		165.00
Slide St. Francis Hill		1,000.00
Lewis-Wiley Hydraulic Co.—Cleaning Streets		187.00
Interest on Street Extensions		23.19
Witness Fees—J. Speier		3.00
Witness Fees—R. Walsh		12.00
Witness Fees—J. E. Stanley		2.15
Witness Fees—J. C. Sharp		2.15
Witness Fees—C. H. Smith		2.00
Witness Fees—J. Gill		3.20
Witness Fees—D. Clark		2.10
Witness Fees—E. B. Smith		2.00
Witness Fees—H. Gurr		2.50

GENERAL FUND—Continued

Receipts—		
Witness Fees—R. R. Duniway.....	\$.....	\$ 2.10
Witness Fees—L. Burdick.....	.....	2.10
Witness Fees—S. Grutze.....	.....	4.20
Witness Fees—C. D. Jamison.....	.....	1.50
Witness Fees—L. N. Penfield.....	.....	4.20
Witness Fees—R. C. Watkins.....	.....	2.10
Witness Fees—E. V. Hale.....	.....	4.40
Witness Fees—A. L. Barbur.....	.....	2.10
Witness Fees—L. Lynch.....	.....	4.40
Witness Fees—G. Barks.....	.....	2.10
Witness Fees—W. D. Smith.....	.....	2.10
Sale of Auburn Auto.....	.....	200.00
Photographic Work.....	.....	.70
Damage to Sweeper.....	.....	21.00
Refund W. P. LaRoche, City Attorney.....	.....	31.20
Refund F. Henshaw.....	.....	.85
Refund Insurance Premium.....	.....	1,009.11
Rock Sold—H. W. Corbett Estate.....	.....	31.25
Cement Tests.....	.....	8.00
Errol Heights Ry. Co.—Use of Streets.....	.....	20.00
Fines Circuit Court.....	.....	4,791.51
Repair Sewers.....	.....	192.78
Newsboys Badges.....	.....	.25
Hospital Fees.....	.....	52.00
Multnomah Co. Elections.....	.....	13.48
Appeal Building Inspector.....	.....	160.00
Grading Permit.....	.....	7.00
A. L. Donaldson—Supplies.....	.....	.50
Taxes Sundry Years.....	.....	75.54
Refund U. S. National Bank.....	.....	2.50
Refund Pacific Hdwe. Co.....	.....	6.84
Oil Sold a/c Election.....	.....	3.00
Telephone Commission.....	.....	12.50
United Ry. Co.—Rock Sold.....	.....	25.00
Port. Ry. L. & P. Co.—Use of Streets.....	.....	60.00
Com'n of Public Docks—Stat'y, etc.....	.....	1,144.25
Repair Hydrant.....	.....	25.50
Rent Jefferson Street Levee.....	.....	4,170.79
Removing Dead Animals.....	.....	380.00
Changing Grade.....	.....	1,012.56
Sale of Guinea Pigs and Rabbits.....	.....	15.00
Meals a/c Election.....	.....	24.45
Refund J. R. Wood.....	.....	2.65
Refund Swelland & Son.....	.....	1.40
Refund F. Shepard.....	.....	5.00
Refund Southern Pacific Co.....	.....	.22
Return Key Deposit.....	.....	1.00
Claim No. 1245, a/c stores.....	.....	2.65
Rolling Pavements.....	.....	18.00
Money Left at Bldg. Inspector's Office.....	.....	2.00
Certificates of Deposit.....	.....	5,500.00
Multnomah Co.—Use of Man.....	.....	10.00
Use of Launch.....	.....	18.50
Charter and Ordinances.....	.....	2.50
Paving Broadway.....	.....	2,000.00
Comfort Station.....	.....	213.12
Draining Lots.....	.....	154.50
Carcass of Horse.....	.....	10.00
Repair Broadway Bridge.....	.....	5.80
Storing Auto.....	.....	30.00
Grappling.....	.....	166.75
Five Trees Destroyed in Terwilliger Park.....	.....	50.00
License Tags.....	.....	5.25
Damage to Flusher.....	.....	75.75
Surfacing Roadway.....	.....	38.30
Wood Sold—Crematory.....	.....	105.00
Repair Auto.....	.....	10.22

GENERAL FUND—Continued

Receipts—		
Repair Chalmers Auto.....	\$.....	\$ 60.80
Repair 10th Street.....	.....	310.00
Refund J. B. Drennan.....	.....	15.00
Refund Claim No. 12621.....	.....	142.27
Refund Free Employment Bureau—Stamps.....	.....	5.00
Installing Lateral Sewer.....	.....	15.22
Sale at City Barn and P. Station.....	.....	1,843.83
Permit Moving House.....	.....	1.00
Flushing (Drain) Tracks.....	.....	18.25
Concert and Rent—Tabernacle.....	.....	134.00
Refund Water Main—Park Dept.....	.....	155.80
Use of Streets—Heights Trust Co.....	.....	25.00
Picture—Poor Farm.....	.....	.90
Mrs. Burnett—Park Concession.....	.....	1,200.00
Kennel Licenses.....	.....	15.00
Cutting Fire Alarm Wires.....	.....	3.00
Refund—Excess on Warrants.....	.....	6.74
Rent—Market Block.....	.....	35.00
Refund Portland Flour Mills.....	.....	10.00
Removing Sidetracks—Percy & Strickler.....	.....	33.32
Refund R. S. Hazen.....	.....	44.00
Refund Southern Pacific Co.....	.....	129.00
Warrants Held by City.....	.....	280.53
Damage to Cart.....	.....	5.00
Rock—Pacific Bridge Co.....	.....	15.00
Rent of Space—Fire Dispatch Co.....	.....	120.00
Refund—Firemen's Relief & Pension Fund.....	.....	53.50
Damage to Fire Hose.....	.....	45.00
Refund Northern Pacific Exp. Co.—Level Rod..	.....	10.00
Dividend—Percy & Strickler.....	.....	.60
Storage on Car.....	.....	1.00
Use of Sprinkler—Terwilliger Blvd.....	.....	10.00
Photographic Work.....	.....	.90
Refund Freight Charges—H. Waller.....	.....	2.52
Jury Fees.....	.....	76.20
Painting Floor—Visiting Nurses' Assn.....	.....	6.13
Fines Juvenile Dept. & Park Dept.....	.....	6.60
Public Market.....	.....	1,615.95
Removing Dirt, etc., from Sidewalk.....	.....	105.34
Sacks Sold.....	.....	1,577.08
Sale of Tabernacle.....	.....	150.00
Quit Claim Deeds.....	.....	243.53
Repair House Lateral.....	.....	9.60
Repair of Car.....	.....	20.02
Bathing Suits.....	.....	3.25
Unused Car Tickets.....	.....	3.20
Refund Expense Camping Trip.....	.....	2.51
Damages to Park Auto.....	.....	33.19
Extension of Union Avenue.....	.....	25.00
Use of Playgrounds.....	.....	12.60
Lease of Property.....	.....	5.00
Rolling Albina Avenue.....	.....	136.50
Damage to Fire Truck No. 1.....	.....	185.62
Repair Sewer Manhole.....	.....	7.81
Interest on Removing Earth.....	.....	.20
City Charters Sold.....	.....	16.60
Judgment Oil Co.....	.....	147.65
Miscellaneous Collections—Chief of Police.....	.....	132.07
Refund—Labor Investigating Union Avenue.....	.....	13.44
Transfers From—		
1914 Tax Fund.....	.....	2,009.39
Bonded Indebtedness Int. Fund.....	.....	2,276.61
Fire Department Fund.....	.....	230,938.98
Police Department Fund.....	.....	43,150.20
Street Repair Fund.....	.....	23,858.60
Park Fund.....	.....	23,099.92

GENERAL FUND—Continued

Transfers From—		
Street Cleaning & Sprinkling Fund.....	\$.....	\$ 13,444.56
Lighting Fund.....	.....	26,121.34
Water Fund.....	.....	89,488.30
Improvement Bond Interest Fund.....	.....	3,000.00
Public Auditorium Fund.....	.....	26,010.04
Street Improvement Fund.....	.....	467.63
Park and Boulevard Fund.....	.....	1,734.40
Street Extension Fund.....	.....	3,500.00
Temporary Auditorium Fund.....	.....	246.50
Police Relief Fund.....	.....	1,218.65
Municipal Jail Fund.....	.....	600.00
Garbage Crematory Fund.....	.....	2,278.10
Special Bridge Fund.....	.....	33.10
Transfers To—		
Fire Department Fund.....	.....	15
Street Repair Fund.....	210.00	.....
Park Fund.....	5.19	.....
Street and Sewer Interest Fund.....	7,238.22	.....
Sewer Fund.....	55.40	.....
Improvement Bond Sinking Fund.....	548.85	.....
Improvement Bond Interest Fund.....	145,010.34	.....
Public Auditorium Fund.....	18,500.00	.....
Water Fund.....	76,819.57	.....
Street Improvement Fund.....	662.04	.....
Street Extension Fund.....	25.00	.....
Park and Boulevard Fund.....	40.48	.....
Redemption Fund.....	118.55	.....
Police Relief Fund.....	25.00	.....
Crematory Bonds redeemed and Returned.....	10,800.00	.....
Crematory Bonds Interest Coupons Returned.....	4,215.00	.....
Charged off Ordinance No. 29219.....	2.00	.....
Warrants Paid and Returned.....	2,401,611.32	.....
Balance	844,060.04	.....
	\$ 3,509,927.65	\$ 3,509,927.65

FIRE DEPARTMENT FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 298,153.13
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	8,839.54
Received Transfer from General Fund.....	.....	15
Transferred to General Fund.....	230,938.98	.....
Warrants Paid and Returned.....	75,945.94	.....
Balance	107.90	.....
	\$ 306,992.82	\$ 306,992.82

POLICE DEPARTMENT FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 95,061.55
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	5,695.30
Transferred to General Fund.....	43,150.20	.....
Warrants Paid and Returned.....	57,562.38	.....
Balance	44.27	.....
	\$ 100,756.85	\$ 100,756.85

STREET REPAIR FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 37,752.19
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	1,619.64
Received Bond Sale.....	.....	1,353.85
Received Repair Sidewalks.....	.....	174.70
Received Transfer from General Fund.....	.....	210.00
Transferred to General Fund.....	23,858.60	.....
Warrants Paid and Returned.....	17,042.34	.....
Balance	209.44	.....
	\$ 41,110.38	\$ 41,110.38

BONDED INDEBTEDNESS INTEREST FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 105,306.29
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	315,548.34
Received Rental Morrison Bridge.....	.....	2,276.61
Received Interest on Auditorium Bonds.....	.....	186.66
Received Transfer from 1914 Tax Fund.....	.....	356.54
Received Transfer from Water Fund.....	.....	7,500.00
Transferred to General Fund.....	2,276.61	.....
Transferred to Chemical National Bank.....	33,400.00	.....
Transferred to Chase National Bank.....	1,500.00	.....
Transferred to Harris-Forbes & Co.....	9,000.00	.....
Warrants Paid and Returned.....	139.00	.....
Interest Coupons Paid and Returned.....	279,410.00	.....
Balance	105,448.83	.....
	\$ 431,174.44	\$ 431,174.44

WATER MAIN FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 4,762.08
Balance	4,762.08	.....
	\$ 4,762.08	\$ 4,762.08

LIBRARY FUND

Received Taxes Jno. M. Lewis, Co. Treas.....	\$.....	\$ 164.31
Warrants Paid and Returned.....	123.72	.....
Balance	40.59	.....
	\$ 164.31	\$ 164.31

BONDED INDEBTEDNESS INTEREST FUND
NEW YORK ACCOUNT

Balance Chase National Bank, Nov. 30, 1913.....	\$.....	\$ 1,620.00
Balance Harris-Forbes & Co.....	.....	7,710.00
Balance Chemical National Bank.....	.....	4,550.00
Transferred to Chase National Bank.....	.....	3,000.00
Transferred to Harris-Forbes & Co.....	.....	15,000.00
Transferred to Chemical National Bank.....	.....	33,400.00
Interest Coupons Paid Chase National Bank.....	4,470.00	.....
Interest Coupons Paid Harris-Forbes & Co.....	15,180.00	.....
Interest Coupons Paid Chemical National Bank.....	32,895.00	.....
Balance Chase National Bank.....	150.00	.....
Balance Harris-Forbes & Co.....	7,530.00	.....
Balance Chemical National Bank.....	5,055.00	.....
	\$ 65,280.00	\$ 65,280.00

LIGHTING FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 33,482.37
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	2,513.65
Received Bonds Redeemed.....	.....	9,000.00
Received Interest on Bonds.....	.....	270.00
Transferred to General Fund.....	26,121.34	.....
Warrants Paid and Returned.....	19,144.68	.....
Balance .....	.....	.....
	\$ 45,266.02	\$ 45,266.02

PARK FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 55,125.89
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	2,027.86
Transferred from General Fund.....	.....	5.19
Transferred to General Fund.....	23,099.92	.....
Transferred to Water Fund.....	184.60	.....
Warrants Paid and Returned.....	33,796.00	.....
Balance	78.42	.....
	\$ 57,158.94	\$ 57,158.94

WATER BOND INTEREST FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 2,800.00
Transferred to Water Fund.....	2,800.00	.....
	\$ 2,800.00	\$ 2,800.00

STREET CLEANING AND SPRINKLING FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 35,147.85
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	2,616.67
Transferred to General Fund.....	13,444.56	.....
Warrants Paid and Returned.....	24,293.81	.....
Balance	26.15	.....
	\$ 37,764.52	\$ 37,764.52

IMPROVEMENT BOND SINKING FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 822,112.41
Received Sundry Collections.....	.....	1,880,907.00
Received Bonds Sold and Redeemed.....	.....	1,031,989.87
Received Transferred from General Fund.....	.....	548.85
Received Transferred from Water Fund.....	.....	102,608.11
Received Sale of Bonds.....	.....	255.06
Bonds Paid and Returned.....	2,948,589.51	.....
Warrants Paid and Returned.....	196,223.30	.....
Balance	203,608.49	.....
	\$ 3,348,421.30	\$ 3,348,421.30

IMPROVEMENT BOND INTEREST FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 27,292.11
Received Sundry Collections.....	.....	619,174.55
Received Interest on Bonds.....	.....	90,815.10
Received Interest on Daily Balances.....	.....	4,296.92
Received Transferred from Water Fund.....	.....	60,000.00
Received Transferred from General Fund.....	.....	145,010.34
Received Transferred from Sinking Fund.....	.....	7,777.81
Transferred to Bonded Indebtedness Sinking Fund	86.34	.....
Transferred to General Fund.....	3,000.00	.....
Error Coupons August 3d.....	1,640.00	.....
Interest Coupons Paid and Returned.....	908,224.53	.....
Warrants Paid and Returned.....	1,604.79	.....
Balance	39,711.47	.....
	\$ 954,267.13	\$ 954,267.13

WATER FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 244,322.89
Receipts—		
Collections .....	.....	859,474.60
Refund .....	.....	1.50
Warrants .....	.....	1.70
Fire Service.....	.....	11.60
Water Tank.....	.....	17.00
Sacks Sold.....	.....	53.10
Pipe Sold.....	.....	1,228.40
Repair Hydrant.....	.....	426.86
Northwestern Electric Co.....	.....	371.25
Repair Meters.....	.....	24.05
Interest on Daily Balances.....	.....	4,411.20
Repair Leak.....	.....	5.25
Sale of Bonds \$250,000 at .9297.....	.....	232,425.00
Service Pipe.....	.....	4.25
Service Pipe, Accrued Interest.....	.....	527.77
Inspection Water Main.....	.....	26.00
Sale of Bonds \$35,000 at .9378.....	.....	32,823.00
Jury Fees D. D. Clark.....	.....	18.00
Accrued Interest D. D. Clark.....	.....	85.55
Sale of Bonds \$175,000 at .9558.....	.....	167,265.00
Sale of Bonds, Accrued Interest.....	.....	661.11
Sale of Horse and Wagon.....	.....	322.50
Transferred From—		
General Fund.....	.....	76,819.57
Park and Boulevard Fund.....	.....	96.60
Water Bond Interest Fund.....	.....	2,800.00
Park Fund.....	.....	184.60
Transferred To—		
Water Bond Sinking Fund.....	254,460.00	.....
Harris-Forbes & Co.....	6,000.00	.....
Bonded Indebtedness Interest.....	7,500.00	.....
Chase National Bank.....	1,500.00	.....
General Fund.....	89,488.30	.....
Improvement Bond Sinking Fund.....	102,608.11	.....
Improvement Bond Interest Fund.....	60,000.00	.....
Water Bond Interest Coupons Paid and Ret'd....	266,735.00	.....
Warrants Paid and Returned.....	777,876.88	.....
Balance	58,240.06	.....
	\$ 1,624,408.35	\$ 1,624,408.35

PARK AND BOULEVARD FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 70,775.81
Transferred from General Fund.....	40.48	
Transferred to General Fund.....	1,734.40	
Transferred to Water Fund.....	96.60	
Warrants Paid and Returned.....	59,848.62	
Balance	9,134.67	
	\$ 70,814.29	\$ 70,814.29

BROADWAY BRIDGE FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 5,175.55
Warrants Paid and Returned.....	42.00	
Balance	5,133.55	
	\$ 5,175.55	\$ 5,175.55

GARBAGE CREMATORY FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 2,278.10
Transferred to General Fund.....	2,278.10	
	\$ 2,278.10	\$ 2,278.10

MUNICIPAL JAIL FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 10,460.38
Warrants Paid and Returned.....	9,860.38	
Transferred to General Fund.....	600.00	
	\$ 10,460.38	\$ 10,460.38

FIRE BOAT AND FIRE MAIN FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 108.03
Balance	108.03	
	\$ 108.03	\$ 108.03

SPECIAL BRIDGE FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 5,728.42
Received Taxes Jno. M. Lewis, Co. Treas.....	1,904.77	
Transferred to General Fund.....	33.10	
Warrants Paid and Returned.....	3,930.16	
Balance	3,669.93	
	\$ 7,633.19	\$ 7,633.19

SINKING FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 17,391.67
Received Taxes Jno. M. Lewis, Co. Treas.....		122,589.85
Received Bonds Matured and Redeemed.....		35,800.00
Received Interest on Bonds.....		17,438.28
Received Interest on Daily Balances.....		1,068.90
Transferred from 1914 Tax Fund.....		138.46
Transferred to Improvement Bond Interest Fund..	7,777.81	
Warrants Paid and Returned.....	175,554.96	
Balance	11,094.39	
	\$ 194,427.16	\$ 194,427.16

BILL POSTING BADGE FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 192.00
Received for Badges.....		58.00
Badges Redeemed and Returned.....	32.00	
Balance	218.00	
	\$ 250.00	\$ 250.00

WATER BOND SINKING FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 57,917.88
Received Bonds Matured.....		35,000.00
Received Interest on Bonds.....		34,510.00
Transferred from Water Fund.....		254,460.00
Warrants Paid and Returned.....	245,477.01	
Balance	136,410.87	
	\$ 381,887.83	\$ 381,887.88

WATER FUND BOND ACCOUNT

Balance per report Nov. 30, 1913.....	\$.....	\$ 22.95
Balance	22.95	
	\$ 22.95	\$ 22.95

BONDED INDEBTEDNESS SINKING FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 518.04
Received Bonds Matured.....		2,878.02
Received Interest on Bonds.....		176.34
Transferred from Improvement Bond Interest Fund		86.34
Warrants Paid and Returned.....	3,014.00	
Balance	644.74	
	\$ 3,658.74	\$ 3,658.74

POLICE AND FIRE DEPARTMENT RELIEF FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 73.91
Warrants Paid and Returned.....	48.56	
Balance	25.35	
	\$ 73.91	\$ 73.91

DEPARTMENT OF FINANCE

AUDITORIUM FUND—TEMPORARY

Balance per report Nov. 30, 1913.....	\$.....	\$ 405.00
Transferred to General Fund.....	246.50	.....
Warrants Paid and Returned.....	158.50	.....
	\$ 405.00	\$ 405.00

PUBLIC AUDITORIUM FUND

Received from Public Auditorium Fund.....	\$.....	\$ 109.22
Received Sale of Bonds \$35,000 at .9237.....	.....	32,329.50
Received Transferred from General Fund.....	.....	18,500.00
Received Interest on Daily Balances.....	.....	421.24
Transferred to General Fund.....	26,010.04	.....
Warrants Paid and Returned.....	765.43	.....
Balance	24,584.32	.....
	\$ 51,359.96	\$ 51,359.96

STREET EXTENSION BOND SINKING FUND

Received Assessments.....	\$.....	\$ 390.54
Balance	390.54	.....
	\$ 390.54	\$ 390.54

STREET EXTENSION BOND INTEREST FUND

Received Collections.....	\$.....	\$ 113.10
Interest Coupons Paid and Returned.....	79.03	.....
Balance	34.02	.....
	\$ 113.10	\$ 113.10

REDEMPTION FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 381.60
Received Collections.....	.....	24,746.63
Transferred from General Fund.....	.....	118.55
Warrants Paid and Returned.....	24,003.46	.....
Balance	1,243.32	.....
	\$ 25,246.78	\$ 25,246.78

SPECIAL 1914 TAX FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 2,451.04
Received Taxes Jno. M. Lewis, Co. Treas.....	.....	214.30
Transferred to General Fund.....	2,009.39	.....
Transferred to Bonded Indebtedness Interest Fund	356.54	.....
Transferred to Sinking Fund.....	138.46	.....
Warrants Paid and Returned—Firemen's Relief	.....	.....
and Pension Fund.....	34.61	.....
Warrants Paid and Returned—Dock Commission..	126.34	.....
	\$ 2,665.34	\$ 2,665.34

SPECIAL 1915 TAX FUND

Received Taxes Jno. M. Lewis, Co. Treas.....	\$.....	\$ 2,865.49
Received Interest on Daily Balances.....	.....	15.12
Balance	2,880.61	.....
	\$ 2,880.61	\$ 2,880.61

MT. HOOD RAILWAY & POWER CO.

Balance Ordinance No. 22989.....	\$.....	\$ 3,000.00
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MT. HOOD RAILWAY & POWER CO.—PERMANENT REPAIR FUND

Balance per report Nov. 30, 1913.....	\$.....	\$* 1,000.00
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STREET IMPROVEMENT FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 46,877.26
Received Assessments.....	517,147.57
Received Sale of Bonds.....	.....	1,985,402.64
Transferred from General Fund.....	.....	662.04
Transferred to General Fund.....	467.63	.....
Warrants Paid and Returned.....	2,524,126.97	.....
Balance	25,494.91	.....
	\$ 2,550,089.51	\$ 2,550,089.51

SEWER FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 11,897.13
Received Assessments.....	.....	175,595.49
Received Sale of Bonds.....	.....	317,498.09
Transferred to General Fund.....	.....	55.40
Charged off Ordinance No. 29219.....	47.80	.....
Warrants Paid and Returned.....	492,627.35	.....
Balance	12,370.96	.....
	\$ 505,046.11	\$ 505,046.11

STREET EXTENSION FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 51,594.72
Received Assessments.....	.....	8,384.25
Received Sale of Bonds.....	.....	3,655.50
Transferred to General Fund.....	3,500.00	.....
Transferred from General Fund.....	.....	25.00
Warrants Paid and Returned.....	53,984.93	.....
Balance	6,174.54	.....
	\$ 63,659.47	\$ 63,659.47

DEPARTMENT OF FINANCE

STREET AND SEWER INTEREST FUND

Balance per report Nov. 30, 1913.....	\$.....	\$ 2,484.36
Received Interest on Assessments.....	.....	4,652.23
Received Accrued Interest on Improvement Bonds.....	.....	8,243.76
Transferred from General Fund.....	.....	7,238.22
Charged off Ordinance No. 29219.....	1.60	.....
Warrants Paid and Returned.....	1.08	.....
Interest Paid on Warrants.....	21,730.47	.....
Balance.....	875.42	.....
	\$ 22,618.57	\$ 22,618.57

POLICE RELIEF FUND

Transferred from General Fund.....	\$.....	\$ 25.00
On Deposit Ladd and Tilton.....	.....	7,614.93
Received Interest on Bonds.....	.....	143.94
Received Interest on Daily Balances.....	.....	43.01
Received Dues.....	.....	593.50
Received Donations.....	.....	12.50
Transferred to General Fund.....	1,218.35	.....
Warrants Paid and Returned.....	4,612.78	.....
Balance.....	3,201.43	.....
	\$ 8,432.85	\$ 8,432.88

OFFICE OF CITY TREASURER

SUMMARY

Balance in Treasury Nov. 30, 1913.....	\$ 2,339,819.22	\$.....
Balance in New York.....	13,880.00	.....
Received from all Sources.....	10,858,489.55	.....
Charged off Ordinance No. 29219.....	.....	51.40
Disbursed.....	.....	11,695,351.89
Balance in Treasury.....	.....	1,504,050.48
Balance in New York.....	.....	12,735.00
	\$13,212,188.77	\$13,212,188.77
Credited as follows:		
General Fund.....	\$.....	\$ 844,060.04
Fire Department Fund.....	.....	107.90
Police Department Fund.....	.....	44.27
Street Repair Fund.....	.....	209.44
Bonded Indebtedness Interest Fund.....	.....	105,448.83
Water Main Fund.....	.....	4,762.08
Bonded Indebtedness Interest Fund, Chase National Bank, New York.....	.....	150.00
Bonded Indebtedness Interest Fund, Harris-Forbes & Co., New York.....	.....	7,530.00
Bonded Indebtedness Interest Fund, Chemical National Bank, New York.....	.....	5,055.00
Library Fund.....	.....	40.59
Park Fund.....	.....	78.42
Street Cleaning and Sprinkling Fund.....	.....	26.15
Improvement Bond Sinking Fund.....	.....	203,608.49
Improvement Bond Interest Fund.....	.....	39,711.47
Water Fund.....	.....	58,240.06
Park and Boulevard Fund.....	.....	9,134.67
Broadway Bridge Fund.....	.....	5,133.55
Fire Boat and Fire Main Fund.....	.....	108.03
Special Bridge Fund.....	.....	3,669.93
Sinking Fund.....	.....	11,094.39
Bill Posting Badge Fund.....	.....	218.00
Water Bond Sinking Fund.....	.....	136,410.87
Water Fund Bond Account.....	.....	22.95
Bonded Indebtedness Sinking Fund.....	.....	644.74
Police and Fire Department Relief Fund.....	.....	25.35
Police Relief Fund.....	.....	3,201.45
Public Auditorium Fund.....	.....	24,584.49
Street Extension Bond Sinking Fund.....	.....	390.54
Street Extension Bond Interest Fund.....	.....	34.02
Redemption Fund.....	.....	1,243.32
Mt. Hood Ry. & Power Co.....	.....	3,000.00
Mt. Hood Ry. & Power Co., Permanent Repair Fd.....	.....	1,000.00
Special 1915 Tax Fund.....	.....	2,880.61
Street Improvement Fund.....	.....	25,494.91
Sewer Fund.....	.....	12,370.96
Street Extension Fund.....	.....	6,174.54
Street and Sewer Interest Fund.....	.....	875.42
	\$ 1,510,785.48	\$ 1,510,785.48

STREET IMPROVEMENT FUND

Balance as stated.....	\$ 25,494.91	\$.....
Credited as follows:		
M. Street, 4th to 12th.....		68.37
Clinton Street, 12th to 21st.....		532.28
Front Street, Gaines to 1st Avenue.....		88.14
Hood Street, Sheridan to Curry.....		6.05
22d Street, J to P.....		22.66
Multnomah Street, Grove to Curry.....		9.10
24th Street, Formerly A.....		29.96
Cable Street, Mill to Terrace Road.....		82.10
Tacoma Ave., Willamette River to E. L. Sellwood.....		50.00
Grand Avenue, Clay to Stark.....		2.36
Belmont Street, Water to East 34th.....		12.00
4th Street, Burnside to Glisan.....		23.60
Grand Avenue, Clay to Stark.....		1.47
Columbia Street, 3d to Water.....		.77
Elm Street, 16th to Chapman.....		3.75
Front Street, Madison to Burnside.....		6.05
Davis Street, 12th to 14th.....		2.90
Union Avenue, 12 ft. S. to 121 ft. N. Broadway.....		37.78
Rodney Avenue, Hancock to Knott.....		62.42
Stark Street, 7th to 12th.....		7.00
Front Street, Quimby to 404 ft. S. of.....		36.33
Hancock, 200 ft. E. of 17th to E. 15th.....		1.41
Sherman Street, 6th to 300 ft. W. of.....		.16
Washington Street, Burnside to City Park.....		9.48
East Salmon Street, 15th to 33d.....		38.35
4th Street, Glisan to Jefferson.....		.05
Front Street, Arthur to Seymour.....		21.52
G Street, East to West End.....		4.62
Union Avenue, Alberta to Love D. L. C.....		69.11
Mississippi Avenue, Morris to Prescott.....		5.36
5th Street, C. to L.....		65.34
Albina Avenue, Page to River.....		447.54
Kelly Street, Hamilton to Macadam.....		134.53
Falling Street, Williams to Union Ave.....		77.01
Corbett Street, Hood to Seymour.....		122.18
East Washington Street, Union Ave. to E. Water.....		296.06
16th Street, Washington to Thurman.....		52.08
Weidler Street, 1st to 21st.....		92.01
Colfax Street, Union Ave. to Garfield.....		5.39
16th Street, College to Davenport.....		11.05
14th Street, Burnside to Savier.....		1,048.99
Denver Avenue, Killingsworth to Port. Blvd.....		68.17
East Oak Street, Union Ave. to East 6th.....		12.96
Front Street, Fill at Lane.....		103.71
Front Street, Fill at Wood.....		387.13
1st Street, Fill at Grover.....		103.61
Hood Street Fill at Sheridan.....		45.06
Corbett Street Fill at Grover.....		1,099.12
Corbett Street Fill at Pennoyer.....		322.32
Van Houten Street, Strong to Col. Park.....		87.10
Frankfort Street, Milwaukee to E. 8th, Feurers Add.....		133.15
East 34th Street, Brooklyn to Powell.....		830.28
Minnesota Avenue, Fremont to Skidmore.....		3.51
13th Street, Leo to Malder.....		27.15
East 31st Street, Brooklyn to Clinton.....		.50
Karl Street, Milwaukee to East 20th.....		18.22
17th Street, Vaughn to Marshall.....		154.37
Hawthorne Avenue, 3d to 41st.....		.01
Kelly Street, Custer to Boulevard.....		16.36
19th Street, Overton to Wilson.....		.77
Tillameok Street, 14th to 24th.....		.07
4th Street, Burnside to Glisan.....		.09
Monteith Street, Lombard to Willamette Blvd.....		21.77
East Glisan et al.....		.05
East 29th Street, Killingsworth to Ainsworth.....		41.10
East 21st Street, Division to Powell.....		6.37

STREET IMPROVEMENT FUND—Continued

East Monteith et al, District.....	\$.....	\$.....	.40
Clinton Street, 21st to 36th.....			120.01
Mason et al District.....			.02
Union Avenue, Belmont to East Oak.....			7.85
Corbett Street, Arthur to Terwilliger Hmsid.....			.10
Lombard Street, Westanna to Wabash.....			.25
Patton Avenue, Port. Blvd. to Col. Blvd.....			.02
Killingsworth Avenue, Union Ave. to County Road.....			.10
East 47th Street, Belmont to Stark.....			3.00
Skidmore et al District.....			284.05
Cornell, Lovejoy to Fordham Heights.....			4.50
East 75th Street, Base Line Road to Barr Road.....			67.32
Yamhill et al District.....			2.10
Glenn Avenue District.....			10.97
Belmont et al District.....			330.20
East 8th Street, Ainsworth to Dekum.....			61.28
Macadam, N. L. Sec. 15 to Dakota.....			90.05
East Glisan Street, 60th to 82d.....			4.03
First Street District.....			1,269.77
Jarrett Street, Patton to Michigan.....			5.03
Westanna, Willamette to Houghton.....			14.37
Sumner Street, Vernon Avenue to East 30th.....			11.96
Second Street, Sheridan to Arthur.....			51.58
Corbett et al, District, Custer to Boundary.....			.24
Sumner Street, Union Avenue to Serene Park.....			.10
Corbett Street, L 6, B 11; L 3, B 10 Terwilliger Hmsid.....			3,279.58
Dekum Avenue, Piedmont to Co. Heights.....			435.53
Hall and College District.....			75.04
East 50th et al, Dist. 150.....			9.00
Grand Ave., Stark to Oak.....			1.02
First Street, Madison to Stark.....			183.31
East 43d Street, Hawthorne Ave. to E. Main.....			13.88
Oak, Park to 9th.....			.01
East Stark, 16th to 20th.....			13.82
Goldsmith Street, Albina Avenue to Russell.....			2.56
Marguerite Avenue, Division to Hawthorne Avenue.....			845.49
Multnomah et al District.....			1,566.77
North 16th Street, B. to G.....			.80
Sandy Boulevard, N. L. Lhst. to East 72d.....			.50
East 19th Street, Broadway to Multnomah.....			.01
East 67th Street, Powell Valley Road to Foster Rd.....			.79
East 39th Street, 41st to 42d Ave., S. E.....			.01
½ of East 29th Street, Regent Drive to Shaver..			39.34
Hall et al District No. 216.....			46.54
Farragut et al District No. 226.....			.03
Brandon Street, Lombard to Argyle.....			1,155.39
East 29th Street, Glisan to Sandy.....			75.78
East 46th et al, Dist. 249.....			26.75
Killingsworth Avenue, Patton Ave. to Willamette Blvd.....			360.68
South half of Front Street, Watson to Sherlock..			30.44
East 9th Street, Webster to Emerson.....			.02
Alberta, East 30th to East 33d.....			1.00
East 56th Street, Dist. 255.....			2.00
East 55th Street, Dist. 199.....			.01
East Burnside Street, 82d to 90th.....			48.00
Williams Avenue et al, Dist. 180.....			.10
Kingston Avenue et al District.....			35.77
Front Street, Arthur to Porter.....			796.32
East 41st Street, 60th to 53d.....			247.18
Lombard Street, Wabash to Patton.....			1.00
Fremont Street, 8th to 33d.....			11.28
Pendleton Avenue, Dist. 288.....			43.83
Terrace Road, Spring to Patton.....			12.50
Thompson et al District.....			.10
East 50th Street, Stark to Wallace.....			6.94
East Stark Street, District 253.....			18.00

STREET IMPROVEMENT FUND—Continued

Weidler, East 1st to Wheeler.....	\$		\$	200.00
Summit Avenue and Summit Court.....				14.58
East 5th Street, Hawthorne Avenue to East Wash- ington Street.....				56.70
57th Avenue, 69th to 72d.....				366.48
Saratoga et al, District 171.....				142.75
40th Avenue, 62d to 67th.....				1.14
39th Avenue S. E., 58th to 60th.....				190.92
East 65th Street, Powell to East 45th.....				8.68
64th Avenue S. E., 59th Avenue to Foster Road..				285.90
44th Avenue S. E., 70th to 72d.....				68.39
East 56th Street, 55th to 57th.....				24.70
East Market Street, 50th to Hawthorne Place....				9.02
East 48th Street, 70th to 74th.....				.80
Alley, Spruce, Elliott, Harrison, Birch.....				9.44
East 18th Street, Clinton to Powell.....				404.26
Alley, Maple, Ladd, Hawthorne Avenue, East 16th				.44
East Harrison, District No. 334.....				1,000.00
East 63d Street, Glisan to Davis.....				.26
McKenna Street, Lombard to Willamette.....				.80
East 69th Street, Glisan to Pacific.....				118.94
East 41st Street, District No. 284.....				40.68
East Glisan Street, 44th to 60th.....				65.98
Emerson Street, Vernon to East 19th.....				2.75
East Harrison, District No. 335.....				72.53
East 69th Street, Whitman to County Road.....				56.54
Lexington Avenue, East 7th to Milwaukie.....				82.78
Thompson et al, District No. 302.....				324.68
East 3d and Glisan, District No. 306.....				863.30
Stanton Street, Club Avenue to East 72d.....				146.24
Wall Street, Lombard to Edwards.....				20.32
60th Avenue, 45th to 72d.....				52.71
East Salmon Street, 80th to 82d.....				74.36
East Madison Street, District No. 213.....				109.51
59th Street, District No. 328.....				52.37
East 45th, District No. 300.....				21.83
East 7th Street, Webster to Sumner.....				44.06
East 43d Street, Hawthorne Avenue to Division..				23.52
East Ash Street, 3d to 12th.....				32.31
Edwards Street, Bridge to S. P. Track.....				.95
East 52d Street, Stark to Melrose.....				52.38
Skidmore et al, District No. 317.....				58.69
22d Street, Crane to Prescott.....				59.65
Albina Avenue, Lombard to Killingsworth.....				360.40
66th Street S. E., 50th to 55th.....				477.74
Upper Drive.....				59.44
East 23d Street, Crane to Prescott.....				62.20
Simpson, District No. 321.....				45.06
Lombard Street, Patton to Alberta.....				551.63
Brazee Street, East 27th to East 28th.....				48.11
69th Avenue S. E., District (Deficit).....				4.99
East 71st Street, Foster Road to 45th Ave. S. E. (Deficit).....				62.71
Deficit	\$	25,494.91	\$	25,562.61
				67.70
	\$	25,494.91	\$	25,494.91

SEWER FUND

Balance as stated.....	\$	12,370.96	\$	.....
Credited as follows:				
Irrington District.....				1.64
Tanner Creek District.....				51.04
Wood Street Gulch.....				20.00
East Alder et al District.....				44.90
East Alder et al District.....				13.98
Johnson Creek District.....				.75
East 20th, District.....				193.10
North Branch Brooklyn District.....				774.00
Brooklyn District.....				357.50
Jasper and 1st Streets.....				23.95
Harrison Street, River to 10th.....				1.80
Riverside District.....				1.30
Belmont and Broughton Streets.....				.20
Grand Avenue and Beacon Street.....				26.55
Eastmoreland District.....				11.80
Westmoreland District.....				211.30
Olmsted Park, District No. 38.....				337.20
Holgate District.....				7,880.16
St. Johns Extension Riverside District.....				.10
East 26th Street, Brazee to Brazee.....				.60
East Stark No. 2, District.....				5.50
East 33d and Sullivans Gulch.....				54.30
East Stark No. 1, District.....				39.91
T at North 14th Street.....				5.00
North 19th and D Streets.....				1.65
Eastmoreland Main Sewer.....				6.00
Rhine Street District.....				939.82
Sullivans Gulch Sewer Trunk No. 2.....				11.80
Insley Avenue.....				30.20
Canyon Road, District No. 80.....				2.40
East 32d Street, Holgate to Cora.....				21.45
Hood Street, Lincoln to Sheridan.....				25.68
East 31st Street, District No. 9.....				1.00
Ralph Avenue Sewer System.....				336.20
East 52d System No. 2.....				.03
East 68th Street, Royal to Royal.....				9.20
49th and East Hoyt Streets.....				3.85
Curry Street, 2d to Thomas Creek.....				117.26
Upper Drive.....				8.50
East 63d St. Extension of East Stark Street Sewer				20.00
East Davis and East Glisan Streets.....				22.50
Reedway, Milwaukie to East 22d.....				.02
Blandena Avenue, Williams to Vancouver.....				38.15
Rural Avenue and East 13th Street.....				5.67
60th and East Davis.....				84.35
Fremont Street, 41st to 38th.....				38.90
East 25th Street, Siskiyou to Klickitat.....				416.17
East 44th Street, Division to Sherman.....				5.50
Bybee Avenue District.....				168.08
	\$	12,370.96	\$	12,370.96

STREET EXTENSION FUND

Balance as stated.....	\$ 6,174.54	\$.....
Credited as follows:		
Holgate Terrace.....		70.00
East Burnside Street, East 28th to Goodsell Ave..		.50
St. Helens Road.....	110.15	
Nevada Street.....	4.00	
Union Avenue.....	3.74	
Clinton Street, East 36th to East 37th.....	73.68	
East 15th Street, Belmont to Yamhill.....	14.00	
Dekum Avenue, Camden to Vancouver Co. Road..	14.00	
East 29th Street, Broadway to Tillamook.....	57.00	
East 26th Street, Hawthorne Ave. to Dolan Add..	35.00	
Francis Avenue, east line block 11 to west line block 1, Kenilworth.....		3.00
Belmont, Prettyman's Add. to E. L. City.....		6.00
Emerald, Phippen to Willis.....		21.20
Dekum Avenue, Camden to Vancouver Co. Road..	190.40	
East 19th Street, Powell to Edgar.....	150.00	
Portland Boulevard, Vancouver Ave. to Union Ave.		3.75
East 17th Street, Highland Park to Howe.....		69.00
East 30th Street, L. "P." E. P. Hts. to Ellsworth		76.15
East 27th Street, L. "S." E. P. Hts. to Ellsworth	117.80	
East 28th Street, L. "R." E. P. Hts. to Ellsworth	40.90	
East 29th Street, L. 2 E. P. Hts. to Ellsworth...	3.00	
Pearl Street.....	33.00	
East 26th Street Hawthorne Ave. to Dolan.....	78.00	
East Salmon St., E. L. Sunnyside Add. to Glencoe	17.00	
East 39th Street, Salmon to Stark.....	23.90	
Villard Avenue, Pippin to Col. Boulevard.....	31.33	
East 30th Street, Stark to Hawthorne Avenue...	16.00	
Sumner Street, Minnesota to M. Patton's Tract..	81.00	
East 76th Street, Hawthorne Ave. to Base Line Rd.	1.00	
East 40th Street, W. L. Lot "A." Hawthorne Ave- nue Addition to Hawthorne Avenue Place.....		1.00
East 40th Street, Francis Avenue to Powell Val- ley Road.....	11.20	
Wisconsin Street, B. 17, S. Portland to B. 48, Ful- ton Park.....	155.70	
East 45th Street, L. "B" to B. B. Haw. Ave. Add.	1.00	
East 20th Street, Insley Avenue to Zanita.....	103.50	
East 44th Street, N. to S. line L. 6, Hawthorne Avenue Addition.....		1.00
East 41st Street, in Hawthorne Avenue Addition		1.00
Villa Avenue.....	58.30	
Killingsworth Avenue.....	12.30	
East 42d Street, in Hawthorne Avenue Addition	1.00	
East 43d Street, in Hawthorne Avenue Addition	1.00	
East Sherman Street, Park View Annex to Mar- guerite Avenue.....	4.10	
East 48th Street, in Hawthorne Avenue Addition	1.00	
East 47th Street, S. L. to M. L. L. 9, Hawthorne Avenue Addition.....		1.00
Malden Avenue, East 13th to Milwaukie St.....	1.00	
Belmont Street, Sec. 6 to East 69th.....	3.00	
Harrison Street.....	3.00	
Lombard Street, Patton to Wabash.....	126.00	
Thompson Street, 24th to 33d.....	50.00	
Vanderbilt, Portsmouth to Hodge.....	70.00	
Jessup Street, W. Piedmont to Commercial.....	400.50	
A New Street, East 50th to East 60th.....	9.00	
East Taylor Street, Paradise Springs to East 45th	25.00	
East Sherman Street, Murraymead to East 26th..	.70	
Simpson Street, West Piedmont to Commercial..	8.50	
Sandy Road.....	203.20	
Claremont, Oneonta to Madrona.....	2.00	
East 78th Street, North Villa to Oregon.....	.07	
East 80th Street, Base Line to Hawthorne Ave...	4.95	
East 26th Street, Division to Simon's Addition...	12.25	

STREET EXTENSION FUND—Continued

East 13th Street, B. 11, Miller's Addition to Rural Avenue	\$.....	\$ 11.00
Wall Street, N. Branch Add. to Edwards.....		74.67
Cactus Drive.....		530.00
Villa Avenue, S. 23, T. 1 N. R. 1 E.....		60.00
Union Avenue, Love D. L. C. to Col. Slough Road		1.00
East Gilsan Street, Wiberg Lane to East 60th...		51.00
East Main Street, Sunnyside Add. to Glencoe Park		10.00
East 17th Street, Midway to Yukon.....		449.10
East 52d Street, O.-W. R. & N. to Halsey.....		1,566.00
East 13th Street, Rural Avenue to East 14th St...		530.00
East 54th Street, 42d Ave. S. E. to 44th Ave. S. E.		268.50
East 25th Street, East Irvington to Thompson..		.50
	\$ 6,174.54	\$ 6,174.54

WATER MAIN FUND

Balance as stated.....	\$ 4,762.08	\$.....
Credited as follows:		
East Gilsan et al, Laurelhurst.....		14.15
Irvington Chain District.....		881.05
Broadway, East 33d to East 37th.....		77.08
Laurelhurst District.....		576.75
Richardson Avenue et al.....		211.27
East 25th Street, Broadway to N. L. Irvington...		155.53
Hancock Street, East 27th to East 37th.....		62.12
East Harrison Street, East 20th to East 30th....		341.31
East Burnside Street, East 60th to East 69th....		203.35
Council Crest Park District.....		1,072.75
Yukon Avenue et al District.....		1,166.72
	\$ 4,762.08	\$ 4,762.08

BUREAU OF PUBLIC MARKETS.

The Public Market of the City of Portland was established as a direct result of a campaign of education started by various civic organizations, headed by the Progressive Business Men's Club, and including the Ad Club, Realty Associates, East Side Business Men's Club, Woman's Clubs and others. This campaign was started during the early part of 1914, and as a result the Producers and Consumers Public Market Association was formed for the purpose of definitely establishing public markets. Strong public sentiment backed the effort, and the City Council co-operated with the Market Association to the extent of authorizing the use of Yamhill Street between Third and Fifth as a curb market, and appropriating \$250.00 for construction of initial temporary shelter for such public curb market. The market was finally opened under the auspices of the Producers and Consumers Public Market Association on May 16, 1914, under the name of the Carroll Central Public Market, as a direct tribute of honor to John F. Carroll, who had persistently and insistently fostered the public market idea for a number of years preceding its establishment. With the initial appropriation of the Council, one hundred and eighty feet of temporary stalls were provided as a beginning. It took but a few days of operation to show the necessity of additional construction, and an additional appropriation of \$250.00 was made with which additional stalls were constructed, making a total of six hundred lineal feet of stall space. This increased the number of stalls from the original forty to one hundred.

The management of the market was under the market board, a voluntary board recommended by the Market Association, and comprising R. W. Gill, N. H. Atchison, and C. D. Minton. Mr. R. W. Gill acted as Market Master. During the period beginning with May 16th, extending to July 11th, the market was in direct charge of this Market Committee, and no charge was made producers for the privilege of selling upon the market. The latter part of June overtures were made to the City Council asking that the City assume official control and direction of the Public Market, and by Ordinance, the City assumed control on July 11th, 1914. At this time rental rates were established of ten cents per day for each producer occupying stall space, or a charge of twenty-five cents per day where an association of producers was represented by one agent. The intent was to place the market upon a self-supporting basis, and since that time it has been more than self supporting.

The market has been opened daily, with the exception of Sundays, since its installation, and the attendance of producers has been steady, and at times there have been as many as two hundred and fifty producers on the market in a single day. Shortly after the City assumed control, the market having firmly established itself as a thorough success, plans were considered for making it somewhat of a permanent institution, and in October the City Council awarded the contract for the construction of six hundred lineal feet of steel umbrella style curb market sheds to cost \$5700. These sheds were placed along the curb on both sides of Yamhill Street, between Third and Fifth, and were equipped with counters and false floors, both of which were so constructed as to enable the lifting and folding of counters and floors to a position entirely clear of the street, making

possible the sanitary flushing and cleaning of the street. Heavy canvas curtains were also installed the full length of these sheds, placed on rollers in such a position as to protect the consumers from storm whenever necessary. The Market had proven such a success, and had benefited the abutting property so much that the property owners along which the Market was constructed, contributed the sum of \$2250 toward the construction of these Market Sheds.

The fact that the campaign for the establishment of public markets was started so late in the year of 1914, and its success was so uncertain, many farmers who believed in public markets did not prepare in time to be a factor in supplying the market. Notwithstanding this fact, the market has at all times been well supported with a large variety of products of choice quality, and at most reasonable prices. Many times we have been taxed to the utmost to provide facilities for producers, and in many cases have rented the same stall to as many as five producers in a given day. The fact that the market has been so successful in the first year of its existence has been the means of a large number of farmers planning for the year 1915, and it will be an absolute necessity to provide additional space for this increased number of producers. A plan has been outlined for the extension of the market sheds along the north side of Yamhill Street from Third to Second and from Second to First, which will increase our space to an extent of four hundred feet, and will mean that nearly every important car line will be immediately adjacent to some part of our Market. I recommend that these plans be adopted and construction proceed early enough to be made available for the opening of business of 1915. The new Market Ordinance has been carefully drawn, and every safeguard placed therein to protect the consumer and the market from intrusion of middlemen. The consumers' interests have been carefully safeguarded, and rules and regulations in the new ordinance providing for sanitation, proper weights, proper qualities, and giving the Market Master sufficient power to enforce strict compliance with all rules and regulations.

The following is the estimated daily average of producers on the market, together with actual rental received, beginning with the time the City assumed control on the 11th day of July up to and including the 30th day of November, 1914.

Month—	Daily Average Producers.	Rental Receipts.
July	65	\$ 285.65
August	101	371.90
September	107	279.95
October	95	351.35
November	99	327.10
Total revenue.....		\$1,615.95

While the operating expenses for this period of time have been \$774.55, this leaving a net balance for the first four and two-thirds months of municipal control of the Carroll Central Public Market of \$841.45.

ANNUAL REPORT
OF THE
OFFICE OF THE
CITY AUDITOR

FOR THE FISCAL YEAR ENDING
NOVEMBER 30, 1914

ANNUAL REPORT OF A. L. BARBUR, AUDITOR OF THE CITY OF PORTLAND, FOR THE YEAR ENDING NOVEMBER 30, 1914

Fund	Balance Nov. 30, 1913.	Received by Transfer.	Receipts.	Disbursements.	Disbursed by Transfer.	Balance Nov. 30, 1914.	Warrants Outstanding Nov. 30, 1913.	Warrants Drawn.	Warrants Paid.	Warrants Outstanding Nov. 30, 1914.	Warrants Cancelled.
1. General Fund.....	\$ 277,768.61	\$ 491,038.15	\$ 2,741,140.39	\$ 2,416,628.32	\$ 240,258.79	\$ 844,060.04	\$ 83,404.34	\$ 2,528,053.06	\$ 2,401,611.32	\$ 208,592.66	\$ 1,253.42
2. Fire Department Fund.....	298,326.33	15	8,839.54	76,119.19	230,938.98	107.90	45,639.50	31,251.71	76,119.19	107.90	664.12
3. Police Department Fund.....	95,061.55	5,095.30	57,562.38	43,150.20	44.27	31,056.30	26,592.64	57,562.38	44.27	42.29	
4. Bonded Indebtedness Interest Fund.....	105,806.29	7,827.88	315,763.66	279,549.00	43,900.00	105,448.83	139.00	139.00			
5. Chemical National Bank, New York.....	4,550.00	33,400.00		32,895.00		5,055.00					
6. Chase National Bank, New York.....	1,620.00	3,000.00		4,470.00		150.00					
7. Harris, Forbes & Co., New York.....	7,710.00	15,000.00		15,180.00		7,530.00					
8. Lighting Fund.....	39,482.37		11,783.65	19,144.68	26,121.34		2,332.13	19,812.55	19,144.68		
9. Street Repair Fund.....	37,752.19	210.00	3,148.19	17,042.34	23,858.60	209.44	9,156.20	8,177.33	17,042.34	209.44	
10. Public Library Fund.....			164.31	123.72		40.59		164.31	123.72	40.59	81.75
11. Park Fund.....	55,125.89	5.19	2,027.36	33,796.00	23,284.52	78.42	12,872.79	33,305.58	33,796.00	78.42	
12. Special Bridge Fund.....	5,728.42		1,904.77	3,930.16	33.10	3,669.93		4,513.99	3,930.16	583.83	2,303.95
13. Sinking Fund.....	17,391.67	127.33	176,908.16	175,554.96	7,777.81	11,094.39		175,554.96	175,554.96		
14. Street Cleaning and Sprinkling Fund.....	35,147.85		2,616.67	24,293.81	13,444.56	26.15	18,543.00	5,776.96	24,293.81	26.15	
15. Water Fund.....	244,319.19	79,900.77	1,300,183.94	1,044,611.88	521,556.41	58,235.61	50,543.43	766,488.93	777,876.88	36,944.52	2,210.96
16. Water Bond Interest Fund.....	2,800.00				2,800.00						
17. Water Bond Sinking Fund.....	57,917.88	254,460.00	69,510.00	245,477.01		136,410.87		245,477.01	245,477.01		
18. Police and Fire Dept. Relief Fund.....	73.91		48.56			25.35	73.91		48.56	25.35	
19. Redemption Fund.....	381.60	118.55	24,746.63	24,003.46		1,243.32	234.73	25,017.27	24,003.46	1,148.18	100.36
20. Water Fund Bond Accounts.....	22.95					22.95	22.95			22.95	
21. Park and Boulevard Fund.....	70,773.81	40.48	59,848.62	1,831.00	9,134.67	5,133.55	24.07	71,643.34	59,848.62	127.84	11,666.88
22. Broadway Bridge Fund.....	5,175.55		42.00			108.03		42.00	42.00	24.07	
23. Fire Boat and Fire Main Fund.....	108.03										
24. Garbage Crematory Fund.....	2,278.10			2,278.10							
25. Municipal Jail Fund.....	10,460.38		9,860.38	600.00				9,860.38	9,860.38		
26. Bill Posting Badge Fund.....	192.00		58.00	32.00		218.00					
27. (a) Mt. Hood Ry. and Power Co. Deposit Fund.....	3,000.00					3,000.00					
28. (b) Mt. Hood Ry. and Power Co. Repair Fund.....	1,000.00					1,000.00					
29. Street Improvement Funds.....	46,877.26	662.04	2,502,559.21	2,524,126.97	467.63	25,494.91	1,141,972.41	2,965,954.10	2,524,126.97	443,710.84	240,038.70
30. Sewer Funds.....	11,897.13	55.40	493,093.58	492,675.15		12,370.96	66,516.03	568,526.49	492,627.35	40,910.08	101,505.14
31. Street Extension Funds.....	51,594.72	25.00	12,039.75	53,984.93	3,500.00	6,174.54	51,246.12	12,501.20	53,984.93	4,971.44	5,090.95
32. Water Main Funds.....	4,762.03					4,762.03	6,136.25			6,136.25	
33. Street and Sewer Interest Funds.....	2,484.36	7,238.22	12,895.99	21,743.15		875.42		1.08	1.08		
34. Improvement Bond Sinking Fund.....	832,112.41	103,156.96	2,413,151.93	3,144,812.81		203,603.49	280.38	196,200.60	196,223.30	257.68	
35. Improvement Bond Interest Fund.....	27,292.11	212,788.15	714,186.87	911,469.32	3,086.34	39,711.47	165.14	1,571.02	1,604.79	132.37	
36. Bonded Indebtedness Sinking Fund.....	518.04	86.34	3,014.00			644.74		3,014.00	3,014.00		
37. Temporary Auditorium Fund.....	405.00			158.50	246.50		150.00	8.50	158.50		
38. Special Tax Fund, 1914.....	2,451.04		12.95	160.95	2,303.04			160.95	160.95		
39. Street Extension Bond Sinking Fund.....			390.54			390.54					
40. Street Extension Bond Interest Fund.....			113.10	79.08		34.02		765.43	765.43		
41. Public Auditorium Fund.....		18,500.00	32,859.96	765.43	26,010.04	24,584.49					
42. Special Tax Fund, 1915.....		2,830.61				2,880.61		4,208.57	4,012.78	195.79	
43. Police Relief Fund.....		25.00	8,407.88	4,012.78	1,218.65	3,201.45					
Totals.....	\$ 2,353,868.77	\$ 1,227,065.61	\$10,860,128.80	\$11,697,216.00	\$ 1,227,665.61	\$ 1,516,781.03	\$ 1,520,370.73	\$ 6,792,032.96	\$ 7,203,154.55	\$ 744,290.62	\$ 365,008.52

a. Amount deposited as required by Ordinance 22989 granting franchise.

b. Amount deposited as guarantee that streets disturbed in constructing conduits will be properly replaced.

GENERAL FUND—Continued

Miscellaneous—		
Dividend, Percy Strickler Co.....	\$	.60
Multnomah Co., Labor, Material, etc.....		49.72
Concerts and Rent Gypsy Smith Auditorium.....	134.00	
Unclaimed Salary.....		6.74
Damage to Street Flusher.....	75.75	
Oil Returned Account Elections.....	3.00	
Free Employment Bureau, Stamps Returned.....	5.00	
Overprinting Bonds U. S. National Bank.....	2.50	
Return Key Safety Deposit Vault.....	1.00	
Southern Pacific Co., damage to fire hose.....	45.00	
Damage to Lever Rods.....	10.00	
Jury Fees Paid by Employees.....	76.20	
Damage to Push Cart.....	2.50	
Broken Lamps.....	6.60	
Extension Union Avenue.....	25.00	
Charter and Ordinances.....	2.50	
Witness Fees—		
J. D. Webster.....	\$ 3.00	
O. E. Stanley.....	2.15	
R. Walsh.....	12.00	
J. C. Sharp.....	2.15	
C. H. Smith.....	2.00	
James Gill.....	3.20	
E. B. Smith.....	2.00	
R. R. Duniway.....	2.10	
Harry Gurr.....	2.50	
Rigel Grutze.....	4.20	
D. D. Clark.....	2.10	
L. E. Burdick.....	2.10	
C. D. Jameson.....	1.50	
L. N. Penfield.....	4.20	
R. C. Watkins.....	2.10	
E. V. Hale.....	4.40	
A. L. Barbur.....	2.10	
J. Lynch.....	4.40	
Gus Barks.....	2.10	
W. D. Smith.....	2.10	
Barber Asphalt Paving Co., Rolling Albina Ave.....	62.49	
A. Donaldson, Supplies.....	136.50	
Photographic Work.....	.50	
Sale of Auburn Car.....	2.50	
Investigating Union Avenue.....	200.00	
H. E. Plummer, money left in office.....	13.44	
Damage to Sprinkler.....	2.00	
Damage to Broadway Bridge.....	2.50	
Installing House Laterals.....	5.80	
Repairs to Sewers and Catch Basins.....	15.22	
Checking Slide St. Frances Hill.....	192.78	
Sale of Wood at Crematory.....	1,187.00	
Sale of Junk.....	105.00	
Pennsylvania Steel Co. Repairs to Broadway Bridge.....	1,843.83	
Changing Grade, Oregon Electric Company.....	3,000.00	
Rolling Pavement.....	1,012.56	
Resurfacing Roadway.....	18.00	
Filling and Draining Lots.....	38.30	
Repairs to Auto, W. Hanson.....	154.50	
Storing and Hauling Auto.....	10.23	
Services of Harbor Launch.....	31.00	
Flushing Tracks.....	18.50	
Repairing Auto, C. R. Davis.....	18.25	
Removing Track, National Surety Company.....	60.80	
Use of Sprinkler, Elliott Construction Co.....	33.32	
Cutting Fire Alarm Wires.....	10.00	
Painting Floor Visiting Nurses' Association.....	3.00	
Quit Claim Deeds.....	6.13	
Sale of Sacks.....	243.53	
	1,577.08	

GENERAL FUND—Continued

Sale of Gypsy Smith Auditorium.....	\$	150.00	\$.....
Repair to J. R. Wood's car.....		20.02	
Sale of Bathing Trunks.....		3.25	
Repairs to House.....		9.60	
Interest on Removing Earth.....		.20	
Repairs to Tenth Street.....		310.00	
Paid Account Playgrounds.....		12.50	
Multnomah County, Services of Man.....		10.00	
Sale of Guinea Pigs and Rabbits.....		15.00	
Damage to Truck No. 1.....		185.62	
Damage to Park Auto.....		38.19	
Cement Tests.....		8.00	
Sale of Rock.....		71.25	
Changing Hydrants.....		25.60	
Sale of Dead Horse.....		10.00	
Sale of Two Barrels.....		2.65	
Street and Sewer Warrant Cashied.....		280.58	
Locating Sewer.....		7.81	
Sale of Badges.....		.25	
Damage to Street Sweeper.....		21.00	11,632.29
Rents—			
Municipal Shop.....		237.00	
Election, Multnomah County.....		13.48	
Market Block.....		35.00	
675 Fourth Street.....		5.00	
Jefferson Street Levee.....		4,170.70	
Commercial Fire Dispatch.....		120.00	
Concessions, City Park.....		1,200.00	5,781.27
Refunds—			
City Attorney.....		31.20	
Election Meals.....		24.45	
Insurance Premiums.....		1,009.11	
R. S. Huzner.....		44.00	
F. Sheppard.....		5.00	
Union Oil Company.....		142.27	
Water Mains.....		155.80	
Sweetland & Son.....		1.49	
F. Henshaw.....		.35	
J. D. Drennan.....		15.00	
Pacific Hardware & Steel Co.....		6.84	
Portland Seattle Ry. Co.....		129.00	
Southern Pacific Ry. Co.....		.22	
Pierce Arrow Sales Co.....		2.65	
Firemens Relief & Pension Fund.....		53.50	
H. Waller, Refund Freight Charges.....		2.52	
Oregon Electric Ry. Company.....		3.20	
J. L. Thompson.....		2.51	
Portland Flouring Mills.....		10.00	
H. R. Albee, Emergency Fund.....		400.00	2,039.02
Transfers—			
Fire Department Fund.....		230,938.98	
Police Department Fund.....		43,150.20	
Street Repair Fund.....		23,858.60	
Park Fund.....		23,099.92	
Water Fund.....		89,488.30	
Lighting Fund.....		26,121.34	
Street Cleaning and Sprinkling Fund.....		13,444.56	
Special Tax Fund.....		1,847.83	
Public Auditorium Fund.....		26,010.04	
Improvement Bond Interest Fund.....		3,000.00	
Street Improvement Fund, Improvement Braadon Street.....		467.63	
Street Extension Fund, Extension of Mill Street		3,500.00	
Park and Boulevard Fund.....		1,734.40	
Temporary Auditorium Fund.....		246.50	
Police Relief Fund.....		1,218.65	
Special Bridge Fund.....		33.10	
Municipal Jail Fund.....		600.00	

GENERAL FUND—Continued

Garbage Crematory Fund.....	\$ 2,278.10	\$ 491,038.15
DISBURSEMENTS		
Crematory Bonds Redeemed.....	\$ 10,800.00	
Interest on Crematory Bonds.....	4,215.00	
Warrants Paid and Returned.....	2,401,611.32	
Transferred to Fire Department Fund.....	15	
Transferred to Park Fund.....	5.19	
Transferred to Street Repair Fund.....	210.00	
Transferred to Water Fund.....	76,819.57	
Transferred to Public Addition.....	18,600.00	
Transferred to Improvement Fund.....	545.85	
Transferred to Street and Sewer Repair Fund.....	155,010.34	
Transferred to Improvement Alley Fund.....	7,238.22	
Addition.....	18.50	
Transferred to Sewer East 26th Street, Extension		
Mullan Gulch.....	44.20	
Transferred to Sewer East 26th Street at Hazen		
Street.....	1.20	
Transferred to Extension Union Avenue, Love B.		
L. C. to Columbia Slough Road.....	25.00	
Transferred to Police Relief Fund.....	25.00	
Costs on Sewer Receipts & 18th Street, Extension	2.00	
Transferred to Park and 18th Street, Extension	40.48	
Transferred to Police Relief Fund.....	195.25	
Nickelback to Police Relief Fund.....	27.11	
Transferred to Police Relief Fund.....	360.68	
Transferred to Police Relief Fund.....	2.31	
Transferred to Police Relief Fund.....	14.19	
Transferred to Police Relief Fund.....	44.00	
Transferred to Police Relief Fund.....	118.65	
Transferred to Police Relief Fund.....	844,060.04	
Balance Nov. 30, 1914.....		\$ 3,509,947.15

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND—DEPARTMENT OF PUBLIC SAFETY

Code Designation.	Mayor's Office.	Emergency Fund.	Bureau of Fire.	Bureau of Police.	Bureau of Health.	Municipal Court.	Pound.	Total Department Expenditures.
Personal Services.								
A-1 Salaries.....	\$ 9,870.00		\$ 446,379.74	\$ 356,274.77	\$ 41,647.41	\$ 6,043.05	\$ 5,095.62	\$ 865,310.59
A-2 Special Services.....			1,016.00	185.50		1,204.00		2,405.59
Supplies.								
B-1 Office.....	100.52		552.77	1,525.53	885.35	198.46	1.68	3,264.31
B-2 Fuel.....			14,578.64	2,152.78	128.55			16,859.97
B-3 Forage and Veterinary.....			12,365.28		7.00		262.32	12,634.60
B-4 Food.....				6,883.19	654.86			7,538.05
B-5 Cleaning and Disinfecting.....			1,359.75	813.96	726.38		8.41	2,908.50
B-6 Motor Vehicle.....	301.60		2,371.67	3,300.37	1,209.20			7,272.84
B-8 Educational and Recreational.....	1.50							1.50
B-9 Medical and Surgical.....				2.55	1,307.71			1,310.26
B-10 General Plant.....			1,626.07	695.39	282.07	20.00		2,623.53
Material.								
C-2 Sewer.....				.62				.62
C-3 Building.....			649.90	98.86	100.90			849.75
C-4 General Plant.....			2,776.94	132.09	8.00		32.67	2,949.70
Equipment.								
D-1 Office.....	.25		287.18	179.52	55.38	38.10		560.43
D-2 Household.....			772.18	246.75	17.35			1,036.28
D-4 Motorless Vehicles.....				19.26				19.26
D-5 Motor Vehicles.....			3,280.72	6,002.94	1,067.18			10,350.84
D-7 General Plant.....			2,868.52	253.62	980.52			4,082.66
Construction and Extension Repairs.								
E-2 General.....			38,976.83	215.43	78.01		54.50	39,324.77
E-3 Motor Vehicle.....	7.45		6,219.42	2,230.48	770.33			9,227.68
Lighting.								
E-4-b Public Buildings.....							5.50	5.50
E-5 Janitorial Service.....				143.75				143.75
Transportation.								
E-6-a Hire of Horses and Vehicles.....				13.68				13.68
E-6-b Hire of Automobiles.....				387.29	25.00			412.29
E-6-c Storage Motor Vehicles.....					111.91			111.91
E-6-d Shoeing and Boarding Horses.....			4,742.12	3,145.90	148.28		121.00	8,157.30
E-6-e Car fare.....			27.25		738.00		19.00	784.25
E-6-f Other transportation.....			2,549.96	52.00	1,361.90			3,963.86

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND—DEPARTMENT OF PUBLIC SAFETY—Continued

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Code Designation.		Mayor's Office.	Emergency Fund.	Bureau of Fire.	Bureau of Police.	Bureau of Health.	Municipal Court.	Pound.	Total Department Expenditures.
Communication.									
E-7-a	Telephone.....				1,175.75				1,175.75
E-7-b	Telegraph and Messenger Service.....				259.46				259.46
E-8	General Plant Service.....					2,871.00			2,871.00
F	Contingencies.....	15.00		3,040.67	1,457.61	33.53		9.00	4,555.81
G-2	Rents.....			180.00	175.00				355.00
G-5	Advertising.....			13.81					13.81
G-7	Other Contributions.....		4,374.30	920.00					5,294.30
H	Purchase of Real Estate.....				7,800.00				7,800.00
	Expenditures.....	\$ 10,296.32	\$ 4,374.30	\$547,555.42	\$395,804.14	\$ 55,305.01	\$ 7,503.61	\$ 5,609.70	\$1,026,449.40
	General Fund, Warrants drawn.....	\$ 10,113.47	\$ 4,374.30	\$520,418.37	\$ 391,715.29	\$ 52,655.72	\$ 7,318.65	\$ 5,524.77	\$ 992,120.57
	Miscellaneous Debits.....	182.85		27,137.05	4,088.85	2,650.19	184.96	84.93	34,328.83
	Outstanding Claims.....			6,359.31	2,450.21	1,042.32	33.49	20.25	9,905.58
	Total cost.....	\$ 10,296.32	\$ 4,374.30	\$ 553,914.73	\$ 398,254.35	\$ 56,348.23	\$ 7,537.10	\$ 5,629.95	\$1,036,354.98
	Total Appropriation.....	11,109.05	5,000.00	630,566.70	439,871.00	57,076.37	8,461.00	7,070.00	1,159,154.12
	Balance of Appropriation.....	182.73	625.70	76,651.97	41,616.65	728.14	923.90	1,440.05	122,799.14

*Dec. 27, 1913.	H. R. Albee, Mayor—Emergency.....	\$ 600.00
May 12, 1914.	W. H. Murphy, Commander Gordon Grange Post.....	300.00
May 12, 1914.	C. R. Hotchkiss, Commander Scout Young Camp.....	100.00
May 18, 1914.	C. A. Bigelow.....	77.80
May 19, 1914.	Cecelia F. Benedict, Pres.....	50.00
June 1, 1914.	Mrs. F. Frank, Treas. Visiting Nurse Assn.....	20.00
July 1, 1914.	Visiting Nurse Association.....	20.00
July 7, 1914.	H. R. Albee, Mayor.....	350.00
Aug. 1, 1914.	Visiting Nurse Association.....	20.00
Sept. 15, 1914.	H. R. Albee, Mayor, Ord. 29490.....	800.00
Sept. 21, 1914.	Buffalo Steam Roller Co., Shafts, etc.....	761.50
Oct. 30, 1914.	Wm. Adams, City Treasurer, Refund.....	15.00
Oct. 30, 1914.	Mrs. Johanna Costello, Relief.....	25.00
Nov. 5, 1914.	Mrs. Johanna Costello, Relief.....	25.00

Nov. 17, 1914.	Williams & Beggs, Plumbing.....	285.00
Nov. 28, 1914.	H. R. Albee, Mayor.....	500.00
Nov. 30, 1914.	H. R. Albee, Mayor, Ord. 29830.....	400.00
Nov. 30, 1914.	Mrs. Johanna Costello, Relief.....	25.00
		\$4,374.30

OFFICE OF THE CITY AUDITOR

OFFICE OF THE CITY AUDITOR

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ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND—DEPARTMENT OF FINANCE

Code Designation.		Commissioner's Office.	Office of City Treasurer.	Municipal Garage.	Public Market.	Bureau of Purchases & Stores.	Municipal Repair Shop.	City Store House.	Total Department Expenditures.
Personal Services.									
A-1	Salaries.....	\$ 6,019.82	\$ 16,077.87	\$ 878.85	\$ 703.16	\$ 9,440.01		\$ 1,469.58	\$ 34,589.29
B-1	Office.....	52.94	967.78					80.76	1,541.20
B-6	Motor Vehicle.....			789.20		439.72			789.20
C-4	General Plant.....			43.36					43.36
Material.									
D-1	Office.....	40.50	762.19			263.35			1,066.04
D-5	Motor Vehicle.....					509.00			509.00
D-7	General Plant.....			275.26			2,407.66	19.55	2,702.47
Equipment.									
E-2	General.....	6.20	43.01						43.01
F	Contingencies.....		42.20	124.10	52.89	3.40		10.77	239.56
G-2	Fixed Charges and Contributions.								
G-4	Rents.....		206.00	152.60				860.00	1,218.60
	Insurance and premium on Personal Bonds.....		300.00						300.00
	Expenditures.....	\$ 6,119.46	\$ 18,399.05	\$ 2,263.37	\$ 756.05	\$ 10,655.48	\$ 2,407.66	\$ 2,440.66	\$ 43,041.73
	General Fund Warrants drawn.....	\$ 6,066.52	\$ 17,845.86	\$ 2,099.03	\$ 744.96	\$ 10,212.01	\$ 269.77	\$ 1,531.43	\$ 38,769.58
	Miscellaneous Debits.....	52.94	553.19	164.34	11.09	443.47	2,137.89	909.23	4,272.15
	Outstanding Claims.....		6.00	219.72	5,744.10	37.99			6,007.81
	Total cost.....	\$ 6,119.46	\$ 18,405.05	\$ 2,483.09	\$ 6,500.15	\$ 10,693.47	\$ 2,407.66	\$ 2,440.66	\$ 49,049.54
	Total Appropriation.....	6,318.05	18,002.70	2,085.24	6,915.22	10,829.58	2,575.14	3,370.14	51,896.17
	Balance of Appropriation.....	\$ 198.59	\$ 497.65	\$ 502.15	\$ 415.17	\$ 136.11	\$ 167.48	\$ 929.48	\$ 2,846.63

OFFICE OF THE CITY AUDITOR

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND—DEPARTMENT OF PUBLIC AFFAIRS

Code Designation.		Commissioner's Office.	Bureau of City Hall.	Office of City Attorney.	Bureau of Parks.	Bureau of Free Employment.	Bureau of Weights and Measures.	Free Museum.	Temporary Auditorium.	Total Department Expenditures.
Personal Services.										
A-1	Salaries.....	\$ 7,095.46	\$ 14,406.34	\$ 19,374.14	\$ 98,992.83	\$ 2,462.61	\$ 3,000.00			\$ 145,331.38
A-2	Special Services.....				40.00					40.00
	Unemployed.....				16,810.15				680.97	17,491.12
Supplies.										
B-1	Office.....	74.54	2.64	467.55	520.53	71.61	24.23			1,161.10
B-2	Fuel.....		1,633.19		957.42	42.10				2,632.71
B-3	Forage and Veterinary.....				4,689.24					4,689.24
B-5	Cleaning and Disinfecting.....		280.62		953.90					1,234.52
B-6	Motor Vehicle.....				435.40					435.40
B-7	Botanical and Agricultural.....				1,570.54					1,570.54
B-8	Educational and Recreational.....				1,913.13					1,913.13
B-9	Medical and Surgical.....				31.22					31.22
B-10	General Plant.....		195.76		695.65					891.41
Material.										
C-1	Highway.....				289.37					289.37
C-2	Sewer.....				101.03					101.03
C-3	Building.....		90.88		1,212.70					1,303.58
C-4	General Plant.....		17.63		3,169.95					3,187.58
Equipment.										
D-1	Office.....	14.50	30.00	725.15	255.75	11.00	38.60			1,075.00
D-2	Household.....	10.00	60.75							70.75
D-3	Livestock.....				579.67					579.67
D-5	Motor Vehicle.....				2,811.28					2,811.28
D-6	Educational and Recreational.....				3,999.59					3,999.59
D-7	General Plant.....		105.28		2,164.88		8.97	98.00		2,377.13
E-1	Construction and Extension.....		2,649.09		1,564.94					4,214.03
Repairs.										
E-2	General.....		345.08		967.22		28.92			1,341.22
E-3	Motor Vehicle.....				638.80					638.80
E-4-d	Heat.....		268.50							268.50
E-5	Janitorial Service.....		492.36		830.08	121.75				1,444.19
Transportation.										
E-6-a	Hire of Horses and Vehicles.....				2,001.18					2,001.18
E-6-b	Hire of Automobiles.....				93.64					93.64

OFFICE OF THE CITY AUDITOR

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND—DEPARTMENT OF PUBLIC AFFAIRS—Continued

Code Designation.		Commissioner's Office.	Bureau of City Hall.	Office of City Attorney.	Bureau of Parks.	Bureau of Free Employment.	Bureau of Weights and Measures.	Free Museum.	Temporary Auditorium.	Total Department Expenditures.
E-6-d	Shoeing and Boarding Horses				\$ 134.60		\$ 329.41			\$ 464.01
E-6-e	Car Fare			93.85	246.05	2.00	50.00			391.90
E-6-f	Other Transportation			14.90	219.50	8.95				243.35
	Communication									
E-7-a	Telephone		860.60	1.25	164.60	95.26				1,121.71
E-7-b	Telegraph and Messenger service			13.56	8.52					22.08
E-8	General Plant Service		182.80		12,205.77					12,388.57
D	Contingencies			1,864.22	281.87	.96		54.45		2,229.66
G	Fixed Charges and Contributions	28.16			72.25					72.25
G-2	Rents					1,320.00				1,320.00
G-7	Other Contributions				9,353.73					9,353.73
	Expenditures	\$ 7,222.66	\$ 21,621.52	\$ 22,554.62	\$ 170,976.98	\$ 4,136.24	\$ 3,480.13	\$ 152.45	\$ 680.97	\$ 230,825.57
	General Fund Warrants drawn	\$ 7,144.61	\$ 21,607.65	\$ 23,395.36	\$ 159,344.46	\$ 3,954.88	\$ 3,395.95	\$ 152.45	\$ 680.97	\$ 219,676.33
	Miscellaneous Debits	78.05	13.87	** 840.74	11,632.52	181.36	84.18			11,492.24
	Outstanding Claims	22.79	1,356.23	68.19	3,204.55	38.50	42.25			4,732.51
	Total cost	\$ 7,245.45	\$ 22,977.75	\$ 22,622.81	\$ *174,181.53	\$ 4,174.74	\$ 3,522.38	\$ 152.45	\$ 680.97	\$ 235,558.08
	Total Appropriations	7,470.53	24,878.50	25,455.52	175,951.21	4,951.14	3,593.00	200.00	718.47	243,218.37
	Balance of Appropriations	\$ 225.08	\$ 1,900.75	\$ 2,832.71	\$ 1,769.68	\$ 776.40	\$ 70.62	\$ 47.55	\$ 37.50	\$ 7,660.29

*For balance of cost of Bureau of Parks, see expenditures out of Park Fund.
 **Deduct.

OFFICE OF THE CITY AUDITOR

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND—DEPARTMENT OF PUBLIC UTILITIES

Code Designation.		Commissioner's Office.	Bureau of Street Cleaning.	Bureau of Garbage Disposal.	Lighting	Total Department Expenditures.
	Personal Services.					
A-1	Salaries	\$ 9,539.34	\$ 214,395.67	\$ 20,679.16		\$ 244,614.17
	Supplies.					
B-1	Office	58.25	95.84	9.60		163.69
B-2	Fuel		85.60			85.60
B-3	Forage and Veterinary		18,640.51	280.18		18,920.69
B-5	Cleaning and Disinfecting		8.67			8.67
B-6	Motor Vehicle		1,783.42			1,783.42
B-9	Medical and Surgical		198.65			198.65
B-10	General plant		18,551.20	594.93		19,146.13
	Material.					
C-4	General Plant		1,481.76	353.04		1,834.80
	Equipment.					
D-1	Office		11.20			11.20
D-3	Livestock		465.00			465.00
D-4	Motorless Vehicle		105.04			105.04
D-5	Motor Vehicle		7,862.08			7,862.08
D-7	General Plant		486.26	26.04		512.30
E-1	Construction and Extension		1,804.04			1,804.00
	Repairs.					
E-2	General		3,451.78	484.87		3,936.65
E-3	Motor Vehicle		721.23			721.23
	Lighting.					
E-4-a	Streets and Parks				\$ 168,124.11	168,124.11
E-4-c	Power			70.10		70.10
	Transportation.					
E-6-d	Shoeing and Boarding Horses		3,257.37	28.14		3,285.51
E-6-e	Car Fare		68.00			68.00
	Communication.					
E-7-a	Telephone		128.00			128.00
E-8	General Plant Service			87.01		87.01
F	Contingencies	78.15	785.76	15.79		879.70
G-2	Rents		600.00			600.00
	Expenditures	\$ 9,675.74	\$ 274,987.04	\$ 22,628.86	\$ 168,124.11	\$ 475,415.79

OFFICE OF THE CITY AUDITOR

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND—DEPARTMENT OF PUBLIC UTILITIES—Continued

	Commissioner's Office.	Bureau of Street Cleaning.	Bureau of Garbage Disposal.	Lighting.	Total Department Expenditures.
General Fund Warrants drawn.....	\$ 9,610.32	\$ 262,808.07	\$ 22,472.61	\$ 167,961.37	\$ 462,853.37
Miscellaneous debits.....	65.42	12,179.01	155.25	162.74	12,502.42
Outstanding Claims.....		45,029.88	134.04	15,303.33	60,557.25
Total cost.....	\$ 9,675.74	\$ 320,016.96	\$ 22,762.90	\$ 183,517.44	\$ 535,973.04
Total appropriation.....	20,487.50	357,454.05	26,591.25	196,000.00	599,502.80
Balance of Appropriation.....	\$ 10,811.76	\$ 27,437.09	\$ 5,228.35	\$ 11,482.56	\$ 63,559.76

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS PAYABLE OUT OF THE GENERAL FUND — DEPARTMENT OF PUBLIC WORKS

Code Designation.		General.	Specials.	Total Department Expenditures.
Personal Service.				
A-1	Salaries.....	\$ 299,369.45		
Supplies.				
B-1	Office.....	3,815.24		
B-2	Fuel.....	2,307.62		
B-3	Forage and Veterinary.....	151.65		
B-4	Food.....	11.15		
B-5	Cleaning and Disinfecting.....	23		
B-6	Motor Vehicle.....	1,376.48		
B-9	Medical and Surgical.....	24.00		
B-10	General Plant.....	1,038.71		
Material.				
C-1	Highway.....	17,563.95		
C-2	Sewer.....	3,629.89		
C-3	Building.....	252.80		
C-4	General Plant.....	721.89		
Equipment.				
D-1	Office.....	2,145.31		
D-2	Household.....	91.98		
D-4	Motorless Vehicle.....	8.00		
D-5	Motor Vehicle.....	5,028.98		
D-7	General Plant.....	3,536.72		
E-1	Construction and Extension Permanent Works.....		\$ 38,870.78	
Repairs.				
E-2	General.....	5,456.77		
E-3	Motor Vehicle.....	2,710.42		
E-4-c	Power.....	38.81		
Transportation.				
E-6-a	Hire of Horses and Vehicles.....	7,015.56		
E-6-b	Hire of Automobiles.....	24.64		
E-6-c	Storage Motor Vehicles.....	217.05		
E-6-d	Shoeing and Boarding Horses.....	107.77		
E-6-e	Car Fare.....	3,488.50		
E-6-f	Other transportation.....	3.85		
Communication.				
E-7-a	Telephone.....	2.25		
E-7-b	Telegraph and Messenger Service.....	13.16		
F	Contingencies.....	2,673.96		
	Repairs of Retaining Walls.....		147.00	
	Street Maintenance.....		11,079.35	
	Repair Maywood Drive.....		1,020.41	
	Repair Broadway Bridge.....		1,775.98	
	Repair Front St. Bridge.....		9,956.36	
	Repair Union Ave. Bridge.....		9,880.79	
	Repair Grand Ave. Bridge.....		197.76	
	Repair Vista Ave. Retaining Wall.....		21,586.86	
	Removal of Obstruction to Navigation.....		278.44	
	Peninsula Dist. Surveys.....		195.05	
	Additional Booths, Public Market.....		647.82	
	Expenditures.....	\$ 362,826.79	\$ 95,636.60	\$ 458,463.39

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS
PAYABLE OUT OF THE GENERAL FUND — DEPARTMENT OF
PUBLIC WORKS—Continued

	General.	Specials.	Total Department Expenditures.
General Fund Warrants drawn.....	\$ 366,939.39	\$ 85,537.42	\$ 452,496.81
Miscellaneous Debits.....	*4,112.60	10,079.18	5,966.58
Outstanding Claims.....	6,331.90	22,180.32	28,512.22
Total Cost.....	\$ 369,158.69	\$ 117,816.92	\$ 486,975.61
Total Appropriation.....	423,875.00	132,202.19	556,077.19
Balance of Appropriation.....	\$ 54,716.31	\$ 14,385.27	\$ 69,101.58

*Deduct.

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS
PAYABLE OUT OF THE GENERAL FUND — OFFICE OF CITY
AUDITOR

Code Designation.		General.	Elections.	Total Department Expenditures.
	Personal Services.			
A-1	Salaries.....	\$ 45,301.54	\$ 16,878.50	\$ 62,178.04
A-2	Special Services.....		325.88	325.88
	Supplies.			
B-1	Office.....	4,345.15	1,335.63	5,680.78
B-4	Food.....		2,708.05	2,708.05
	Equipment.			
D-1	Office.....	266.40		266.40
D-7	General Plant.....		287.50	287.50
	Repairs.			
E-2	General.....	49.25		49.25
	Transportation.			
E-6-f	Hire of Automobiles.....		2,615.00	2,615.00
	Fixed Charges and Contributions.			
G-2	Rents.....		3,124.00	3,124.00
G-5	Advertising.....		452.90	452.90
	Expenditures.....	\$ 49,962.34	\$ 27,725.46	\$ 77,687.80
	General Fund Warrants Drawn.....	\$ 47,185.56	\$ 26,732.36	\$ 73,917.92
	Miscellaneous Debits.....	2,776.78	993.10	3,769.88
	Outstanding Claims.....	895.87		895.87
	Total Cost.....	\$ 50,858.21	\$ 27,725.46	\$ 78,583.67
	Total Appropriation.....	55,152.55	46,611.56	101,764.11
	Balance of Appropriation.....	\$ 4,294.34	\$ 18,886.10	\$ 23,180.44

ANALYSIS OF ANNUAL EXPENSES OF THE VARIOUS DEPARTMENTS
PAYABLE OUT OF THE GENERAL FUND—CIVIL SERVICE BOARD

Code Designation.		Total Department Expenditures.
	Personal Services.	
A-1	Salaries.....	\$ 3,761.95
	Supplies.	
B-1	Office.....	401.07
F	Contingencies.....	226.32
	Expenditures.....	\$ 4,389.34
	General Fund Warrants Drawn.....	\$ 4,010.82
	Miscellaneous Debits.....	478.52
	Total Cost.....	\$ 4,389.34
	Total Appropriation.....	4,675.00
	Balance of Appropriation.....	\$ 285.66

MISCELLANEOUS APPROPRIATIONS NOT CHARGEABLE TO COST OF DEPARTMENTS OR BUREAUS

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OFFICE OF THE CITY AUDITOR

	Appropriation.	Claims Paid.	Claims Outstanding.	Balance of Appropriation.	General Fund Warrants Drawn.	Miscellaneous Debits.	Interest Coupons Paid.	Garbage Crematory Bonds Redeemed.
Advertising.....	\$ 14,000.00	\$ 11,742.76	\$ 1,002.90	\$ 1,254.34	\$ 11,742.76			
Assessments against City Property.....	11,246.53	11,246.53			11,246.53			
Audit of Financial Books.....	2,500.00	897.00		1,603.00	897.00			
Codifying City Ordinances.....	1,304.48	1,104.48	200.00		1,104.48			
Cutting weeds, etc.....	11,710.26	10,420.92		1,289.34	10,420.92			
Forms Committee of Council.....	15.25	15.25			15.25			
Furnishing Municipal Jail.....	63,000.00	55,048.45	9,017.25	*1,065.70	54,882.63	165.82		
Interest on Crematory Bonds.....	4,215.00	4,215.00					\$ 4,215.00	
Manufacturer's & Land Products Show.....	200.00	121.85	8.00	70.15	73.27	48.58		
Municipal Lodging House.....	1,250.00	1,194.50		55.50	1,254.54	*60.04		
Oregon Humane Society Fines.....	500.00	365.50		134.50				
Payment of Judgments.....	3,297.80	3,297.80			2,938.90	358.90		
Postage stamps.....	3,036.30	3,036.30			3,036.30			
Portland Press Badges.....	57.50	57.50			57.50			
Printing draft of Housing Code.....	50.00	50.00			50.00			
Printing opinions of City Attorney.....	400.40	400.40			400.40			
Premium on Fire Insurance.....	6,264.53	6,259.41		5.12	6,259.41			
Premium on Employes Bonds.....	2,500.00	1,237.65		1,262.35	1,237.65			
Prior year claims from 1914 appn.....	1,086.35	519.34		567.01	519.34			
Purchase of Real Estate.....	10,460.50	10,460.50			10,460.50			
Purchase of St. Imp. and Sewer warrants.....	748.37	747.77		.60	747.77			
Purchase of Right of Way.....	2,895.50	2,849.50		46.00	2,849.50			
Redemption of Crematory Bonds.....	10,800.00	10,800.00						10,800.00
Refund Licenses—Signs and Banners.....	332.70	332.70			332.70			
Relief of certain persons.....	6,462.61	4,933.00		1,529.61	4,933.00			
Relief of unemployed.....	4,891.89	27.50	578.80	4,285.59	27.50			
Relief of Mrs. J. F. Kraig.....	240.00	240.00			240.00			
Rent of Railroad Bridge.....	11,774.19	11,774.19			11,774.19			
Special services Assessment Clerks.....	88.75	88.75			88.75			
State Board of Pharmacy.....	1,550.00	1,550.00			1,550.00			
"Rotary Accounts."								
Stationery stock.....	29,785.02	28,210.42		1,574.60	22,336.75	5,873.67		
Stores.....	56,006.17	44,900.71		11,105.46	35,644.73	9,255.98		
Municipal Shop.....	53,966.25	53,520.64		445.61	26,977.55	26,543.09		
Extension of Mill Street.....	3,500.00	3,550.00			3,500.00			
Extension of Broadway.....	10,530.60	10,530.60			10,530.60			
Extension of East Grant Street.....	2,244.00	2,244.00			2,244.00			
Totals.....	\$ 362,010.95	\$ 323,166.73	\$ 15,581.14	\$ 24,163.08	\$ 265,965.73	\$ 42,180.00	\$ 4,215.00	\$ 10,800.00
*Deduct.								

RECAPITULATION OF GENERAL FUND DISBURSEMENTS 1914, NOT INCLUDING TRANSFERS

	Appropriation.	Warrants Drawn.	Miscellaneous Debits.	Interest on Crematory Bonds.	Redemption of Crematory Bonds.	Outstanding Claims.	Balance of Appropriation.
Department of Public Safety.							
Mayor's Office.....	\$ 11,109.05	\$ 10,113.47	\$ 182.85				\$ 812.73
Emergency Fund.....	5,000.00	4,374.30					625.70
Bureau of Fire.....	630,566.70	520,418.37	27,137.05			6,359.31	76,651.97
Bureau of Police.....	439,871.00	391,715.29	4,088.85			2,450.21	41,616.65
Bureau of Health.....	57,076.37	52,655.72	2,650.19			1,042.32	728.14
Municipal Court.....	8,461.00	7,318.65	184.96			33.49	923.90
Pound.....	7,070.00	5,524.77	84.93			20.25	1,440.05
Department of Finance.							
Commissioner's Office.....	6,318.05	6,066.52	52.94				198.59
Office of City Treasurer.....	18,902.70	17,845.86	553.19			6.00	497.65
Municipal Garage.....	2,985.24	2,099.03	164.34			219.72	502.15
Public Market.....	6,915.32	744.96	11.09			5,744.10	415.17
Bureau of Purchase and Stores.....	10,829.58	10,212.01	443.47			37.99	136.11
Municipal Repair Shop.....	2,575.14	269.77	2,137.89				167.48
City Store House.....	3,370.14	1,531.43	900.23				929.48
Department of Public Affairs.							
Commissioner's Office.....	7,470.53	7,144.61	78.05				225.08
Bureau of City Hall.....	24,878.50	21,607.65	13.87			22.79	1,900.75
Office of City Attorney.....	25,455.52	23,395.36	*840.74			1,356.23	2,832.71
Bureau of Parks.....	175,951.21	159,344.46	11,632.52			68.10	1,769.68
Bureau of Free Employment.....	4,951.14	3,954.88	181.36			3,204.55	776.40
Bureau of Weights and Measures.....	3,593.00	3,395.95	84.18			38.50	70.62
Free Museum.....	200.00	152.45				42.25	47.55
Temporary Auditorium.....	718.47	680.97					37.50
Department of Public Utilities.							
Commissioner's Office.....	20,487.50	9,610.32	65.42				10,811.76
Bureau of Street Cleaning.....	357,484.05	262,808.07	12,179.01			45,029.88	37,467.09
Bureau of Garbage Disposal.....	26,591.25	22,473.61	155.25			134.04	3,828.35
Lighting.....	195,000.00	167,961.37	162.74			15,393.33	11,482.56
Department of Public Works.							
General.....	423,875.00	366,939.39	*4,112.60			6,331.90	54,716.31
Special Appropriations.....	132,202.19	85,557.42	10,079.18			22,180.32	14,385.27
Office of City Auditor.							
General.....	55,152.55	47,185.56	2,776.78			895.87	4,294.34
Elections.....	46,611.56	26,732.36	993.10				18,886.10

OFFICE OF THE CITY AUDITOR

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RECAPITULATION OF GENERAL FUND DISBURSEMENTS 1914, NOT INCLUDING TRANSFERS—Continued

	Appropriation.	Warrants Drawn.	Miscellaneous Debits.	Interest on Crematory Bonds.	Redemption of Crematory Bonds.	Outstanding Claims.	Balance of Appropriation.
Civil Service Board.	\$ 4,575.00	\$ 4,010.82	\$ 378.52	\$ 4,215.00	\$ 10,800.00	\$ 15,531.14	\$ 285.66
Miscellaneous and Rotary Accts.	362,010.95	265,965.73	42,186.00				24,163.08
Claims paid during 1914—Authorized during 1913.	97,402.44	18,241.93	6,655.98				72,504.53
Grand totals.	\$3,176,661.15	\$2,598,053.06	\$ 121,269.60	\$ 4,215.00	\$ 10,800.00	\$ 126,192.38	\$ 386,131.11

*Deduct.

STATEMENT OF GENERAL FUND WARRANTS DRAWN DURING 1914 IN PAYMENT OF CLAIMS AUTHORIZED DURING THE YEAR 1913

	App'n.	Claims Paid.	Balance App'n.	Warrants Drawn.	Misc'l. Debits.
Advertising.	\$ 2,843.31	\$ 2.75	\$ 2,840.56	\$ 2.75	
Building Insp'rs. Office.	3,097.80	79.80	3,018.00	79.80	
Car Fare.	2,036.60	17.20	2,019.40	7.20	\$ 10.00
City Hall.	1,262.55	1,262.55		1,262.55	
Comfort Station, Construction.	151.71	136.51	15.20	136.51	
Civil Service Board.	366.20	126.20	240.00	126.20	
Engineer's Office.	15,091.53	1,316.28	13,775.25	1,275.28	41.00
Free Employment Bureau.	643.76	133.75	510.01	133.75	
Free Museum.	758.37	52.00	706.37	52.00	
Garbage Crematory.	7,074.23	120.25	6,953.98	120.25	
Health Department.	7,815.70	1,603.91	6,211.79	1,603.91	
Litigation.	3,643.69	126.35	3,517.34	126.35	
License Tags.	58.75	11.00	47.75	11.00	
Mayor's Office.	1,707.80	.25	1,707.55	.25	
Miscellaneous Expense.	723.23	701.08	22.15	701.08	
Municipal Reference Library.	124.00	.93	123.07	.93	
Municipal Shop Expense.	700.70	654.63	46.07	50.46	604.17
New York Bureau of Municipal Research.	2,000.00	2,000.00		2,000.00	
Operating New Railroad Bridge.	19,766.72	493.34	19,273.38	493.34	
Peninsula District Sewer.	852.61	789.54	63.07	602.04	187.50
Pound Department.	1,338.49	19.72	1,318.77	19.72	
Refund Vehicle License.	4,072.20	194.75	3,877.45	194.75	
Relief of Certain persons.	1,653.92	394.37	1,259.55	394.37	
Sealer of Weights and Measures.	549.93	35.26	514.67	35.26	
Stationery and Blanks.	2,592.54	2,329.71	262.83	488.81	1,840.90
Switchboard Installation.	50.00	10.67	39.33	9.55	1.12
Salary Employees, Municipal Building.	4,441.56	333.07	4,108.49		333.07
Stores, Capital Account.	11,919.54	11,919.54		8,281.32	3,638.22
Water Trough, 21st & Powell.	65.00	32.50	32.50	32.50	
Totals.	\$ 97,402.44	\$ 24,897.91	\$ 72,504.53	\$ 18,241.93	\$ 6,655.98

FIRE DEPARTMENT FUND

Balance Dec. 1, 1913.	\$ 298,326.88	
RECEIPTS		
Delinquent Taxes.	8,839.54	
Transferred from General Fund.	.15	307,166.07
DISBURSEMENTS		
Warrants Paid and Returned.	\$ 76,119.19	
Transferred to General Fund.	230,938.98	
Balance Nov. 30, 1914.	107.90	307,166.07
Total Appropriation.	\$ 243,004.99	
Miscellaneous Credits.	655.87	243,660.86
Total Warrants Drawn.	\$ 31,251.71	
Miscellaneous Debits.	1,434.29	
App'n Cancelled.	210,974.86	243,660.86

POLICE DEPARTMENT FUND

Balance Dec. 1, 1913.....	\$ 95,061.55	
RECEIPTS		
Delinquent Taxes.....	5,695.30	100,756.85
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 57,562.38	
Transferred to General Fund.....	43,150.20	
Balance Nov. 30, 1914.....	44.27	100,756.85
Total Appropriation.....	\$ 88,312.11	
Miscellaneous Credits.....	42.29	88,354.40
Total Warrants Drawn.....	\$ 26,592.64	
Miscellaneous Debits.....	5.13	
App'n Cancelled.....	61,756.63	88,354.40

BONDED INDEBTEDNESS INTEREST FUND

Balance Dec. 1, 1913.....	\$ 105,306.29	
RECEIPTS		
City Taxes 1914.....	310,608.42	
Delinquent Taxes.....	4,968.58	
Interest on Auditorium Bonds.....	186.66	
Transfer from Water Fund.....	7,500.00	
Transfer from Special Tax Fund 1914.....	327.88	428,897.83
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 139.00	
Coupons Paid and Returned.....	279,410.00	
Transferred to Chemical National Bank, N. Y....	33,400.00	
Transferred to Chase National Bank, N. Y....	1,500.00	
Transferred to Harris, Forbes & Co.....	9,000.00	
Balance Nov. 30, 1914.....	105,448.83	428,897.83

CHEMICAL NATIONAL BANK, N. Y.

Balance Dec. 1, 1913.....	\$ 4,550.00	
RECEIPTS		
Transferred from Bonded Ind. Int. Fund.....	33,400.00	37,950.00
DISBURSEMENTS		
Coupons Paid and Returned.....	\$ 32,895.00	
Balance Nov. 30, 1914.....	5,055.00	37,950.00

CHASE NATIONAL BANK, N. Y.

Balance Dec. 1, 1913.....	\$ 1,620.00	
RECEIPTS		
Transferred from Bd. Ind. Int. Fund.....	1,500.00	
Transferred from Water Fund.....	1,500.00	4,620.00
DISBURSEMENTS		
Coupons Paid and Returned.....	\$ 4,470.00	
Balance Nov. 30, 1914.....	150.00	4,620.00

HARRIS, FORBES & CO., N. Y.

Balance Dec. 1, 1913.....	\$ 7,710.00	
RECEIPTS		
Transferred from Bonded Ind. Int. Fund.....	9,000.00	
Transferred from Water Fund.....	6,000.00	22,710.00
DISBURSEMENTS		
Coupons Paid and Returned.....	\$ 15,180.00	
Balance Nov. 30, 1914.....	7,530.00	22,710.00

GENERAL BONDED INDEBTEDNESS

CUPONS OUTSTANDING NOV. 30, 1913, AND DUE, PAID AND OUTSTANDING YEAR ENDING NOV. 30, 1914.

	Out.	Due.	Paid.	Out Nov. 30, 1914.
Funding	\$	\$ 23,760.00	\$ 23,760.00	
City Hall.....	25.00	33,750.00	33,325.00	\$ 450.00
Bridge	445.00	137,680.00	137,180.00	945.00
Ferry	395.00	5,250.00	5,550.00	95.00
Park and Boulevard.....		40,000.00	39,980.00	20.00
New Water.....	180.00	50,000.00	50,180.00	
Fire Boat and Fire Mains..		5,000.00	5,000.00	
Municipal Jail.....	620.00	8,000.00	8,260.00	360.00
East Portland Water and Light	9,330.00	18,000.00	19,650.00	7,680.00
Albina General and Park		8,400.00	8,370.00	30.00
Public Auditorium.....		700.00	700.00	
	\$10,995.00	330,540.00	\$ 331,955.00	\$ 9,580.00
Total appropriation.....				357,634.00
Warrants Drawn.....			139.00	
Interest Coupons Paid.....			331,955.00	
Balance of appropriation carried forward.....			25,540.00	\$ 357,634.00

LIGHTING FUND

Balance Dec. 1, 1913.....	\$ 33,482.37	
RECEIPTS		
Delinquent Taxes.....		2,513.65
Interest on Improvement Bonds.....		270.00
Improvement Bonds Cashed.....		9,000.00
		45,266.02
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 19,144.68	
Transferred to General Fund.....	26,121.34	45,266.02
Total Appropriation.....		\$ 40,668.66
Warrants Drawn.....	\$ 16,812.55	
Appropriation Cancelled.....	23,856.11	40,668.66

STREET REPAIR FUND

Balance Dec. 1, 1913.....	\$ 37,752.19	
RECEIPTS		
Delinquent Taxes.....	1,619.64	
Repair Sidewalk.....	1,528.55	
Transferred from General Fund.....	210.00	41,110.38
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 17,042.34	
Transferred to General Fund.....	23,858.60	
Balance Nov. 30, 1914.....	209.44	41,110.38
Total Appropriations.....	\$ 32,289.67	
Miscellaneous Credit.....	210.00	32,499.67
Warrants Drawn.....	\$ 8,177.33	
Miscellaneous Debits.....	162.50	
Appropriation Cancelled.....	24,159.84	32,499.67

PUBLIC LIBRARY FUND

RECEIPTS		
Delinquent Taxes.....	\$.....	\$ 164.31
DISBURSEMENTS		
Warrants Paid and Returned.....	123.72	
Balance Nov. 30, 1914.....	40.59	164.31
Total Appropriation.....		\$ 1,370.39
Warrants Drawn.....	164.31	
Balance of Appropriation Carried Forward.....	1,206.08	1,370.39

PARK FUND

Balance Dec. 1, 1913.....	\$ 55,125.89	
RECEIPTS		
Delinquent Taxes.....	2,027.86	
Transferred from General Fund.....	5.19	57,158.94
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 33,796.00	
Transferred to General Fund.....	23,099.92	
Transferred to Water Fund.....	184.60	
Balance Nov. 30, 1914.....	78.42	57,158.94
Total Appropriation.....	\$ 44,392.00	
Miscellaneous Credit.....	5.19	44,397.19
Warrants Drawn.....	\$ 23,305.58	
Miscellaneous Debits.....	236.30	
Balance of Appropriation Cancelled.....	20,855.31	44,397.19

SPECIAL BRIDGE FUND

Balance Dec. 1, 1913.....	\$ 5,728.42	
RECEIPTS		
Delinquent Taxes.....	1,904.77	7,633.19
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 3,930.16	
Transferred to General Fund.....	33.10	
Balance Nov. 30, 1914.....	3,669.93	7,633.19
Total Appropriation.....		\$ 5,964.04
Warrants Drawn.....	\$ 4,513.99	
Miscellaneous Debits.....	33.10	
Balance of Appropriation Carried Forward.....	1,416.95	5,964.04

SINKING FUND

Balance Dec. 1, 1913.....	\$ 17,391.67	
RECEIPTS		
City Taxes 1914.....	120,624.62	
Delinquent Taxes.....	1,976.36	
Crematory Bonds Cashied.....	5,800.00	
Interest on Crematory Bonds.....	1,305.00	
Interest on Water Bonds.....	2,840.00	
Interest on Street Extension Bonds.....	79.08	
Improvement Bonds Cashied.....	30,000.00	
Interest on Improvement Bonds.....	13,214.20	
Interest on Daily Balances.....	1,068.90	
Transferred from Special Tax Fund.....	127.33	194,427.16
DISBURSEMENTS		
Improvement Bonds Purchased.....	\$ 175,554.96	
Transferred to Improvement Bond Interest Fund..	7,777.81	
Balance Nov. 30, 1914.....	11,094.39	194,427.16
Total Appropriation.....		\$ 200,679.56
Warrants Drawn.....	175,554.96	
Balance of Appropriation Carried Forward.....	25,124.60	200,679.56

STREET CLEANING AND SPRINKLING FUND

Balance Dec. 1, 1913.....	\$ 35,147.85	
RECEIPTS		
Delinquent Taxes.....	2,616.67	37,764.52
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 24,293.81	
Transferred to General Fund.....	13,444.56	
Balance Nov. 30, 1914.....	26.15	37,764.52
Total Appropriation.....		\$ 95,643.06
Warrants Drawn.....	\$ 5,776.96	
Appropriation Cancelled.....	89,866.10	95,643.06

WATER FUND

Balance Dec. 1, 1913.....	\$ 244,319.19	
RECEIPTS		
Collection of Water Rates.....	859,473.85	
Sale of Bonds.....	432,513.00	
Accrued Interest on Bonds Sold.....	1,274.43	
Interest on Daily Balances.....	4,411.20	
Refund on Warrant.....	1.70	
Sale of Water Tank.....	17.00	
Sale of Old Pipe.....	1,228.40	
Northwestern Electric Co., Labor.....	798.11	
Sale of Horse and Wagon.....	322.50	
Shutting off Fire Service McKay Bldg.....	11.60	
Inspection of Water Mains.....	26.00	
Repair of Water Meters.....	24.05	
Repair to Service Pipe.....	9.50	
Refund Kleist & Co.....	1.50	
Jury Fees, D. D. Clarke.....	18.00	
Sale of Sacks.....	53.10	
Transferred from General Fund.....	76,819.57	
Transferred from Water Bond Interest Fund.....	2,800.00	
Transferred from Park Fund.....	184.60	
Transferred from Park and Boulevard Fund.....	96.60	1,624,403.90
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 777,876.88	
Interest Coupons Paid and Returned.....	266,735.00	
Transferred to General Fund.....	89,488.30	
Transferred to Water Bond Sinking Fund.....	254,460.00	
Transferred to Improvement Bond Interest Fund.....	60,000.00	
Transferred to Improvement Bond Sinking Fund.....	102,608.11	
Transferred to Bonded Indebtedness Interest Fund.....	7,500.00	
Transferred to Harris, Forbes & Co., N. Y.....	6,000.00	
Transferred to Chase National Bank, N. Y.....	1,500.00	
Balance Nov. 30, 1914.....	58,235.61	1,624,403.90

DEPARTMENT OF PUBLIC UTILITIES
BUREAU OF WATER WORKS

Code Designation		
Personal Services		
A-1	Salaries	\$ 314,950.08
A-2	Special Services.....	18,604.47
	Unemployed	15,384.07
Supplies		
B-1	Office	9,257.88
B-2	Fuel	1,778.42
B-3	Forage and Veterinary.....	1,243.79
B-4	Food	733.82
B-5	Cleaning and Disinfecting.....	32.08
B-6	Motor Vehicle.....	2,490.32
B-7	Botanical and Agricultural.....	19.50
B-9	Medical and Surgical.....	.73
B-10	General Plant.....	1,719.95
Material		
C-3	Building	4,957.53
C-4	General Plant.....	274,357.91
Equipment		
D-1	Office	461.00
D-2	Household	24.21
D-3	Livestock	138.40
D-4	Motorless Vehicle.....	307.90
D-5	Motor Vehicle.....	4,425.64
D-7	General Plant.....	12,849.08
E-1	Construction and Extension.....	21,847.15
Repairs		
E-2	General	8,822.88
E-3	Motor Vehicle.....	4,702.31
Lighting		
E-4-b	Public Buildings.....	319.25
E-4-c	Power	1,376.86
Transportation		
E-6-a	Hire of Horses and Vehicles.....	510.40
E-6-c	Storage Motor Vehicles.....	85.67
E-6-d	Shoeing and Boarding Horses.....	390.45
E-6-e	Car Fare.....	1,229.90
E-6-f	Other Transportation.....	720.16
Communication		
E-7-a	Telephone	681.45
E-7-b	Telegraph and Messenger Service.....	30.96
F	Contingencies	7,488.59
G	Fixed Charges and Contributions.....	105.75
G-1-a	Interest on Bonded Debt.....	281,735.00
G-2	Rents	1,155.40
G-5	Advertising	182.71
G-7	Other contributions.....	5,280.15
Expenditures		\$ 1,000,401.82
Water Fund Warrants Drawn account 1914.....		\$ 709,512.65
Miscellaneous Debits.....		9,154.17
Interest Coupons Paid.....		281,735.00
Outstanding Claims.....		17,055.04
Total cost.....		\$ 1,017,456.86
Total Appropriations.....		\$ 1,607,963.82
Balance of Appropriation.....		\$ 590,506.96

WATER FUND

EXPENDITURES AUTHORIZED DURING 1913, PAID DURING 1914.

Water Fund Warrants Drawn.....	\$ 56,976.28	
Miscellaneous Debits.....	27.31	
Total.....	\$ 56,948.97	
Total Appropriation.....	\$ 609,043.29	
Balance of Appropriation Cancelled.....	\$ 552,094.32	

WATER BOND INTEREST FUND

Balance Dec. 1, 1913.....		\$ 2,800.00
DISBURSEMENTS		
Transferred to Water Fund.....		2,800.00

WATER FUND, BOND ACCOUNT

Balance Dec. 1, 1913.....		\$ 22.95
Balance Nov. 30, 1914.....		22.95

FIRE BOAT AND FIRE MAINS FUND

Balance Dec. 1, 1913.....	\$ 108.03	
Balance Nov. 30, 1914.....	108.03	
Appropriation Brought Forward.....	608.03	
Appropriation Cancelled.....	608.03	

MT. HOOD RAILWAY & POWER CO. DEPOSIT FUND

Balance Dec. 1, 1913.....	\$ 3,000.00	
Balance Nov. 30, 1914.....	3,000.00	
Appropriation Brought Forward Dec. 1, 1913.....	3,000.00	
Appropriation Carried Forward Nov. 30, 1914.....	3,000.00	

MT. HOOD RAILWAY & POWER CO. STREET REPAIR FUND

Balance Dec. 1, 1913.....	\$ 1,000.00	
Balance Nov. 30, 1914.....	1,000.00	

WATER BOND SINKING FUND

Balance Dec. 1, 1913.....	\$ 57,917.88	
RECEIPTS		
Interest on Improvement Bonds.....	33,635.00	
Improvement Bonds Cashed.....	30,000.00	
Crematory Bonds Cashed.....	5,000.00	
Interest on Crematory Bonds.....	875.00	
Transferred from Water Fund.....	254,460.00	381,887.88
DISBURSEMENTS		
Purchase of Bonds.....	\$ 245,477.01	
Balance Nov. 30, 1914.....	186,410.87	381,887.88
Total Appropriation.....		383,877.88
Warrants Drawn.....	\$ 245,477.01	
Balance of Appropriation Carried Forward.....	138,400.87	383,877.88

POLICE AND FIRE DEPARTMENT RELIEF FUND

Balance Dec. 1, 1913.....		\$ 73.91
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 48.56	
Balance Nov. 30, 1914.....	25.35	73.91

REDEMPTION FUND

Balance Dec. 1, 1913.....	\$ 381.60	
RECEIPTS		
Redemption of Property.....	24,746.63	
Transferred from General Fund.....	118.55	25,246.78
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 24,003.46	
Balance Nov. 30, 1914.....	1,243.32	25,246.78
Total Appropriation.....		\$ 25,977.71
Warrants Drawn.....	25,017.27	
Balance of Appropriation Carried Forward.....	960.44	25,977.71

PARK AND BOULEVARD FUND

Balance Dec. 1, 1913.....	\$ 70,773.81	
RECEIPTS		
Transferred from General Fund.....	40.48	70,814.29
DISBURSEMENTS		
Transferred to General Fund.....	\$ 1,734.40	
Transferred to Water Fund.....	96.60	
Warrants Paid and Returned.....	59,848.62	
Balance Nov. 30, 1914.....	9,134.67	70,814.29
Total Appropriation.....		
Miscellaneous Crpds.....	\$ 84,665.69	
	40.48	84,706.17
Warrants Drawn.....	\$ 71,643.34	
Miscellaneous Debits.....	1,831.00	
Appropriation Cancelled.....	2,225.00	
Balance of Appropriation Carried Forward.....	9,006.83	84,706.17

BROADWAY BRIDGE FUND

Balance Dec. 1, 1913.....		\$ 5,175.55
DISBURSEMENTS		
Warrants Paid and Returned.....	42.00	
Balance Nov. 30, 1914.....	5,133.55	5,175.55
Total Appropriation.....		\$ 14,510.92
Warrants Drawn.....	42.00	
Appropriation Cancelled.....	9,335.37	
Balance of Appropriation Carried Forward.....	5,133.55	14,510.92

GARBAGE CREMATORY FUND

Balance Dec. 1, 1913.....		\$ 2,278.10
DISBURSEMENTS		
Transferred to General Fund.....		2,278.10
Total Appropriation.....		1,077.15
Appropriation Cancelled.....		1,077.15

MUNICIPAL JAIL FUND

Balance Dec. 1, 1913.....		\$ 10,460.38
DISBURSEMENTS		
Warrants Paid and Returned.....	9,860.38	
Transferred to General Fund.....	600.00	10,460.38
Total Appropriation.....		\$ 9,860.38
Warrants Drawn.....		9,860.38

BILL POSTING BADGE FUND

Balance Dec. 1, 1913.....	\$ 192.00	
RECEIPTS		
Sale of Badges.....	58.00	250.00
DISBURSEMENTS		
Badges Redeemed.....	32.00	
Balance Nov. 30, 1914.....	218.00	250.00

STREET IMPROVEMENT FUNDS

Balance Dec. 1, 1913.....	\$ 46,877.26	
RECEIPTS		
Collection of Assessments.....	517,147.57	
Sale of Improvement Bonds.....	1,985,402.64	
Transferred from General Fund.....	662.04	2,550,089.51
DISBURSEMENTS		
Transferred to General Fund.....	\$ 467.63	
Warrants Paid and Returned.....	2,524,126.97	
Balance Nov. 30, 1914.....	25,494.91	2,550,089.51

SEWER FUNDS

Balance Dec. 1, 1913.....	\$ 11,897.13	
RECEIPTS		
Collection of Assessments.....	175,595.49	
Sale of Improvement Bonds.....	317,498.09	
Transferred from General Fund.....	55.40	505,046.11
DISBURSEMENTS		
Warrants Paid and Returned.....	492,627.35	
Receipt S7162 Cancelled.....	47.80	
Balance Nov. 30, 1914.....	12,370.96	505,046.11

STREET EXTENSION FUNDS

Balance Dec. 1, 1913.....	\$ 51,594.72	
RECEIPTS		
Collection of Assessments.....	8,384.25	
Sale of Bonds.....	3,655.50	
Transferred from General Fund.....	25.00	63,659.47
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 53,984.93	
Transferred to General Fund.....	3,500.00	
Balance Nov. 30, 1914.....	6,174.54	63,659.47

STREET AND SEWER INTEREST FUND

Balance Dec. 1, 1913.....	\$ 2,484.26	
RECEIPTS		
Interest Collected on Assessments.....	4,652.23	
Accrued Interest on Improvement Bonds Sold ...	8,243.76	
Transferred from General Fund.....	7,238.22	22,618.57
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 1.08	
Interest Paid on St., Imp. and Sewer Warrants....	21,740.47	
Sewer Receipt No. S7162 Cancelled.....	1.60	
Balance Nov. 30, 1914.....	875.42	22,618.57

IMPROVEMENT BOND SINKING FUND

Balance Dec. 1, 1913.....	\$ 832,112.41	
RECEIPTS		
Collection of Bonded Liens.....	1,381,162.06	
Improvement Bonds Cashed.....	1,031,989.87	
Transferred from General Fund.....	548.85	
Transferred from Water Fund.....	102,608.11	3,348,421.30
DISBURSEMENTS		
Improvement Bonds Redeemed.....	\$ 2,948,589.51	
Warrants Paid and Returned.....	196,223.30	
Balance Nov. 30, 1914.....	208,608.49	3,348,421.30

IMPROVEMENT BOND INTEREST FUND

Balance Dec. 1, 1913.....	\$ 27,292.11	
RECEIPTS		
Interest Collected on Bonded Liens.....	619,174.55	
Interest on Daily Balances.....	4,296.92	
Interest on Bonds Held by City.....	90,715.40	
Transferred from General Fund.....	145,010.34	
Transferred from Sinking Fund.....	7,777.81	
Transferred from Water Fund.....	60,000.00	954,267.13
DISBURSEMENTS		
Interest Coupons Paid and Returned.....	\$ 908,224.53	
Warrants Paid and Returned.....	1,604.79	
Error on Receipt No. 78477, Aug. 3rd.....	1,640.00	
Transferred to Bonded Indebtedness Interest Fund.....	86.34	
Transferred to General Fund.....	3,000.00	
Balance Nov. 30, 1914.....	39,711.47	954,267.13

BONDED INDEBTEDNESS SINKING FUND

Balance Dec. 1, 1913.....	\$ 518.04	
RECEIPTS		
Improvement Bonds Cashed.....	2,878.02	
Interest on Improvement Bonds.....	176.34	
Transferred from Improvement Bond Interest Fund.....	86.34	3,658.74
DISBURSEMENTS		
Improvement Bonds Purchased.....	\$ 3,014.00	
Balance Nov. 30, 1914.....	644.74	3,658.74
Total Appropriation.....		4,000.00
Warrants Drawn.....	3,014.00	
Balance of Appropriation Carried Forward.....	986.00	4,000.00

TEMPORARY AUDITORIUM FUND

Balance Dec. 1, 1913.....	\$ 405.00	
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 158.50	
Transferred to General Fund.....	246.50	405.00
Total Appropriation.....		200.00
Warrants Drawn.....	8.50	
Balance of Appropriation Cancelled.....	191.50	200.00

SPECIAL TAX FUND 1914

Balance Dec. 1, 1913.....	\$ 2,451.04	
RECEIPTS		
Taxes, 1914.....	12.95	2,463.99
DISBURSEMENTS		
Warrants Paid and Returned.....	\$ 160.95	
Transferred to General Fund.....	1,847.83	
Transferred to Bonded Indebtedness Interest Fund.....	327.88	
Transferred to Sinking Fund.....	127.33	2,463.99
Total Appropriation.....		\$ 160.95
Warrants Drawn.....		\$ 160.95

WATER MAIN FUNDS

Balance Dec. 1, 1913.....	\$ 4,762.08
Balance Nov. 30, 1914.....	4,762.08

STREET EXTENSION BOND SINKING FUND

RECEIPTS	
Collection on Bonded Liens.....	\$ 390.54
Balance Nov. 30, 1914.....	390.54

STREET EXTENSION BOND INTEREST FUND

RECEIPTS	
Interest Collected on Bonded Liens.....	\$ 113.10
DISBURSEMENTS	
Interest Coupons Paid and Returned.....	79.08
Balance Nov. 30, 1914.....	34.02
	113.10

PUBLIC AUDITORIUM FUND

RECEIPTS	
Sale of Bonds.....	\$ 32,329.50
Balance Received from Public Auditorium Fund.....	109.22
Interest on Daily Balances.....	421.24
Transferred from General Fund.....	18,500.00
	51,359.96
DISBURSEMENTS	
Warrants Paid and Returned.....	\$ 765.43
Transferred to General Fund.....	26,010.04
Balance Nov. 30, 1914.....	24,584.49
	51,359.96
Total Appropriation.....	\$ 18,909.22
Warrants Drawn.....	765.43
Miscellaneous Debits.....	25.12
Balance of Appropriation Carried Forward.....	18,118.67
	18,909.22

SPECIAL TAX FUND 1915

RECEIPTS	
Collection, 1915 Taxes.....	\$ 2,865.49
Interest on Daily Balances.....	15.12
	2,880.61
Balance Nov. 30, 1914.....	\$ 2,880.61

POLICE RELIEF FUND

RECEIPTS	
Interest on Bonds.....	\$ 143.94
Interest on Daily Balances.....	43.01
Dues.....	593.50
Donation—Equitable Savings & Loan Co.....	12.50
Amount Turned Over by Police Relief Board.....	7,614.93
Transferred from General Fund.....	25.00
	8,432.88
DISBURSEMENTS	
Warrants Paid and Returned.....	\$ 4,012.78
Transferred to General Fund.....	1,218.65
Balance Nov. 30, 1914.....	3,201.45
	8,432.88
Total Appropriation.....	\$ 4,260.45
Warrants Drawn.....	4,208.57
Balance of Appropriation Carried Forward.....	51.88
	4,260.45

TRIAL BALANCE NOVEMBER 30, 1914

City of Portland.....	\$30,488,088.00	\$.....
Bonds	16,169,100.00	.....
Improvement Bonds.....	14,390,492.89	.....
Street Extension Bonds.....	7,461.00	.....
Street and Sewer Warrants.....	78,965.89	.....
Wm. Adams, Treasurer—General Account.....	1,313,781.03	.....
Wm. Adams, Treasurer—Deposit Required by Ordinance No. 22983.....	3,000.00	.....
Wm. Adams, Treasurer—Sinking Fund Investments.....	1,860,716.39	.....
Water Bond Sinking Fund Investments.....	713,000.00	.....
Improvement Bond Sinking Fund Investments.....	652,543.31	.....
Bonded Indebtedness Sinking Fund Investments.....	3,000.00	.....
Sinking Fund Investments.....	492,173.08	.....
Certificate of Deposit.....	200,000.00	.....
Appropriation—General Fund.....	19,614.05	.....
Appropriation—Expense Furnishing Municipal Jail.....	7,911.55	.....
Fire Department Fund.....	107.90	.....
Police Department Fund.....	44.27	.....
Street Repair Fund.....	200.44	.....
Public Library Fund.....	40.59	.....
Appropriation—Public Library Fund.....	1,206.08	.....
Appropriation—Expense of Library.....	1,200.08	.....
Park Fund.....	73.42	.....
Police and Fire Department Relief Fund.....	25.35	.....
Water Fund, Bond Account.....	22.95	.....
Park and Boulevard Fund.....	9,134.07	.....
Appropriation—Park and Boulevard Fund.....	9,006.83	.....
Appropriation—Purchase of Parks and Establishment of Boulevards.....	26.15	.....
Street Cleaning and Sprinkling Fund.....	108.03	.....
Fire Boat and Fire Mains Fund.....	5,133.55	.....
Broadway Bridge Fund.....	5,133.55	.....
Appropriation—Broadway Bridge Fund.....	5,133.55	.....
Appropriation—Construction Broadway Bridge.....	5,133.55	.....
Mount Hood Railway and Power Company Deposit Fund.....	3,000.00	.....
Appropriation—Mount Hood Railway and Power Company Deposit Fund.....	3,000.00	.....
Appropriation—Purchase of Bonds.....	3,000.00	.....
Mount Hood Railway and Power Company Street Repair Fund.....	1,000.00	.....
General Fund.....	844,060.04	.....
Appropriation—General Fund.....	429,709.87	.....
Appropriation—Expense Bureau of Fire.....	83,011.28	.....
Appropriation—Expense Bureau of Police.....	44,066.86	.....
Appropriation—Expense Bureau of Health.....	1,770.46	.....
Appropriation—Expense Municipal Court.....	957.39	.....
Appropriation—Expense Bureau of Pound.....	1,460.30	.....
Appropriation—Expense Bureau of Purchases.....	464.10	.....
Appropriation—Stationery Stock.....	1,574.60	.....
Appropriation—Stores.....	11,105.46	.....
Appropriation—Rotary Shop Expense.....	445.61	.....
Appropriation—Stores Expense.....	639.48	.....
Appropriation—Expense Treasurer's Office.....	6.00	.....
Appropriation—Expense Commissioner of Public Affairs.....	247.87	.....
Appropriation—Expense Bureau of Weights and Measures.....	112.87	.....
Appropriation—Expense Bureau of Free Employment.....	814.90	.....
Appropriation—Expense Bureau of City Hall.....	3,256.98	.....
Appropriation—Expense Office of City Attorney.....	2,900.90	.....
Appropriation—Expense Bureau of Parks.....	4,974.23	.....
Appropriation—Expense Commissioner of Public Works.....	76,968.68	.....
Appropriation—Expense Lighting Streets and Public Buildings.....	26,875.89	.....
Appropriation—Expense Bureau of Street Cleaning.....	82,496.97	.....

TRIAL BALANCE—Continued

Appropriation—Expense Bureau of Garbage Disposal.....	\$ 3,962.39	.....
Appropriation—Expense Auditor's Office.....	7,904.41	.....
Appropriation—Expense of Elections.....	8,161.80	.....
Appropriation—Expense Rent of Railroad Bridge.....	4,774.19	.....
Appropriation—Repair of Retaining Walls.....	153.00	.....
Appropriation—Purchase of Right of Way.....	46.00	.....
Appropriation—Expense Repairs to Front Street Bridge.....	43.64	.....
Appropriation—Expense Repairing Maywood Drive.....	3,179.59	.....
Appropriation—Relief of Unemployed.....	4,864.39	.....
Appropriation—Removal of Obstructions to Navigation.....	4,971.56	.....
Appropriation—Expense Constructing Market Sheds.....	6,000.00	.....
Appropriation—Salary Market Inspector and Deputy.....	18.50	.....
Appropriation—Repairs to Union Avenue Bridge.....	1,312.21	.....
Appropriation—Exhibit Manufacturers' and Land Products Show.....	78.15	.....
Appropriation—Expense Municipal Garage.....	721.87	.....
Appropriation—Expense Repairing Grand Avenue Bridge.....	11,802.24	.....
Bonded Indebtedness Interest Fund.....	105,448.83	.....
Appropriation—Bonded Indebtedness Interest Fund.....	12,805.00	.....
Appropriation—Payment of Interest.....	12,805.00	.....
Chemical National Bank, New York.....	5,055.00	.....
Chase National Bank, New York.....	150.00	.....
Harris, Forbes and Company, New York.....	7,530.00	.....
Sinking Fund.....	11,094.39	.....
Appropriation—Sinking Fund.....	25,124.60	.....
Appropriation—Purchase of Bonds.....	25,124.60	.....
Water Fund.....	58,235.61	.....
Appropriation—Water Fund.....	622,562.00	.....
Appropriation—Expense Bureau of Water Works.....	594,657.15	.....
Appropriation—Payment of Interest on Water Bonds.....	27,185.00	.....
Appropriation—Refund of Deposits.....	719.85	.....
Water Bond Sinking Fund.....	136,410.87	.....
Appropriation—Water Bond Sinking Fund.....	138,400.87	.....
Appropriation—Purchase of Bonds.....	138,400.87	.....
Special Bridge Fund.....	3,669.93	.....
Appropriation—Special Bridge Fund.....	1,416.95	.....
Appropriation—Expense Grade Crossings.....	1,416.95	.....
Redemption Fund.....	1,243.32	.....
Appropriation—Redemption Fund.....	960.44	.....
Appropriation—Redemption of Certificates.....	960.44	.....
Bill Posting Badge Fund.....	218.00	.....
Street Improvement Funds.....	25,494.91	.....
Sewer Funds.....	12,370.96	.....
Street Extension Funds.....	6,174.54	.....
Water Main Funds.....	4,762.08	.....
Street and Sewer Interest Fund.....	875.42	.....
Improvement Bond Sinking Fund.....	203,608.49	.....
Improvement Bond Interest Fund.....	39,711.47	.....
Street Extension Bond Sinking Fund.....	390.54	.....
Street Extension Bond Interest Fund.....	34.02	.....
Public Auditorium Fund.....	24,584.49	.....
Appropriation—Public Auditorium Fund.....	18,118.67	.....
Appropriation—Construction Public Auditorium.....	18,118.67	.....
Franchises.....	9,010.00	.....
Franchise—Portland Railway, Light & Power Company.....	5,750.00	.....
Franchise—City Messenger and Delivery Company.....	400.00	.....
Franchise—Oregon Electric Railway Company.....	660.00	.....
Franchise—United Railways Company.....	2,200.00	.....
Special Tax Fund 1915.....	2,880.61	.....
Bonded Indebtedness Sinking Fund.....	644.74	.....
Appropriation—Bonded Indebtedness Sinking Fund.....	986.00	.....
Appropriation—Purchase of Bonds.....	986.00	.....

OFFICE OF THE CITY AUDITOR

TRIAL BALANCE—Continued

Revenues Receivable—Taxes 1914.....	\$ 90,797.37	\$ 36,351.46
Revenues—General Fund—Taxes.....	.....	6,449.96
Revenues—Bonded Indebtedness Interest Fund—	.....	2,504.86
Taxes.....	.....	45,451.11
Revenues—Sinking Fund—Taxes.....	.....	.....
Reserve for Loss on Taxes.....	3,004,736.73	550,000.00
William Adams Treasurer, Security Account.....	.....	7,000.00
Bank of California.....	.....	50,000.00
George W. Bates and Company, Bankers.....	.....	513,286.51
Citizens Bank.....	.....	60,000.00
First National Bank.....	.....	343,000.00
Hibernia Savings Bank.....	.....	206,500.00
Ladd and Tilton Bank.....	.....	180,500.22
Merchants National Bank.....	.....	349,400.00
Northwestern National Bank.....	.....	100,000.00
Scandinavian-American Bank.....	.....	638,000.00
United States National Bank.....	.....	10,000.00
Bank of Selwood.....	.....	6,000.00
East Side Bank.....	.....	2,000.00
Northwestern Electric Company.....	.....	3,201.53
Police Relief Fund.....	51.88	51.88
Appropriation—Police Relief Fund.....	.....	.....
Appropriation—Payment of Sick Benefits.....	.....	.....
	\$38,317,597.15	\$38,317,597.15

DETAILED STATEMENT OF LICENSE RECEIPTS FOR YEAR ENDING NOVEMBER 30, 1914

Classification.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Abstractors.....	\$ 56.25	\$ 48.75	\$ 45.00	\$ 52.50	\$ 202.50
Auction Houses and Auctioneers.....	240.00	200.00	240.00	540.00	1,220.00
Baggage Solicitors.....	11.65	16.65	26.70	13.35	68.35
Banks.....	462.50	455.00	470.00	402.50	1,790.00
Baths and Massage.....	82.50	90.00	82.50	85.00	340.00
Bill Posters and Distributors.....	526.65	53.40	40.00	193.25	813.30
Bowling Alleys.....	61.65	60.00	45.00	64.95	231.60
Brokers—Money, warrants, etc.....	171.70	220.00	181.65	160.00	743.35
Brokers—Stocks on margin.....	50.00	50.00	50.00	25.00	175.00
Chiropodists.....	91.35	70.00	70.00	88.30	319.65
Coal Oil Storage.....	21.00	9.00	9.00	9.00	48.00
Dance Halls.....	250.00	19.00	6.50	9.75	285.25
Dancing permits.....	274.50	206.50	99.50	249.00	829.50
Detective Agencies.....	86.65	100.05	80.00	80.00	346.70
Dog Breeders.....	.....	.....	.....	73.00	73.00
Electric and other signs.....	332.70	.....	.....	.....	332.70
Employment Agencies—General.....	.....	200.00	2,200.00	200.00	2,600.00
Employment Agencies—Women only.....	.....	40.00	160.00	40.00	240.00
Gasoline Filling Stations.....	.....	.....	228.00	128.00	356.00
Insurance Agents.....	3,286.65	3,453.30	3,346.70	3,449.95	13,536.60
Laundries.....	445.00	345.00	341.65	300.00	1,431.65
Liquor Dealers—Brewers.....	1,200.00	.....	900.00	.....	2,100.00
Liquor Dealers—Grocers and Druggists.....	3,752.50	54.15	4,200.00	.....	8,006.65
Liquor Dealers—Restaurants.....	8,000.00	487.30	7,600.00	.....	16,087.30
Liquor Dealers—Saloons.....	165,688.40	46.00	159,300.00	.....	325,034.40
Liquor Dealers—Wholesale.....	6,442.32	208.84	6,800.00	.....	13,451.16
Liquor Dealers—Wholesale and Rectifying.....	4,000.00	.....	3,500.00	.....	7,500.00
Mercantile Agencies.....	62.50	62.50	62.50	62.50	250.00
Milk and Cream—Cans, carts, etc.....	28.50	16.00	13.00	3.50	61.00
Milk and Cream—Creameries.....	55.00	.....	15.00	.....	70.00
Milk and Cream—Dairy wagons.....	482.50	62.50	40.00	11.50	596.50
Milk and Cream—Stores, restaurants, etc.....	527.00	118.00	50.00	17.00	712.00
Moving Picture Shows, Class 2.....	563.30	426.67	290.00	270.00	1,549.97
Moving Picture Shows, Class 3.....	840.00	893.30	993.35	1,075.00	3,801.65
Pawnbrokers.....	1,125.00	1,375.00	975.00	1,200.00	4,675.00
Peddlers.....	70.50	266.95	545.00	153.65	1,036.10
Pool and Billiards.....	4,354.25	134.00	4,108.30	126.60	8,813.15
Powder and Explosives.....	55.00	85.00	126.65	113.30	379.95
Public Service Corporations.....	2,837.50	2,547.50	2,756.75	3,215.00	11,356.75
Runners—Hotel.....	266.65	313.30	230.00	273.35	1,083.30

DETAILED STATEMENT OF LICENSE RECEIPTS FOR YEAR ENDING NOVEMBER 30, 1914—Continued

Classification.	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	Total.
Runners—Steamboat.....		\$ 6.65	\$ 13.35		\$ 20.00
Second Hand Dealers.....	\$ 735.00	810.00	795.00	\$ 785.00	3,125.00
Shooting Galleries.....	75.00	91.65	25.00	25.00	216.65
Shows, Museums, etc.....	215.00	287.00	640.00	20.00	1,162.00
Storage Warehouses.....	200.00	220.00	180.00	120.00	720.00
Theatres, Class 1.....	300.00	300.00	183.35	300.00	1,083.35
Vehicle Hawkers.....	6,057.50	6,913.85	7,503.15	6,856.80	27,331.30
Wharfingers.....	620.00	440.00	560.00	460.00	2,080.00
Miscellaneous.....	604.60	897.00	343.00	231.40	2,076.00
Totals.....	\$ 215,608.77	\$ 22,699.81	\$ 210,560.60	\$ 21,493.15	\$ 470,362.33

THE BONDED DEBT OF THE CITY OF PORTLAND, OREGON, NOVEMBER 30, 1914, AND THE INTEREST PAID THEREON

When Issued.	Year Due.	Years to Run.	Rate of Int. %	PURPOSE OF ISSUE.	Amount of Bonds.	Total Due.	Total Paid.	Total Out Nov. 30, 1914
CITY HALL.								
1890, Jan. 1.	1920	30	5	Purchase of Site.....	\$ 175,000	\$ 8,750	\$ 8,725	\$ 25
1892, July 1.	1922	30	5	Construction of Building.....	500,000	25,025	24,600	425
					\$ 675,000			
BRIDGES.								
1892, Jan. 1.	1922	30	5	Purchase and Construction of Free Bridges.....	\$ 500,000	\$ 25,225	\$ 24,800	\$ 425
1895, Apr. 1.	1925	30	5	Purchase Morrison Street Bridge.....	200,000	10,000	10,000	
1904, Jan. 1.	1934	30	4	Construction of Morrison Street Bridge.....	400,000	18,000		
1909, Jan. 1.	1939	30	4	Construction of Hawthorne Ave. Bridge.....	450,000	18,000		
1910, July 1.	1940	30	4	Construction of Broadway Bridge.....	250,000	10,000		
1911, Jan. 2.	1941	30	4	Construction of Broadway Bridge.....	500,000	20,000	102,380	520
1911, Sept. 1.	1941	30	4	Construction of Broadway Bridge.....	600,000	24,000		
1912, Oct. 1.	1942	30	4	Construction of Broadway Bridge.....	315,000	12,820		
1913, June 1.	1943	30	4	Construction of Broadway Bridge.....	52,000	2,080		
					\$3,267,000			
FERRY.								
1893, Apr. 1.	1923	30	5	Construction of Free Ferry.....	\$ 50,000	\$ 2,875	\$ 2,800	\$ 75
1903, Dec. 1.	1933	30	5	Construction of Sellwood Ferry.....	15,000	750	750	
1904, Jan. 1.	1934	30	4	Construction of Albina Ferry.....	50,000	2,020	2,000	20
					\$ 115,000			
GENERAL.								
1898, Dec. 1.	1928	30	5	Funding Floating Debt.....	\$ 430,000	\$ 21,500	\$ 21,500	
1903, May 1.	1928	25	4	Redeeming Outstanding Bonds.....	56,500	2,260	2,260	
1911, July 1.	1936	25	4	Construction of Fire Boat.....	125,000	5,000	5,000	
1911, Nov. 1.	1941	30	4	Construction of Jail Building.....	200,000	8,620	8,260	\$ 360
1913, Dec. 1.	1938	25	4	Construction of Auditorium.....	35,000	700	700	
					\$ 846,500			

THE BONDED DEBT OF THE CITY OF PORTLAND, OREGON, NOVEMBER 30, 1914, AND THE INTEREST PAID THEREON—Continued

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When Issued.	Year Due.	Years to Run.	Rate of Int. %	PURPOSE OF ISSUE.	Amount of Bonds	Total Due.	Total Paid.	Total Out Nov. 30, 1914
PARKS AND BOULEVARDS.								
1903, Dec. 1.	1933	25	4	Purchase and Improvement of Parks and Boulevards.	\$ 500,000	\$ 20,000	\$ 19,980	\$ 20
1911, July 1.	1936	25	4	Purchase and Improvement of Parks and Boulevards.	\$ 250,000	10,000	10,000	
1912, Oct. 1.	1937	25	4	Purchase and Improvement of Parks and Boulevards.	250,000	10,000	10,000	
					\$1,000,000			
E. PORTLAND AND ALBINA BONDS.								
1891, May 1.	1921	30	6	Construction of Light Plant, East Portland.	\$ 50,000	\$ 4,650	\$ 3,150	\$ 1,500
1891, June 1.	1921	30	6	Municipal Expenses, Albina.	40,000	2,400	2,400	
1891, June 1.	1921	30	6	Construction of Boulevards and Roadways, Albina.	50,000	3,000	2,940	30
1891, June 1.	1921	30	6	Purchase and Improvement of Parks, Albina.	50,000	3,000	3,000	
					\$ 190,000			
CREMATORY.								
1910, Sept. 1.	10% An.	10	5	Construction of Crematory	\$ 50,000	\$ 1,750	\$ 1,750	
1911, Dec. 1.	10% An.	10	5	Construction of Crematory	58,000	2,465	2,465	
					\$ 108,000			
PUBLIC DOCKS.*								
1911, Nov. 1.	1961	50	4 1/2	Purchase and Construction of Public Docks	\$ 50,000			
1913, May 1.	1943	30	4 1/2	Purchase of Property and Construction of Docks	1,250,000			
1913, Sept. 1.	1923	10	5	Purchase of Property and Construction of Docks	200			
1913, Dec. 1.	1943	30	4 1/2	Purchase of Property and Construction of Docks	900,000			
1914, Oct. 1.	1939	25	4 1/2	Purchase of Property and Construction of Docks	100,000			
					\$2,300,200			
WATER.								
1891, May 1.	1921	30	6	Construction of Water System, E. Portland.	\$ 250,000	\$ 22,680	\$ 16,500	\$ 6,180
1887, Jan. 1.	1917	30	5	Purchase of Water Works	700,000	35,000	147,175	
1893, July 1.	1923	30	5	Construction of Bull Run System	2,200,000	112,175		
1909, Jan. 1.	1934	25	4	Const'n. of new Pipe Line and Purchase of Property	250,000	10,000		
1910, June 1.	1935	25	4	Const'n. of new Pipe Line and Purchase of Property	500,000	20,000	50,180	
1910, Sept. 1.	1935	25	4	Const'n. of new Pipe Line and Purchase of Property	500,000	20,180		

OFFICE OF THE CITY AUDITOR

THE BONDED DEBT OF THE CITY OF PORTLAND, OREGON, NOVEMBER 30, 1914, AND THE INTEREST PAID THEREON—Continued

When Issued.	Year Due.	Years to Run.	Rate of Int. %	PURPOSE OF ISSUE	Amount of Bonds	Total Due.	Total Paid.	Total Out Nov. 30, 1914
1911, Jan. 1.	1936	25	4	Const'n. of new Pipe Line and Purchase of Property	\$ 500,000	\$ 20,000		
1911, Mar. 1.	1936	25	4	Const'n. of new Pipe Line and Purchase of Property	500,000	20,000		
1911, Oct. 1.	1936	25	4	Const'n. of new Pipe Line and Purchase of Property	500,000	20,000		
1912, Mar. 1.	1937	25	4	Const'n. of new Pipe Line and Purchase of Property	500,000	20,000		
1912, Nov. 1.	1937	25	4	Const'n. of new Pipe Line and Purchase of Property	250,000	10,000		
1913, June 1.	1938	25	4	Const'n. of new Water Mains and Pur. of Property	242,000	9,680	\$ 119,560	\$ 5,220
1913, Aug. 1.	1938	25	4	Const'n. of new Water Mains and Pur. of Property	75,000	3,000		
1913, Sept. 1.	1938	25	4	Const'n. of new Water Mains and Pur. of Property	250,000	12,020		
1913, Nov. 1.	1938	25	4	Const'n. of new Water Mains and Pur. of Property	22,000	880		
1913, Dec. 1.	1938	25	4	Const'n. of new Water Mains and Pur. of Property	285,000	5,700		
1914, Feb. 2.	1939	25	4	Const'n. of new Water Mains and Pur. of Property	175,000	3,500		
					\$7,699,000			
				Totals	\$ 16,200,700			
				Less Crematory Bonds redeemed	31,600			
				Net Totals	\$ 16,169,100	\$ 617,705	\$ 602,875	\$ 14,800

OFFICE OF THE CITY AUDITOR

Improvement Bonds outstanding Nov. 30, 1914, issued on account of street improvement, sewer, street extension and water main assessments, and not a part of the limitations by law as to indebtedness, \$14,397,953.89.

*Accounts kept by the Commission of Public Docks not in City's general books.

BONDS HELD AS SINKING FUND INVESTMENTS, IN CUSTODY OF THE CITY TREASURER NOVEMBER 30, 1914

Water Bond Sinking Fund Investments.....	\$ 713,000.00
Improvement Bond Sinking Fund Investment.....	652,543.31
Bonded Indebtedness Sinking Fund Investments.....	3,000.00
Sinking Fund Investments.....	492,173.08
Public Dock Fund Investments.....	100,200.00
Total.....	\$ 1,960,916.39

BONDED INDEBTEDNESS

General Bonds Outstanding.....	\$16,169,100.00
Improvement Bonds Outstanding.....	14,390,492.89
Street Extension Bonds Outstanding.....	7,461.00
Total.....	\$30,567,053.89

COMPARATIVE TAX LEVY

	1914. (Mills)	1915. (Mills)
General Fund.....	5.805	5.326
Bonded Indebtedness Interest Fund.....	1.030	1.043
Sinking Fund.....	.400	.400
Special Bridge Fund.....	.000	.000
Docks Fund.....	.365	.363
Firemen's Relief and Pension Fund.....	.100	.100
Total.....	7.700	7.500

INVENTORY OF CITY PROPERTY—PERSONAL PROPERTY

Auditor's Office.....	\$ 5,060.70
Street Improvement Warrants surrendered to the City for General Fund Warrants, by authority of the Council, face value.....	78,965.89
Street Improvement and Sewer Warrants drawn in favor of the City, to cover expense of engineering and advertising value.....	74,554.05
Election Booths, one-half interest in.....	5,000.00
Civil Service Board.....	720.50
Bureau of Fire.....	556,879.80
Bureau of Police.....	15,798.58
Bureau of Health.....	5,937.76
Bureau of Pound.....	1,275.79
Municipal Court.....	287.20
Mayor's Office.....	831.50
Com. of Public Affairs.....	403.05
Office of City Attorney.....	4,949.00
Bureau of Free Employment.....	151.85
Bureau of City Hall.....	5,284.92
Free Museum.....	55,000.00
Bureau of Weights and Measures.....	1,147.02
Bureau of Parks.....	35,579.93
Municipal Reference Library.....	224.00
Commissioner of Finance.....	334.62
Office of City Treasurer.....	5,110.00
Bureau of Purchases.....	4,414.20
Stationery Stock.....	4,476.03
Municipal Stores.....	8,469.36
Department of Public Works.....	34,832.51
Commissioner of Public Utilities.....	532.95
Bureau of Water Works.....	237,140.28
Bureau of Street Cleaning.....	83,871.48
Bureau of Garbage Disposal.....	1,326.39
Department of Public Docks.....	6,013.33
Total.....	\$ 1,234,572.69

INVENTORY OF CITY PROPERTY—REAL PROPERTY

Name.	Location.	Area in Acres.	Value of Land.	Value of improvement.
CITY HALL BUREAU.				
City Hall block.....	Between Fourth, Fifth, Madison and Jefferson Sts.....	0.918	\$ 300,000	\$ 300,000
PARK BUREAU.				
Park blocks.....	A to F, inclusive, between Eighth St. and Park St. N. of Ankeny St., 7 to 20, inclusive, between Park St. and W. Park St. S. of Salmon St.....	7.5	1,594,000	700
Lownsdale Square.....	Between Salmon, Main, Third and Fourth Sts.....	.9	350,000	250
Chapman Square.....	Between Main, Madison, Third and Fourth Sts.....	.9	300,000	250
Washington Park.....	Between Washington and Jefferson Sts.....	40.78	370,000	7,750
Terwilliger Park.....	Lowell and Macadam Sts.....	4.4	26,000	
Forestry Building.....	Twenty-eight and Upshur St.	2.0	20,000	10,000
Ladd Parks.....	5 parcels in Ladd's Addition.....	1.5	9,450	
Holladay Park.....	Between Holladay Ave., Multnomah, Eleventh and Thirtieth Sts.....	5.0	128,000	700
Macleay Park.....	South of Willamette Heights Addition.....	130.2	65,000	
Columbia Park.....	Lombard and Woolsey Sts.....	30.	61,000	4,100
Governor's Park.....	Davenport St., Portland Heights.....	4.0	29,400	
Lincoln Park.....	Between Beech and Failing Sts., Mallory and Garfield Aves.....	2.0	23,000	500
Sellwood Playground.....	Clatsop Ave. and E. Twenty-third St.....	.88	1,050	
Fulton Park.....	Southern Portland.....	30.0	12,000	
Peninsula Park.....	Portland Blvd., Ainsworth Ave., Albina Ave. and Kerby St.....	17.4	60,000	50,400
Sellwood Park.....	Sellwood.....	15.63	55,000	8,000
Kenilworth Park.....	E. Thirty-second St., E. Thirty-fourth St., Holgate St. and Cora Ave.....	9.0	18,000	3,000
Laurelhurst Park.....	E. Oak, E. Ankeny, E. Thirty-third and E. Thirty-ninth Sts.....	30.3	110,000	
Patton Square.....	Patton Ave., Maryland Ave. and Emerson St.....	1.33	8,000	
Mt. Tabor Park.....	Mt. Tabor.....	176.0	422,000	3,600
Hillside Parkway.....	In Secs. 10 and 16, T. 1 S., R. 1 E., W. M.....	78.028	109,258	800
Gammans Square.....	Buffalo St., between Burrage and Wilbur Sts.....	1.06	4,200	
Brooklyn Playground.....	N. E. cor. of Powell and Milwaukee Sts.....	2.00	13,000	1,700
Overlook Triangle.....	Block 20, Overlook.....	.04	600	
Lents Park.....	In Sec. 16, T. 1 S., R. 2 E., W. M.....	5.19	5,000	
E. Twenty-first Street Bridge.....	Blk. 39, Sullivan's Add. 4 lots in Blk. 14, Proebstel's Add.....	.5	3,000	
		.43	2,500	
PUBLIC AUDITORIUM BUREAU.				
Market Block.....	Between Second, Third, Clay and Market Sts.....	.918	130,000	

INVENTORY OF CITY PROPERTY—REAL PROPERTY—Continued

Name.	Location.	Area in Acres.	Value of Land.	Value of improvement.
FIRE BUREAU.				
Engine 22.....	N. ½ lot 4, block 9, Portland...	.057	\$ 13,000	\$ 13,000
Engine 1.....	Lot 6, block 50, Portland.....	.11	77,500	12,000
Engine 4.....	Lot 6, block 143, Portland.....	.11	8,000	15,000
Engine 3.....	E. ½ lot 8, block 315, Portland..	.11	26,500	2,000
Engine 2.....	N. E. corner of Third and Glisan Sts.....	.108	46,000	14,000
Engine 5.....	Lot 3, block 128, Caruthers Add.	.11	3,000	2,000
Engine 26.....	Lot 2, block 291, Couch's Add.	.11	16,200	1,800
Engine 23.....	S. ½ lot 7, block 76, Stephens' Add.....	.057	2,000	7,000
Unimproved.....	Lot 14, block 29, Albina Homestead.....	.139	1,200	.....
Unimproved.....	Lot 11, block 10, Proebstel's Add.....	.101	1,200	.....
Supply house.....	N. ½ lot 6, block 47, Holladay's Add.....	.057	2,500	125
Chemical 3.....	Lot 13, block 14, Multnomah.....	.11	1,750	1,000
Engine 20.....	Lots 12 and 13, block 57, Sellwood.....	.22	5,850	2,000
Engine 10.....	Macadam Road.....	.11	2,500	3,000
Engine 12.....	Lot 4, block 5, Wynkoop Villa.....	.168	3,200	3,000
Engine 13.....	Lot 5, block 71, Holladay's Add.....	.11	6,950	7,200
Engine 15.....	Lot 5, block 104, Grover's Add.....	.11	5,600	7,000
Unimproved.....	Lots 7 and 9, block 2, Richmond.....	.22	3,400	.....
Engine 27.....	Lots 1 and 2, block 11, Terrace Park.....	.22	1,600	8,400
Unimproved.....	Lots 28 and E. ½ 13, block 5, Scenic Place.....	.17	2,000	.....
Engine 9.....	Lot 6, block 20, Sunnyside.....	.076	5,000	15,000
Engine 14.....	Lot 6, block 5, Maegly Highland.....	.11	5,250	2,000
Engine 11.....	N.W. corner of E. Twelfth and Powell Sts.....	.22	3,300	3,000
Engine 7.....	N. ½ lots 13, 14, 15, 16, Frnsh's Square.....	.11	10,000	10,000
Engine 17.....	Lot 16, block 3, King's 2d Add.....	.11	7,000	12,000
Engine 8.....	Lot 20, block 26, Albina.....	.167	2,500	15,000
Engine 18.....	Lots 14 and 15, block 1, East Irvington.....	.22	4,000	7,000
Engine 16.....	Lots 7 and 10, block 1, Subd. Z, Portland.....	.22	10,000	15,000
Engine 19.....	S. 100 ft. of E. 100 ft. lot 1, block 2, Ramona.....	.22	7,500	9,000
Engine 25.....	Lots 1 and 2, block 10, Kenilworth.....	.22	2,000	16,000
Engine 24.....	N. W. 100 ft. by 100 ft. of S. ½ block B, Patton Tract.....	.22	3,000	15,000
Engine 30.....	Lots 33, 34 and 35, block 38, Kenton.....	.17	2,000	8,000
Engine 31.....	Lots 8 and 9, block 11, Kern Park.....	.22	1,620	2,880
Unimproved.....	W. ½ lots 10 and 11, Sherlock's Add.....	.11	11,000	.....
Engine 28.....	Lots 1 and 2, block 77, Rose City Park.....	.21	2,000	8,000
Unimproved.....	Lots 12, 13 and S. ½ 14, block 29, Sunnyside.....	.18	8,000	.....
Engine House.....	N. ½ lot 3, block 30, Portland.....	.057	35,000	50,000
Truck 3.....	E. ½ lots 2 and 3, block 99, Couch's Addition.....	.11	11,000	14,000

INVENTORY OF CITY PROPERTY—REAL PROPERTY—Continued

Name.	Location.	Area in Acres.	Value of Land.	Value of improvement.
HEALTH BUREAU.				
Former site hospital for contagious diseases, unimproved.....	Tract "D." Sec. 5, T.1S., R. 1 E. W. M.....	2.0	\$ 2,625	.....
POLICE BUREAU.				
Police Station.....	Lots 3 and 4, block 30, Portland	.22	190,000	\$ 285,000
Old Albina police station and jail site.....	N.E. 25 ft. lots 3 and 4, block 56, Albina.....	.057	2,100	.....
Unimproved.....	S. 50 ft. lot 1, block 1, Albina.....	.057	7,000	.....
FERRY APPROACHES.				
New Albina Ferry.....	West Side, N. 60 ft. of Lot 21, block 2, Doschers Add. and south 5 feet of lot 22, block 2, Doschers Add.....	3	37,525	.....
	East side, southerly 65 feet of lot 9, Albina River lots.....	.45	19,500	.....
STREET CLEANING BUREAU.				
West Side barn.....	Lots 5, 8, 9, 10, 11, and 12 blk. 1, Davenport Tract.....	.64	33,000	2,500
Hancock Street barn.....	Lots 1, 2, 7, and 8, block 251, Holladay's Add.....	.45	14,500	8,000
Brooklyn barn.....	Powell and Milwaukie Streets.....	.50	3,000	40,000
WATER BUREAU.				
Bull Run Pipe Line and Service Mains.....				10,823,497.20
Old reservoir site.....	All of block 32, Caruthers Add. Broadway and Lincoln Sts.....	.92	100,000	1,000
Portland Heights reservoir site.....	Blk. "K" Greenway Add.....	.51	5,000	11,114
Repair and meter shop.....	S. E. ¼ of Blk. 150, Portland, Fourth and Market Streets.....	.25	125,000	1,000
East Side Water Office.....	Lot 8, Blk. 139, East Portland, E. Seventh and E. Alder Sts.....	.11	8,500	23,415
Site of old Irvington stand pipe.....	Lots 5 and 6, Blk. 257, Holladay Add., E. Thirteenth and Schuyler Sts.....	.22	4,500	.....
Former pumping station.....	Tract foot of Sherman St.....	.50	12,000	.....
Bull Run conduit No. 1 and 2.....	Tract foot of Stephen St.....	.60	7,500	.....
Reservoir No. 3 and 4.....	Adjoining Washington Park.....	63.10	189,000	569,000
Water tanks.....	Portland Heights.....	.04	600	.....
Water tanks.....	Willamette Heights.....	.06	500	2,500
Albina warehouse.....	Blk. 73, Albina, Randolph and Loring Sts.....	1.00	40,000	5,000
Albina water office, shop and stable.....	Part of Blk. 25 and 26, Albina, Russell St. between Williams Ave. and Rodney Ave.....	.29	7,000	32,310
Old Highland tank site.....	Lot 4, Blk. 6, Maegly Highland, Union Ave. between Wygant and Going St.....	.10	2,500	.....
Old tank site, Browns system.....	E. Sixtieth St. and Foster Road.....	.08	700	.....
Old tank site, Browns system.....	Lot 1, Blk. 1, Pomona Add.....	.08	300	.....

INVENTORY OF CITY PROPERTY—REAL PROPERTY—Continued

Name.	Location.	Area in Acres.	Value of Land.	Value of improvement.
Old tank site, Browns system.....	Lot in School Park Add. ....	.01	\$ 50	.....
Old tank site, Browns system.....	Lot 5, Blk. 22, Saginaw Hghts. ....	.10	300	\$ 30
Vernon stand pipe.....	Tract E. Twentieth and Prescottt.....	2.34	11,000	12,000
Palatine pump station..		21.00	60,000	10,000
High service reservoir (No. 1).....	Mt. Tabor.....	5.75	28,000	134,000
Low service reservoir (No. 2).....	Mt. Tabor.....	10.00	50,000	121,000
Reservoir 5 and 6.....	Mt. Tabor.....	45.17	150,000	690,000
Standpipe.....	Near Lusteds.....	.50	100	.....
Headworks.....	Clackamas and Multnomah Counties.....	4320.00	150,000	925
Standpipe.....	Council Crest.....	.25	900	2,000
Pump station.....	Old Kinzel Park pump station, E. Seventy-sixth and Yamhill Sts.....	1.00	2,000	200
Tract for water tanks...	Ext'n, 19th St., 100 ft. S. of Spring St.....	.025	500	.....
Crematory.....	GARBAGE CREMATORY, North of St. Helens Road in Poole Tract.....	4.98	55,000	70,000
BUREAU OF HIGHWAYS AND BRIDGES.				
Morrison St. Bridge.....				287,000
Burnside St. Bridge.....				130,000
Hawthorne Ave. Bridge.....				465,000
Broadway Bridge.....				1,534,700
Front St. Bridge.....				55,330
First St. Bridge.....				39,920
Thurman St. Bridge.....				16,770
Grand Ave. Bridge.....				50,285
Union Ave. Bridge.....				52,155
E. Twelfth St. Bridge.....				54,926
E. Twenty-first Street Bridge.....				61,410
E. Twenty-eight Street Bridge.....				59,025
Various Wood Trestle Bridges.....				10,000
Albina Ferry Boat.....				10,000
Albina Ferry Boat (new).....				17,500
Sellwood Ferry Boat.....				9,500
DEPARTMENT OF PUBLIC DOCKS.				
Dock site.....	N. 75 ft. of lot 14, all lots 15, 16, 17, 18, 19 and 20, Watson's Add. River Lots and S. 40 ft. of lot 21 and part of lots 24 and 25, block 2, Doschers Addition.....	3.33	1,322,499	580,925.75

SUMMARY OF REAL AND PERSONAL PROPERTY OWNED BY THE CITY OF PORTLAND, OREGON
RESOURCES

Description—	Personal	Real Estate and Improvements.
Auditor's Office.....	\$ 163,580.64	\$.....
Civil Service Board.....	720.50	.....
Bureau of Fire.....	556,879.80	660,525.00
Bureau of Police.....	15,798.53	484,100.00
Bureau of Health.....	5,937.76	2,625.00
Bureau of Pound.....	1,275.79	.....
Municipal Court.....	287.20	.....
Mayor's Office.....	831.50	.....
Com. of Public Affairs.....	403.05	.....
Office of City Attorney.....	4,949.00	.....
Bureau of Free Employment.....	151.85	.....
Bureau of City Hall.....	5,284.92	600,000.00
Free Museum.....	55,000.00	.....
Bureau of Weights and Measures.....	1,147.02	.....
Bureau of Parks.....	35,579.93	3,861,208.00
Municipal Reference Library.....	224.00	.....
Com. of Finance.....	334.62	.....
Office of City Treasurer.....	5,110.00	.....
Bureau of Purchases.....	4,414.20	.....
Stationery Stock.....	4,476.03	.....
Municipal Stores.....	5,469.36	.....
Department of Public Works.....	34,832.51	2,806,521.00
Commissioner of Public Utilities.....	532.85	.....
Bureau of Water Works.....	237,140.28	13,394,941.20
Bureau of Street Cleaning.....	83,871.48	101,000.00
Bureau of Garbage Disposal.....	1,326.39	125,000.00
Public Auditorium.....	.....	130,000.00
Ferry Approaches.....	.....	57,025.00
Public Docks.....	6,013.33	1,903,425.72
Cash Balances in all Funds, except Trust Funds and Special Assessment Funds.....	1,633,492.71	.....
Sinking Fund Investments—		
Water Bond Sinking Fund.....	713,000.00	.....
Sinking Fund.....	492,173.08	.....
Bonded Indebtedness Sinking Fund.....	3,000.00	.....
Public Docks Sinking Fund.....	100,200.00	.....
Total.....	\$ 4,176,438.48	\$24,173,370.92
Grand Total.....	.....	4,176,438.48
LIABILITIES		
Bonded Debt.....	\$16,169,100.00	\$.....
Interest Coupons Due Dec. 1, 1914.....	48,065.00	.....
Bonds due Dec. 1, 1914.....	5,800.00	.....
Interest Coupons Outstanding Nov. 30, 1914.....	14,800.00	.....
Amount of Claims Payable Account of 1914.....	60,865.56	.....
Warrants Outstanding Account of 1914.....	248,171.96	.....
Balance.....	11,803,006.88	28,349,809.40

BUREAU OF WATER WORKS

Balance Dec. 1, 1913.....	\$ 244,319.19	\$
*Receipts During 1914.....	1,380,084.71	1,624,403.90
Disbursements During 1914.....	\$ 1,566,168.29	\$
Balance Nov. 30, 1914.....	58,235.61	1,624,403.90
Value of Water System.....	.....	\$13,632,081.48

*Included in the amount is \$167,926.11 received from sale of bonds.

PORTLAND RAILWAY, LIGHT & POWER COMPANY GENERAL BALANCE SHEET DECEMBER 31, 1913

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)	Capital Stock.....\$18,750,000.00	
Funded Debt.....	Funded Debt.....39,964,000.00	
	288,757.16	
	964,000.00	

Debit	ASSETS AND LIABILITIES	Credit
Cash	Loans and Bills Payable.\$	636,816.69
Bills Receivable.....	Audited Vouchers and Accounts	235,963.44
Accounts Receivable.....	Wages and Salaries—Employees Funds.....	21,892.86
Due from Agents.....	Unclaimed Dividends—Tickets Outstanding....	26,086.26
*Road	Rent Due—Customers' Deposits	24,667.36
Materials and Supplies... 58,783,423.07	Accrued Maintenance and Depn Reserve—Other Liabilities	357,265.56
Other Assets (give detail) 610,403.26	Paving Assessments.....	1,129,478.52
Prepaid Accounts.....	Advance Collections.....	2,130.19
Sinking Fund Investments 277,641.54	Interest Accrued.....	484,181.04
Cash in hand of Trustee.. 67,631.14	Taxes Accrued.....	286,904.73
	Damages Accrued.....	17,398.75
	Miscellaneous Accrued....	117,748.76

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$	Operating Revenue.....\$	1,746,118.85
Taxes		
Bridge Rentals.....		
Interest on Bonds.....		
Interest on Notes.....		
Interest on St. Imp. Bonds 16,834.76		
Bond Discount.....		3,404.91

Debit	PROFIT AND LOSS	Credit
Amount Charged off for Depreciation	Balance Sept. 30, 1913...\$	483,692.58
Dividends Paid.....	Balance from Income Account	410,877.21
	Adjustments	213,513.11
	Surplus	309,560.25

PORTLAND RAILWAY, LIGHT & POWER COMPANY GENERAL BALANCE SHEET MARCH 31, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)	Capital Stock.....\$18,750,000.00	
	Funded Debt.....	39,964,000.00
	291,087.90	

Debit	ASSETS AND LIABILITIES	Credit
Cash	Loans and Bills Payable.\$	908,650.90
Bills Receivable.....	Audited Vouchers and Accounts	297,749.88
Accounts Receivable.....	Employees Funds.....	21,595.44
Due from Agents.....	Customers Deposit.....	23,735.00
*Road	Matured Interest Coupons Unpaid	27,273.99
Materials and Supplies... 59,238,071.15	Advance Collections.....	249.99
Other Assets (give detail) 598,476.69	Paving Assessments.....	1,157,711.65
Sinking Fund Investment. 341,459.58	Interest Accrued.....	572,149.48
Cash in Hands of Trustees 3,538.23	Taxes Accrued.....	136,065.01
Prepaid Accounts.....	Damages Accrued.....	7,758.34
	Miscellaneous	116,210.58
	Accrued Maint. & Depn. Reserve	442,893.99

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$	Operating Revenue.....\$	1,656,543.88
Taxes		
Miscellaneous Rents—Bridge Rentals.....		
Interest on Bonds.....		
Interest on Notes.....		
Interest on St. Imp. Bonds 16,486.51		
Bond Discount.....		3,507.94

Debit	PROFIT AND LOSS	Credit
Amount Charged off for Depreciation	Balance Dec. 31, 1913...\$	309,560.25
Dividends	Balance from Income Account	325,354.96
	Adjustments	271,052.57
	Surplus	558,419.05

OFFICE OF THE CITY AUDITOR

PORTLAND RAILWAY, LIGHT & POWER COMPANY GENERAL BAL-
ANCE SHEET JUNE 30, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give de- tail)\$	412,844.09	Capital Stock.....\$18,750,000.00 Funded Debt..... 39,964,000.00

Debit	ASSETS AND LIABILITIES		Credit	
Cash	\$	140,097.22	Loans and Bills Payable..\$	190,749.48
Bills Receivable		170,994.61	Audited Vouchers and Ac- counts	381,524.76
Accounts Receivable.....		635,919.55	Unpaid Taxes.....	300,657.98
Due from Agents.....		2,500.00	Employees Funds.....	21,117.45
*Road	59,325,115.94		Consumers' Deposits.....	19,446.20
Materials and Supplies...		611,641.88	Tickets Outstanding.....	24,825.35
Other Assets (give detail)		453,054.01	Other Liabilities—Advance Collections	1,720.26
Suspense		98,040.95	Paving Assessments.....	1,146,888.79
Prepaid Accounts.....		93,725.90	Interest Accrued.....	509,422.66
Cash in hands of Trustees		15,966.94	Taxes Accrued.....	16,895.34
Sinking Fund Investment.	341,459.58		Accrued Maintenance Re- serve	436,517.67
			Miscellaneous	117,184.98

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$	696,020.97	Operating Revenue.....\$ 1,591,745.80
Taxes	149,630.88	
Bridge Rentals.....	11,651.79	
Bond Discount.....	3,404.91	
Interest on Bonds.....	502,918.18	
Interest on St. Imp. Bonds	16,706.28	
Interest on Notes.....	9,543.42	

Debit	PROFIT AND LOSS		Credit
Amount Charged off for		Balance March 31, 1914..\$	558,419.05
Depreciation\$	88,305.24	Balance from Income Ac-	
Dividends	250,000.00	count	201,869.37
			1,413.43

OFFICE OF THE CITY AUDITOR

PORTLAND RAILWAY, LIGHT & POWER COMPANY GENERAL BAL-
ANCE SHEET SEPTEMBER 30, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give de- tail)	\$ 405,298.61	Capital Stock.....\$18,750,000.00 Funded Debt..... 39,964,000.00

Debit	ASSETS AND LIABILITIES		Credit
Cash	\$ 160,299.92	Loans and Bills Payable..\$	455,325.00
Bills Receivable.....	211,007.73	Audited Vouchers and Ac- counts	139,556.22
Accounts Receivable.....	512,155.64	Employees Funds.....	20,753.31
Due from Agents.....	2,500.00	Consumers Deposits.....	16,326.40
*Road	59,513,213.72	Tickets Outstanding.....	25,811.54
Materials and Supplies...	531,112.05	Advance Collections.....	337.64
Other Assets (give detail)	507,752.84	Paving Assessments.....	1,107,863.83
Prepaid Accounts.....	61,621.30	Interest Accrued.....	570,215.54
Cash in Hands of Trustee	7,900.98	Taxes Accrued.....	142,091.96
Sinking Fund Investment.	349,550.83	Accrued Maintenance....	508,280.73
		Miscellaneous	127,412.07

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$	650,771.04	Operating Revenue.....\$ 1,469,966.55
Taxes	155,805.02	
Bridge Rentals.....	11,373.19	
Bond Discount.....	4,598.13	
Interest on Bonds.....	514,933.28	
Interest on St. Imp. Bonds	15,981.33	
Interest on Notes.....	6,267.48	

Debit	PROFIT AND LOSS		Credit
Amount Charged off for Depreciation\$	92,522.96	Balance June 30, 1914....\$	420,569.75
		Balance from Income Account	110,237.08
		Adjustments	3,849.49
		Surplus	434,434.38

PACIFIC TELEPHONE & TELEGRAPH COMPANY GENERAL BALANCE
SHEET DECEMBER 31, 1913

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)		Capital Stock.....\$50,000,000.00
Intangible Capital.....	701,843.14	Funded Debt.....41,664,000.00
	14,155,922.79	

Debit	ASSETS AND LIABILITIES	Credit
Cash and Deposits.....\$ 1,216,087.15	Loans and Bills Payable..\$ 1,100,000.00	
Bills Receivable.....2,438,835.83	Audited Vouchers and Accounts	477,661.24
Accounts Receivable—Due from Agents.....	Wages and Salaries.....	421,521.16
*Construction	Other Liabilities (give detail)	727,151.30
General Equipment.....	Taxes Accrued..\$247,151.30	
Materials and Supplies....	Dividends Payable	480,000.00
Real Estate.....	Insurance and Casualty Reserve	50,000.00
Sinking Fund Assets.....	Benefit Fund.....	500,000.00
Prepayments	Reserve for Accrued Depreciation	9,351,247.46
Unamortized Debt Discount and Expense.....		

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$12,352,988.71	Operating Revenue.....\$17,678,429.78	
Uncollectible Revenues....	Non-Operating Revenues..	952,970.38
Taxes Accrued.....		
Miscellaneous Rents.....		
Interest		
Amortization of Debt Discount and Expense.....		
Dividend Appropriation of Income		
Non-Operating Expense....		

Debit	PROFIT AND LOSS	Credit
Other Deductions from Surplus	Balance	130,608.41
	Balance from Income Account	333,895.53

PACIFIC TELEPHONE & TELEGRAPH COMPANY GENERAL BALANCE
SHEET MARCH 31, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)		Capital Stock.....\$50,000,000.00
Intangible Capital.....	711,343.14	Funded Debt.....41,397,000.00
	14,155,922.79	

Debit	ASSETS AND LIABILITIES	Credit
Cash and Deposits.....\$ 910,723.01	Loans and Bills Payable..\$ 1,300,000.00	
Bills Receivable.....2,416,143.82	Audited Vouchers and Accounts	683,447.38
Accounts Receivable and Due from Agents.....	Wages and Salaries.....	389,386.37
*Construction	Other Liabilities (give detail)	1,011,986.58
General Equipment.....	Interest	\$523,712.50
Materials and Supplies....	Dividends Payable	480,000.00
Real Estate	Interest on Provident Funds, Employees' Benefit Fund..	\$855.20
Sinking Fund Assets.....	Tax on Tax-exempt Bonds..	3,418.88
Prepayments	Insurance and Casualty Reserve	50,000.00
Unamortized Debt Discount and Expense.....	Liability for Emp. Ben. Fund	496,446.59
	Reserve for Accrued Depreciation	9,461,171.95

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$ 3,055,125.33	Operating Revenue.....\$ 4,489,596.27	
Uncollectible Revenues....	Dividends on Stocks Owned	277.00
Taxes Accrued.....	Interest on Fnned Debts Owned	8,676.40
Miscellaneous Rents.....	Interest on Securities, Loans and Accounts....	48,856.77
Interest	Non-Operating Revenues..	4,200.70
Amortization of Debt Discount and Expense.....		
Misc. Deductions from Income		
Dividends Appropriations of Income.....		

Debit	PROFIT AND LOSS	Credit
Other Deductions from Surplus	Balance	348,520.52
	Balance from Income Account	145,051.09

PACIFIC TELEPHONE & TELEGRAPH COMPANY GENERAL BALANCE
SHEET JUNE 30, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)\$ 731,343.14	Capital Stock.....\$50,000,000.00	
Intangible Capital..... 14,155,922.79	Funded Debt..... 41,397,000.00	

Debit	ASSETS AND LIABILITIES	Credit
Cash\$ 885,165.53	Loans and Bills Payable..\$ 2,300,000.00	
Bills Receivable..... 2,704,607.77	Audited Vouchers and Accounts 588,885.67	
Accounts Receivable and Due from Agents..... 4,348,396.62	Wages and Salaries..... 389,866.68	
*Construction 72,982,820.60	Other Liabilities (give detail) 508,103.04	
General Equipment..... 678,935.33	Taxes\$ 71,936.66	
Materials and Supplies.... 1,446,516.40	Interest 12,500.00	
Real Estate..... 5,845,009.56	Dividends Payable 480,000.00	
Sinking Fund Assets..... 4,400.25	Tax on Tax-exempt Bonds.. 3,538.63	
Prepayments 161,377.45	Income Tax Collections 127.75	
Unamortized Debt Discount and Expense..... 2,223,904.71	Insurance and Casualty Reserve 50,000.00	
	Liability for Emp. Ben. Fund 500,001.40	
	Reserve for Accrued Depreciation 9,698,779.93	

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$ 6,217,120.92	Operating Revenue.....\$ 9,076,227.68	
Uncollectible Revenues... 90,999.62	Dividends on Stocks Owned 434.00	
Taxes Accrued..... 401,262.19	Interest on Funded Debts Owned 17,012.53	
Miscellaneous Rents..... 113,359.36	Interest on Securities, Loans and Accounts... 87,196.06	
Interest 1,084,351.61	Non-Operating Revenues.. 8,409.38	
Amortization of Debt Discount and Expense..... 49,551.64		
Misc. Deductions from Income 3,643.03		
Dividend Appropriations of Income..... 960,000.00		

Debit	PROFIT AND LOSS	Credit
Other Deductions from Surplus\$ 12,748.37	Balance\$ 348,520.52	
	Balance from Income Account 268,991.28	

PACIFIC TELEPHONE & TELEGRAPH COMPANY GENERAL BALANCE
SHEET SEPTEMBER 30, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)\$ 756,565.64	Capital Stock.....\$50,000,000.00	
Intangible Capital..... 14,155,922.79	Funded Debt..... 41,375,000.00	

Debit	ASSETS AND LIABILITIES	Credit
Cash and Deposits.....\$ 877,670.33	Loans and Bills Payable..\$ 2,400,000.00	
Bills Receivable..... 2,812,238.24	Audited Vouchers and Accounts 561,922.49	
Accounts Receivable and Due from Agents..... 4,357,915.16	Wages and Salaries..... 371,573.07	
*Construction 73,162,300.04	Other Liabilities (give detail) 1,042,684.51	
General Equipment..... 685,282.68	Taxes\$ 29,575.44	
Materials and Supplies.... 1,456,388.59	Interest 527,823.94	
Real Estate..... 6,388,976.67	Dividends Payable 480,000.00	
Sinking Fund Assets..... 31.87	Income Tax Collections 346.75	
Prepayments 188,564.78	Tax on Tax-exempt Bonds... 4,938.38	
Unamortized Debt. Disc. and Expense..... 2,197,809.16	Insurance and Casualty Reserve 50,000.00	
	Liability for Emp. Ben. Fund 499,432.45	
	Reserve for Accrued Depreciation 10,075,331.30	

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$ 9,534,665.24	Operating Revenue.....\$13,786,666.70	
Uncollectible Revenues... 144,501.07	Dividends on Stocks Owned 618.00	
Taxes Accrued..... 621,082.46	Interest on Funded Debts Owned 25,411.14	
Miscellaneous Rents..... 172,252.67	Interest on Securities, Loans and Accounts... 130,084.05	
Interest 1,634,913.45	Non-Operating Revenues.. 12,641.95	
Amortization of Debt Discount and Expense..... 74,256.51		
Misc. Deductions from Income 5,042.78		
Dividend Appropriations of Income 1,440,000.00		

Debit	PROFIT AND LOSS	Credit
Other Deductions from Surplus\$ 13,506.05	Balance\$ 348,520.52	
	Balance from Income Account 328,707.66	

PORTLAND GAS & COKE COMPANY GENERAL BALANCE SHEET
DECEMBER 31, 1913

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)	Capital Stock.....\$ 5,000,000.00 Funded Debt..... 5,492,000.00	
	125,701.00	

Debit	ASSETS AND LIABILITIES	Credit
Cash	Loans and Bills Payable..\$ 30,000.00	
Bills Receivable.....	Audited Vouchers and Ac- counts	51,929.79
Accounts Receivable.....	Wages and Salaries.....	12,702.02
Equipment	Accrued Accounts.....	129,387.55
Materials and Supplies...	Consumers' Deposits.....	20,384.60
Other Assets (give detail) 2,619,831.49	Reserve Accounts.....	433,982.04
Prepaid Accounts.....	Other Liabilities.....	90,384.96
Bonds in Treasury.....		

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$ 547,829.49	Operating Revenue.....\$ 1,265,361.76	
Taxes	Sundry Interest.....	1,516.24
Interest on Funded Debt. 251,915.15		
Dividends		

Debit	PROFIT AND LOSS	Credit
Balance transferred to Gen. Reserve and Depr.....\$ 65,000.00	Balance	100,000.00

PORTLAND GAS & COKE COMPANY GENERAL BALANCE SHEET
MARCH 31, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)	Capital Stock.....\$ 5,000,000.00 Funded Debt..... 5,792,000.00	
	125,701.00	

Debit	ASSETS AND LIABILITIES	Credit
Cash	Audited Vouchers and Ac- counts	42,448.63
Bills Receivable.....	Wages and Salaries.....	12,605.45
Accounts Receivable.....	Accrued Accounts.....	98,076.08
Equipment	Consumers' Deposits.....	20,340.20
Materials and Supplies...	Reserve Accounts.....	396,598.45
Other Assets (give detail) 2,619,831.49	Other Liabilities.....	70,345.84
Prepaid Accounts.....		
U. S. Mtg. & Trust Co..		

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$ 145,318.32	Operating Revenue.....\$ 340,456.64	
Taxes	Sundry Interest.....	1,014.66
Interest on Funded Debt. 72,913.49		
Misc. Deductions from Surplus		
Dividends		

Debit	PROFIT AND LOSS	Credit
	Balance	116,177.83

PORTLAND GAS & COKE COMPANY GENERAL BALANCE SHEET JUNE 30, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)		Capital Stock.....\$ 5,000,000.00 Funded Debt..... 5,792,000.00
	126,401.00	

Debit	ASSETS AND LIABILITIES		Credit		
Cash	\$	129,556.20	Audited Vouchers and Ac- counts	\$	46,505.78
Bills Receivable.....		127,744.65	Wages and Salaries.....		12,386.62
Accounts Receivable.....		204,751.42	Other Liabilities (give de- tail)		66,336.24
Equipment		7,913,927.21	Accrued Accounts.....		189,357.53
Materials and Supplies...		167,749.82	Consumers' Deposits.....		19,429.95
Other Assets (give detail)		2,665,063.39	Reserve Accounts.....		368,512.66
Prepaid Accounts.....		214,528.91			
U. S. Mtg. & Trust Co...		9,000.00			
Undistributed Plant Items		56,841.17			

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....	272,313.81	Operating Revenue.....\$ 646,154.79
Taxes Accrued.....	47,350.50	Sundry Interest..... 8,973.75
Interest on Funded Debt.	147,320.01	
Misc. Deductions from Surplus	407.50	
Dividends	175,000.00	

Debit	PROFIT AND LOSS	Credit
	Balance	\$ 107,700.27

PORTLAND GAS & COKE COMPANY GENERAL BALANCE SHEET SEPTEMBER 30, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)		Capital Stock.....\$ 5,000,000.00 Funded Debt..... 5,792,000.00
	126,401.00	

Debit	ASSETS AND LIABILITIES		Credit		
Cash	\$	14,722.17	Audited Vouchers and Ac- counts	\$	48,735.64
Bills Receivable.....		23,124.10	Wages and Salaries.....		15,611.36
Accounts Receivable.....		226,874.16	Other Liabilities (give de- tail)		57,465.70
Equipment		7,981,023.58	Accrued Accounts.....		142,339.96
Materials and Supplies...		167,542.92	Consumers' Deposits.....		22,997.90
Other Assets (give detail)		2,665,063.39	Reserve Accounts.....		354,612.05
Prepaid Accounts.....		213,065.87			
U. S. Mtg. & Trust Co...		9,000.00			
Undistributed Plant Items		126,362.05			

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit	
Operating Expenses.....\$	398,068.76	Operating Revenue.....\$	951,528.97
Taxes Accrued.....	71,424.05	Sundry Interest.....	14,388.81
Interest on Funded Debt.	221,725.11		
Misc. Deductions from Surplus	483.50		
Dividends	262,500.00		

Debit	PROFIT AND LOSS	Credit
	Balance	\$ 107,700.27

Debit	CAPITAL ACCOUNT	Credit
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Debit	ASSETS AND LIABILITIES	Credit	
Cash	\$ 24,443.91	Audited Vouchers and Ac- counts	\$ 8,363.98
Bills Receivable.....	2,980.00	Wages and Salaries.....	7,737.80
Accounts Receivable....	26,788.16	Unclaimed Dividends....	2,010.75
Plant, Equipment, etc....	5,548,386.09	Accrued Bond Interest...	30,842.77
Materials and Supplies...	46,375.10	1913 Taxes Mult. Co....	12,706.29
Other Assets (give detail)		1913 Franchise Tax—Port- land	3,846.71
—Bonds Purchased.....	11,385.00	Other 1913 Taxes Esti- mated	843.63
		By Balance.....	5,587,406.33
	<u>\$ 5,660,358.26</u>		<u>\$ 5,660,358.26</u>

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....	31,621.33	Operating Revenue.....\$ 89,905.30
Taxes Accrued, Estimated	5,541.96	
Bond Interest Accrued.....	3,058.11	
To Balance.....	18,683.90	
	<u>\$ 89,905.30</u>	<u>\$ 89,905.30</u>

OFFICE OF THE CITY AUDITOR

Debit

Debit	ASSETS AND LIABILITIES	Credit
Cash	\$ 51,952.72	Audited Vouchers and Ac-
Bills Receivable.....	3,653.31	counts
Accounts Receivable.....	27,990.23	Wages and Salaries.....\$
Plant, Equipment, etc.....	5,558,003.95	8,846.28
Materials and Supplies.....	45,589.61	8,576.65
Other Assets (give detail)	*	Unclaimed Dividends.....
—Bonds Purchased.....	11,385.00	2,010.75
		Accrued Bond Interest....
		64,038.31
		1913 Mult. Co. Taxes (Bal-
		ance)
		9,853.19
		1914 Taxes—3 months, es-
		timated
		6,408.86
		1913 Taxes U. S. Int. Rev.
		Corporation Tax.....
		764.67
		By Balance.....
		5,598,076.11
	<u>\$ 5,698,574.82</u>	
		<u>\$ 5,698,574.82</u>

Debit	INCOME ACCOUNT		Credit
Operating Expenses.....\$	35,455.86	Operating Revenue.....\$	86,985.68
Taxes Accrued, Estimated	6,780.00		
Bond Interest Accrued...	34,030.04		
To Balance.....	10,719.78		
	<u>\$ 86,985.68</u>		<u>\$ 86,985.68</u>

Debit		PROFIT AND LOSS		Credit
To Balance.....	\$ 330,017.78	Balance Jan. 1, 1914.....	\$ 319,298.00	
		Balance from Income Ac- count, 3 months.....		10,719.78
	<u>\$ 330,017.78</u>	By Balance Mch. 31, 1914		<u>330,017.78</u>

OFFICE OF THE CITY AUDITOR

HOME TELEPHONE AND TELEGRAPH COMPANY OF PORTLAND,
OREGON, GENERAL BALANCE SHEET JUNE 30, 1914

CAPITAL ACCOUNT		Debit	Credit
Stocks and Bonds of other Companies owned by Respondent (give details)—Albany, Corvallis, Oregon City and Independence	\$ 148,450.00		
Funded Debt Owned.....	1,257,700.00		
Stock in Treasury.....	325,291.67		
To Balance.....	5,268,558.33		
	<u>\$ 7,000,000.00</u>		<u>\$ 7,000,000.00</u>
Capital Stock.....	\$ 3,000,000.00		
Funded Debt.....	4,000,000.00		

ASSETS AND LIABILITIES		Debit	Credit
Cash	\$ 19,165.16		
Bills Receivable.....	3,653.31		
Accounts Receivable.....	27,654.37		
Plant, Equipment, etc....	5,573,327.26		
Materials and Supplies....	50,067.11		
Other Assets (give detail)			
—Bonds Purchased.....	11,385.00		
	<u>\$ 5,685,262.21</u>		
Audited Vouchers and Accounts	\$ 12,659.66		
Wages and Salaries.....	9,329.95		
Unclaimed Dividends.....	1,839.75		
Accrued Bond Interest.....	31,091.10		
1913 Mult. Taxes (Bal.)....	9,853.19		
1914 Taxes, 6 mos., est....	12,938.86		
By Balance.....	<u>5,607,539.70</u>		
	<u>\$ 5,685,262.21</u>		<u>\$ 5,685,262.21</u>

*This item to be changed to conform to purpose for which franchise is granted.

INCOME ACCOUNT		Debit	Credit
Operating Expenses.....	\$ 35,668.52		
Taxes Accrued, Estimated	6,780.00		
Bond Interest Accrued....	34,035.21		
To Balance.....	8,963.59		
	<u>\$ 85,447.32</u>		
Operating Revenue.....	\$ 85,447.32		

PROFIT AND LOSS		Debit	Credit
To Balance.....	\$ 338,981.37		
Balance April 1, 1914....	\$ 330,017.78		
Balance from Income Account, 3 months.....	8,963.59		
By Balance June 30, 1914	<u>338,981.37</u>		
	<u>\$ 338,981.37</u>		

OFFICE OF THE CITY AUDITOR

HOME TELEPHONE AND TELEGRAPH COMPANY OF PORTLAND,
OREGON, GENERAL BALANCE SHEET SEPTEMBER 30, 1914

CAPITAL ACCOUNT		Debit	Credit
Stocks and Bonds of other Companies owned by Respondent (give detail)—Albany, Corvallis, Oregon City and Independence	\$ 148,450.00		
Funded Debt Owned.....	1,257,700.00		
Stock in Treasury.....	325,291.67		
To Balance.....	5,268,558.33		
	<u>\$ 7,000,000.00</u>		<u>\$ 7,000,000.00</u>
Capital Stock.....	\$ 3,000,000.00		
Funded Debt.....	4,000,000.00		

ASSETS AND LIABILITIES		Debit	Credit
Cash	\$ 31,018.80		
Bills Receivable.....	5,106.16		
Accounts Receivable.....	27,022.00		
Plant, Equipment, etc....	5,660,154.07		
Materials and Supplies....	59,316.00		
Other Assets (give detail)			
—Bonds purchased.....	11,385.00		
	<u>\$ 5,794,002.03</u>		
Loans and Bills Payable..	\$ 50,000.00		
Audited Vouchers and Accounts	32,088.47		
Wages and Salaries.....	9,081.85		
Unclaimed Dividends.....	1,764.75		
Accrued Bond Interest....	64,544.86		
1914 Taxes 9 mos., est....	19,668.86		
By Balance.....	<u>5,616,853.24</u>		
	<u>\$ 5,794,002.03</u>		<u>\$ 5,794,002.03</u>

*This item to be changed to conform to purpose for which franchise is granted.

INCOME ACCOUNT		Debit	Credit
Operating Expenses.....	\$ 32,745.72		
Taxes Accrued, estimated	6,780.00		
Other Interest.....	433.33		
Bond Interest Accrued....	34,036.26		
To Balance.....	9,313.54		
	<u>\$ 83,308.85</u>		
Operating Revenue.....	\$ 83,308.85		

PROFIT AND LOSS		Debit	Credit
To Balance.....	\$ 348,294.91		
Balance July 1, 1914....	\$ 338,981.37		
Balance from Income Account, 3 months.....	9,313.54		
By Bal. Sept. 30, 1914..	<u>348,294.91</u>		
	<u>\$ 348,294.91</u>		

AMERICAN DISTRICT TELEGRAPH COMPANY GENERAL BALANCE
SHEET DECEMBER 31, 1913

Debit		Credit	
ASSETS		LIABILITIES	
Accounts Receivable.....\$	2,015.95	Advance Collections.....\$	1,059.39

*This item to be changed to conform to purpose for which franchise is granted.

Debit		Credit	
INCOME ACCOUNT			
Operating Expenses.....\$	2,232.02	Operating Revenue from Signal Service.....\$	7,639.16
Repairs	241.36		
Reconstruction	141.97		
General Expense.....	950.00		
	\$ 3,565.35		\$ 7,639.16

Debit		Credit	
PROFIT AND LOSS			
		Balance from Income Account	4,073.81

AMERICAN DISTRICT TELEGRAPH COMPANY GENERAL BALANCE
SHEET MARCH 31, 1914

Debit		Credit	
ASSETS		LIABILITIES	
Accounts Receivable.....\$	2,376.79	Advance Collections.....\$	892.88

*This item to be changed to conform to purpose for which franchise is granted.

Debit		Credit	
INCOME ACCOUNT			
Operating Expenses.....\$	2,714.79	Operating Revenue from Signal Service.....\$	7,445.05
Repairs	326.65		
Reconstruction	51.36		
General Expense.....	950.00		
	\$ 4,042.80		7,445.05

Debit		Credit	
PROFIT AND LOSS			
		Balance from Income Account	3,402.25

AMERICAN DISTRICT TELEGRAPH COMPANY GENERAL BALANCE
SHEET JUNE 30, 1914

Debit		Credit	
ASSETS		LIABILITIES	
Bills Receivable.....\$	2,155.62	Advance Collections.....\$	1,111.59

*This item to be changed to conform to purpose for which franchise is granted.

Debit		Credit	
INCOME ACCOUNT			
Operating Expenses.....\$	2,917.13	Operating Revenue from Signal Service.....\$	5,916.79
Repairs	310.85		
Reconstruction	193.96		
General Expense.....	740.00		
	\$ 4,161.94		\$ 5,916.79

Debit		Credit	
PROFIT AND LOSS			
		Balance from Income Account	1,754.85

AMERICAN DISTRICT TELEGRAPH COMPANY GENERAL BALANCE
SHEET SEPTEMBER 30, 1914

Debit		Credit	
ASSETS		LIABILITIES	
Accounts Receivable.....\$	2,285.02	Advance Collections.....\$	1,093.09

*This item to be changed to conform to purpose for which franchise is granted.

Debit		Credit	
INCOME ACCOUNT			
Operating Expenses.....\$	2,368.22	Operating Revenue from Signal Service.....\$	5,898.67
Repairs	334.91		
Reconstruction	67.29		
General Expense.....	740.00		
	\$ 3,510.42		\$ 5,898.67

Debit		Credit	
PROFIT AND LOSS			
		Balance from Income Account	2,388.25

NORTHWESTERN ELECTRIC COMPANY GENERAL BALANCE SHEET
MARCH 31, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned — Investment Securities.....\$ 100,180.00	Capital Stock—Common...\$10,000,000.00 Install on Capital Stock—Preferred 264,825.00	
Funded Debt Owned— In Treasury...\$ 329,000 Pledged 4,671,000 5,000,000.00	Funded Debt— 1st Mtg. 5% Gold Bonds 5,000,000.00 2 year 6% Gold Notes.. 2,660,000.00 Bonded Subscription.... 462,187.50	
Unamortized Debt Disc. and Exp. 133,790.43		

Debit	ASSETS AND LIABILITIES	Credit
Cash\$ 4,834.20	Loans and Bills Payable..\$ 828,999.86	
Bills Receivable..... 592,430.00	Audited Vouchers and Ac- counts 204,384.55	
Accounts Receivable..... 25,381.47	Wages and Salaries..... 6,195.97	
Due from Agents..... 11,136.73		
*Construction Work in Progress 13,602,685.33		
Materials and Supplies.... 25,434.43		

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$ 12,249.42	Operating Revenue.....\$ 80,268.30	
Acc. Income not yet due, Int. on, Notes, Rec..... 26,032.56	Dividends on Stocks Owned, Add. and Ded.. 1,115.50	
	Interest on Funded Debts Owned 19,910.00	
	Interest on Loans and Ac- counts 1,018.94	
	Corporate Surplus, Unap- propriated 5,250.00	
		\$19,534,155.62

NORTHWESTERN ELECTRIC COMPANY GENERAL BALANCE SHEET
JUNE 30, 1914

Debit	CAPITAL ACCOUNT	Credit
Stocks and Bonds of other Companies owned — Investment Securities.....\$ 87,505.00	Capital Stock— Common .....\$10,000,000.00 Preferred 2,000,000.00	
Funded Debt Owned— In Treasury...\$1,081,000 Pledged 4,734,000.00 5,815,000.00	Funded Debt— 1st Mtg. 5% Gold Bonds 5,000,000.00 2 year 6% Gold Notes.. 3,500,000.00	
Stock in Treasury—Pre- ferred 2,000,000.00	Installments on Preferred Stock Subscriptions.... 400,275.00	
Unamortized Debt Disc. and Exp. 135,279.69	Installments on Bond Sub- scriptions 462,187.50	

Debit	ASSETS AND LIABILITIES	Credit
Cash\$ 30,515.62	Loans and Bills Payable..\$ 926,591.02	
Bills Receivable..... 593,506.46	Audited Vouchers and Ac- counts 284,703.03	
Accounts Receivable..... 37,543.08		
Due from Agents..... 32,776.22		
*Construction Work in Progress 13,984,621.54		
Materials and Supplies.... 21,633.93		

*This item to be changed to conform to purpose for which franchise is granted.

Debit	INCOME ACCOUNT	Credit
Operating Expenses.....\$ 25,349.41	Operating Revenue.....\$ 148,130.48	
Acc. Income not yet due, Int. on, Notes, Rec. Bl. 28,443.86	Dividends on Stocks Owned, Add and Ded... 658.09	
	Interest on Funded Debts Owned 60,392.50	
	Interest on Loans and Ac- counts 3,937.19	
	Corporate Surplus Unap- propriated 5,250.00	
		\$22,792,174.81

NORTHWESTERN ELECTRIC COMPANY GENERAL BALANCE SHEET SEPTEMBER 30, 1914

CAPITAL ACCOUNT		
Debit		Credit
Stocks and Bonds of other Companies owned — Investment Securities.....\$	222,505.00	
Funded Debt Owned—		
Bonds	5,000,000.00	
Gold Notes	865,000.00	
Stock in Treasury, Preferred	1,523,000.00	
Unamortized Debt Disc. and Expense	180,730.91	
Capital Stock—		
Common		\$10,000,000.00
Preferred		2,000,000.00
Funded Debt—		
1st Mort. 5% Bonds....		5,000,000.00
2 year 6% Gold Notes..		3,500,000.00
Installments on Bond Subscription		462,187.50
Installments on Preferred Stock Subscription		18,000.00

ASSETS AND LIABILITIES		
Debit		Credit
Cash	\$ 9,225.56	
Bills Receivable	372,510.17	
Accounts Receivable	25,192.75	
Due from Agents and Consumers	63,329.10	
*Construction Work in Progress	14,187,043.15	
Materials and Supplies....	22,766.66	
Prepaid Insurance	3,540.89	
Other Assets, Miscellaneous	501.02	
Accrued Interest Not Yet Due	25,680.83	
Loans and Bills Payable..\$		1,070,568.02
Audited Vouchers and Accounts		264,769.14
Wages and Salaries		201.21
Accrued Liabilities not yet due, Taxes		3,000.00
Int. on Funded Debt....		19,762.50
Int. on Floating Debt....		5,096.42
Surplus Invested in Fixed Capital		123,439.16

*This item to be changed to conform to purpose for which franchise is granted.

INCOME ACCOUNT		
Debit		Credit
Operating Expenses.....\$	23,892.90	
Taxes Accrued	3,000.00	
Interest on Funded Debt	39,720.00	
Interest on Floating Debt	15,618.27	
	\$22,583,257.21	
Operating Revenue.....\$		106,181.62
Dividends on Stocks Owned		520.00
Interest on Securities, Loans and Accounts....		9,562.91
Miscellaneous Income....		371.15
		\$22,583,257.21

PROFIT AND LOSS		
Debit		Credit
		Invested in Fixed Capital as of June 30, 1914....\$
		3 months ending Sept. 30, 1914
		123,439.16
		34,404.51

NORTHERN PACIFIC TERMINAL COMPANY OF OREGON GENERAL BALANCE SHEET JUNE 30, 1914

INCOME ACCOUNT		
Debit		Credit
Operating Expenses.....\$	296,734.28	
Taxes Accrued	117,927.53	
Joint Facilities Revenue.	83,182.71	
Accrued Interest on Funded Debt	191,010.00	
Rents Misc. R. of W. and Tracks	794.34	
Hire of Equipment Borrowed	718.65	
	\$ 690,367.51	
Operating Revenue.....\$		83,182.71
Rents, Joint Facilities, Taxes		117,927.53
Joint Facilities Expenses Cr.		296,734.28
Rents Joint Facilities Interest		107,410.00
Rents Misc. Int. on E. S. Property		83,600.00
Rents Misc. R. of W. and Tr. Col. fr. Lessee.....		794.34
Hire of Equip. Borrowed from Lessee		718.65
		\$ 690,367.51

PROFIT AND LOSS		
Debit		Credit
Balance	\$ 74,225.27	

OFFICE OF THE CITY AUDITOR

NORTHERN PACIFIC TERMINAL COMPANY OF OREGON GENERAL
BALANCE SHEET SEPTEMBER 30, 1914

CAPITAL ACCOUNT		Credit
Debit		
	Capital Stock.....	\$ 1,320,534.64
	Funded Debt.....	3,115,000.00
		\$ 4,435,534.64

ASSETS AND LIABILITIES		Credit
Debit		
Cash—		
Portland, Or.\$30,894.56		
New York.. 58,534.70—\$	89,429.26	
Lessee Companies—Inter-		
est	46,725.00	
Accounts Receivable.....	165,363.39	
*Buildings, Fixtures and		
Grounds	2,071,946.88	
Equipment Less Deprecia-		
tion	113,837.09	
Materials and Supplies...	39,980.07	
Other Assets — Items in		
Suspense	456.38	
E. S. Property under con-		
tract of sale to O. W.		
Rd. Nav. Co.....	1,600,000.00	
Cost in Excess of Sale		
Price	474,958.31	
	\$ 4,602,696.38	
		228,166.51

*This item to be changed to conform to purpose for which franchise is granted.

INCOME ACCOUNT		Credit
Debit		
Operating Expenses.....\$	67,038.39	
Taxes Accrued.....	27,759.09	
Accrued Interest on Fund-		
ed Debt	46,725.00	
Joint Facilities—Revenues	21,632.05	
Rents Misc., R. of W. and		
Tracks	241.00	
Hire of Freight Cars.....	105.60	
	\$ 163,501.13	
		\$ 163,501.13

PROFIT AND LOSS		Credit
Debit		
Balance	\$ 61,004.77	
	\$ 4,827,202.28	
		\$ 4,827,202.28

OFFICE OF THE CITY AUDITOR

FRANCHISES

Ordinance No. 107—former City of Albina—entitled "An Ordinance authorizing the erecting, laying, stretching and maintaining of poles and wires for use in conducting electricity in the City of Albina by the Albina Light & Water Company and its assigns." Approved March 5, 1890. Expires, no time. Owned by Portland Railway, Light & Power Company.

Ordinance No. 183—former City of East Portland—entitled: "An Ordinance granting to the Oregon & California Railroad Company the right of way on First street." Passed June 17, 1876. Expires, no time. Owned by Oregon & California Railroad Company, leased by the Southern Pacific Railway.

Ordinance No. 310—former City of East Portland—entitled: "An Ordinance authorizing the Oregon Railway & Navigation Company to lay a railroad track and run cars over the same within the City of East Portland." Passed September 13, 1881. Expires, no time. Owned by the Oregon Railroad & Navigation Company.

Ordinance 595—former City of East Portland—entitled: "An Ordinance granting H. A. Hogue, C. P. Hogue and D. H. Jones, their successors and assigns, the right and privilege of erecting, constructing, maintaining and operating an electric light and power plant in the City of East Portland." Approved June 29, 1887. Expires, no time. Owned by Portland Railway, Light & Power Company.

Ordinance No. 631—former City of East Portland—entitled: "An Ordinance authorizing the Oregon Railway & Navigation Company to lay down railway tracks and run cars over the same, over, along and across certain streets in the City of East Portland, to connect with the bridge of the said company to be constructed across the Willamette River between the Cities of East Portland and Portland." Approved December 5, 1887. Expires, no time. Owned by the Oregon Railroad & Navigation Company.

Ordinance No. 681—former City of East Portland—entitled: "An Ordinance authorizing George W. Brown, his successors or assigns, to construct, maintain and operate street railways in the City of East Portland, County of Multnomah, State of Oregon." Approved November 22, 1888. Expires, fifty years. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 888—former City of East Portland—entitled: "An Ordinance authorizing George W. Brown, his successors and assigns, to construct, and maintain and operate a street railway on certain streets in the City of East Portland." Owned by the Portland Railway, Light & Power Company. Approved October 22, 1890. Expires, fifty years.

Ordinance No. 967—former City of East Portland—entitled: "An Ordinance confirming to the East Side Railway Company all the rights, privileges and franchises granted by Ordinance No. 888 entitled: 'An Ordinance authorizing George W. Brown, his successors, or assigns, to construct, maintain and operate a street railway on certain streets in the City of East Portland, Oregon.'" Approved May 22, 1891. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 984—former City of East Portland—entitled: "An Ordinance authorizing George W. Brown, his successors or assigns, to construct, maintain and operate an electric light and power plant in the City of East Portland, Multnomah County, Oregon." Approved

June 25, 1891. Expires, no time. Owned by Portland General Electric Company.

Ordinance No. 2969, entitled: "An Ordinance authorizing the Oregonian Railway Company (limited) to lay a railway track and run cars over the same within the City of Portland." Approved January 7, 1881. Expires, no time. Owned by the Oregon & California Railway Company, and leased by the Southern Pacific Company.

Ordinance No. 3513, entitled: "An Ordinance granting the right of way through the streets of the City of Portland for laying pipes for the purpose of conveying water through and throughout the city." Approved July 21, 1882. Owned by Portland Railway, Light & Power Company.

Ordinance No. 3538, entitled: "An Ordinance authorizing the erection and maintaining of electric light wires and the necessary supports therefor on and over the streets of the City of Portland." Approved September 8, 1882. Expires, no time. Owned by Portland Railway, Light & Power Company.

Ordinance No. 3656, entitled: "An Ordinance authorizing the Northern Pacific Terminal Company of Oregon, its successors and assigns, to construct and maintain a double railway track on North Front street, in the City of Portland, from the northern limits of said city to the south line of 'P' street, and a single track from thence to a point opposite the southwest corner of block G, and eighty feet distant therefrom with a side track from a point opposite to block 220 to block H, both in Couch's Addition to said City of Portland; also sufficient and suitable side tracks from, at, or near the foot of 'P' street, curving across and along East and West Park streets and M, N, O and P streets, and to confirm to the Oregon & California Railway Company the right to maintain and operate its main and side tracks in North Front street, in said city." Approved December 8, 1882. Expires, no time. Owned by the Northern Pacific Terminal Company of Oregon.

Ordinance No. 4932, entitled: "An Ordinance authorizing and directing a contract with P. F. Morey and his assigns, and authorizing and allowing the erection and maintaining of poles and wires used in connection with or as a part of electric light works, in, upon and over the streets, alleys and public parks and public grounds of the City of Portland." Approved October 7, 1886. Expires, no time. Owned by Portland Railway, Light & Power Company.

Ordinance No. 4942, entitled: "An Ordinance granting to the Northwestern American District Telegraph Company, of Oregon, the right and privilege of erecting, constructing, maintaining and operating its telegraph system in the City of Portland." Approved October 21, 1886. Expires, no time. Owned by American District Telegraph Company.

Ordinance No. 4995, entitled: "An Ordinance granting to the Pacific Postal Telegraph Cable Company the right and privilege of erecting, constructing, laying, maintaining and operating its telegraph lines in the City of Portland." Approved January 6, 1887. Expires, no time. Owned by the Postal Telegraph Cable Company.

Ordinance No. 5100, entitled: "An Ordinance granting to the Portland & Willamette Valley Railway Company, its successors and assigns, a right of way over certain lands belonging to the City of Portland." Approved June 17, 1887. Expires, no time. Owned by

Oregon & California Railroad Company, leased by Southern Pacific Company.

Ordinance No. 5163, entitled: "An Ordinance authorizing the Oregon Railway & Navigation Company, its successors and assigns, to cross with bridge approach and tracks North Front street and North Third street, and to occupy portions of said streets." Approved August 19, 1887. Expires, no time. Owned by the Oregon Railroad & Navigation Company.

Ordinance No. 5568, entitled: "An Ordinance authorizing the Northern Pacific Terminal Company of Oregon to construct and maintain certain railroad tracks in and across certain streets in the City of Portland." Approved September 11, 1888. Expires, no time. Owned by the Northern Pacific Terminal Company.

Ordinance No. 7134, entitled: "An Ordinance to authorize and empower the Committee on Free Bridges to enter into a contract with the Columbia Street Bridge Company to purchase the bridge commonly known as the 'Madison Street Bridge,' and to grant to the Mount Tabor Street Railroad Company, and its assigns, the right of way across the same." Approved November 11, 1891. Expires, 30 years. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 7443, entitled: "An Ordinance granting to the Highland Park Water Company the right of way through and across certain streets and avenues of that portion of the City of Portland known as Highland Park, Irvington Park, Woodlawn Heights, Cloverdale, Cloverdale Extension No. 1, Cloverdale Extension No. 2, and Columbia Heights, for laying pipes for the purpose of conveying water through and throughout said portion of said city." Approved March 3, 1892. Expires, 20 years. Owner unknown.

Ordinance No. 7578, entitled: "An Ordinance granting to the Investment Company the right of way through and across certain streets in the City of Portland, Oregon, for the purpose of laying pipes for conveying water." Approved April 25, 1892. Expires 20 years. Owned by City of Portland.

Ordinance No. 8101, entitled: "An Ordinance granting to the East Portland Gas Light Company the right to lay pipes and mains underground through the streets and alleys of that portion of the City of Portland lying on the east bank of the Willamette River, for the purpose of carrying gas into, through and throughout said portion of the City of Portland, and to supply the inhabitants thereof with gas." Approved January 5, 1893. Expires, no time. Owned by the Portland Gas and Coke Company.

Ordinance No. 8208, entitled: "An Ordinance granting to the Investment Company the right of way through and across certain streets in the City of Portland, Oregon, for the purpose of laying pipe for carrying water." Approved March 16, 1893. Expires 20 years. Owned by City of Portland.

Ordinance No. 8275, entitled: "An Ordinance authorizing the East Side Railway Company, its successors or assigns, to construct, maintain and operate a street railway on East Eleventh Street, in the City of Portland, Oregon." Approved May 4, 1893. Expires, 30 years. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 8419, entitled: "An Ordinance granting to the Western Union Telegraph Company the right to place and maintain its poles and lines in the streets, alleys and public ways of the City

of Portland, State of Oregon, on the terms and conditions herein stated." Approved July 21, 1893. Expires, no time. Owned by Western Union Telegraph Company.

Ordinance No. 8445, entitled: "An Ordinance authorizing the East Side Railway Company, its successors or assigns, to construct, maintain and operate a street railway on Madison street, in the City of Portland, County of Multnomah, State of Oregon." Approved August 4, 1893. Expires, 30 years. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 9190, entitled: "An Ordinance granting to the East Side Railway Company, its successors and assigns, certain rights on East Water street, etc." Approved March 22, 1895. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 9291, entitled: "An Ordinance to vacate a portion of Third street, between the north line of Glisan street and the north line of Hoyt street, and to authorize the Oregon Railway & Navigation Company, its successors and assigns, to construct upon the part of said Third street so vacated an elevated roadway from Third street, connecting with the upper deck of the steel bridge of said railway crossing the Willamette River." Approved June 6, 1895. Expires, no time. Franchise granted by Section 2. Owned by the Oregon Railway & Navigation Company.

Ordinance No. 9363, entitled: "An Ordinance authorizing Charles E. Smith, G. Glass and Adolph A. Dekum, or assigns to construct, maintain and operate a system of street railways in the City of Portland." Approved July 18, 1895. Expires, 30 years. Owner, Portland Railway Company.

Ordinance No. 9641, entitled: "An Ordinance granting to L. Zimmerman the right to construct, establish and carry on or operate upon his property in the City of Portland, a packing and meat business." Approved February 12, 1896. (Repealed by Ordinance No. 96560.) Approved December 2, 1897. Owned by L. Zimmerman.

Ordinance No. 11086, entitled: "An Ordinance authorizing the placing of a permanent railway track in Upshur street between the westerly line of Fifteenth street to a point 100 feet westerly from the west line of Eighteenth street, in Watson's Addition to the City of Portland, Multnomah County, Oregon." Approved January 9, 1899. Expires, 33 years. Owned by the Northern Pacific Terminal Company.

Ordinance No. 11111, entitled: "An Ordinance authorizing the Oregon Railroad & Navigation Company, its successors and assigns, to lay a railroad track upon certain streets in the City of Portland, and to run cars and locomotives over the same." Approved January 21, 1899. Expires, no time. Owned by the Oregon Railroad & Navigation Company.

Ordinance No. 11270, entitled: "An Ordinance authorizing the Eastern Lumber Company to construct and maintain a side track of standard gauge across Front street and to connect with the track of the Northern Pacific Railroad Company on Sherlock avenue, between Colton and Hull streets." Approved June 28, 1899. Expires, 30 years. Owned by the Northern Pacific Terminal Company.

Ordinance No. 11279, entitled: "An Ordinance to authorize the Oregon & California Railroad Company to construct an embankment in lieu of the existing trestle on East Stark street, East Portland, now City of Portland, and to construct thereunder a tubular culvert for

drainage purposes." Approved June 6, 1899. Expires, no time. Owned by Oregon & California Railroad Company. Leased by the Southern Pacific Company.

Ordinance No. 12590, entitled: "An Ordinance granting to the Pacific States Telephone and Telegraph Company, its successors and assigns, the right and privilege to continue to maintain and operate its present telephone and telegraph system, to erect and maintain such additional poles and wires as may be necessary for its telephone and telegraph business and to maintain and operate an underground telephone and telegraph system, for the period of twenty-five years, in, under and upon the streets, alleys, and public highways of the City of Portland, and to repeal all existing franchises and ordinances under which the said Pacific States Telephone and Telegraph Company is now operating or could operate in any part of the City of Portland." Approved February 21, 1902. Expires, 25 years. Owned by Pacific States Telephone and Telegraph Company.

Ordinance No. 13054, entitled: "An Ordinance authorizing the Northern Pacific Terminal Company of Oregon to place a side track on Front street." Approved November 11, 1902. Expires, no time. Owned by the Northern Pacific Terminal Company.

Ordinance No. 13053, entitled: "An Ordinance granting to the Oregon Water Power & Railway Company, its successors and assigns, the right and privilege to construct and to maintain and operate railways in the City of Portland." Approved November 10, 1902. Expires, 25 years. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 13089, entitled: "An Ordinance granting to Portland Railway Company, its successors and assigns, the right to construct, acquire and own and to maintain, operate and use railways and poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon." Approved November 25, 1902. Expires 31st day of December, 1927. Owned by Portland Railway, Light & Power Company.

Ordinance No. 13113, entitled: "An Ordinance granting to the Oregon Water Power & Railway Company, and its successors and assigns, the right and privilege to construct and to maintain and operate railways in the City of Portland." Approved December 18, 1902. Expires, 25 years. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 13177, entitled: "An Ordinance granting to the City & Suburban Railway Company, its successors and assigns, the right to construct, acquire and own and to maintain and use railways and poles, and wires and underground conduits, cables and conductors in the City of Portland, Oregon." Approved January 13, 1903. Expires 31st day of December, 1932. Owned by the Portland Railway, Light & Power Company. Amended by Ordinance No. 17848.

Ordinance No. 13791, entitled: "An Ordinance granting to the Oregon Water Power & Railway Company, a corporation, its successors and assigns, the right to substitute for the street car fenders described in the act of the Legislative Assembly of the State of Oregon, entitled, 'An Act to require all individuals, firms, associations, companies and corporations, owning, managing or operating any street railway, to provide suitable aprons, fenders or guards on street cars, and providing a penalty for violation thereof.' Approved February 17,

1903, the street car fender hereinafter referred to, and granting said corporation the right to use said substituted street car fender on all cars operated by it in the City of Portland." Approved February 6, 1904.

Ordinance No. 13897, entitled: "An Ordinance granting to the City Messenger & Delivery Company, a corporation, its successors and assigns, the right, franchise and privilege to erect poles and string wires thereon; to construct underground conduits, and to lay wires in underground conduits and to stretch wires along, over, upon and across the streets, avenues and public places of the City of Portland, Oregon, for the transmission of electric current to be used solely and exclusively in connection with a messenger system and service and a call-box system; and to establish, maintain and operate a messenger system and service and a system of call-boxes and fixing the compensation to be paid therefor." Approved April 8, 1904. Owned by City Messenger & Delivery Company. Expires, 25 years.

Ordinance No. 14083, entitled: "An Ordinance authorizing the Oregon Water Power and Railway Company, a corporation, to construct and maintain a sentry box at the intersection of Hawthorne avenue and East First street, City of Portland, Multnomah County, Oregon, and to authorize and require the removal of the sentry box from the place where the same is now located at the intersection of Hawthorne avenue and East First street." Approved July 8, 1904. Owned by the Portland Railway, Light & Power Company.

Ordinance No. 14699, entitled: "An Ordinance granting to Charles E. Summer, his successors and assigns, the right, privilege and franchise to erect poles and string wires and cables thereon; to construct underground conduits and manholes and to lay wires and cables in underground conduit and through manholes, and to stretch wires and cables along, over, upon and across streets, alleys and avenues and public places of the City of Portland, for the transmission of sounds, signals, conversation and intelligence through and over said wires and cables by means of electricity, and to construct, establish, equip and install a telephone and telegraph system, and to conduct a general telephone and telegraph business within the City of Portland, and fixing the compensation to be paid therefor." Owned by the Home Telephone and Telegraph Company. Expires, 25 years. By proclamation, July 1, 1905.

Ordinance No. 15427, entitled: "An Ordinance granting to the United Railways Company, its successors and assigns, the right to construct, lay down, maintain and operate railways, poles and wires and underground conduits in the City of Portland, Oregon." Owned by the United Railways Company. Expires, 25 years. Became a law June 5, 1906, without Mayor's signature.

Ordinance No. 15428, entitled: "An Ordinance granting to the Willamette Valley Traction Company, its successors and assigns, the right to construct, lay down, maintain and operate railways, poles and wires and underground conduits in the City of Portland, and to operate cars over certain streets in said City of Portland, in accordance with the provisions of an ordinance entitled, 'An Ordinance granting to the United Railways Company, its successors and assigns, the right to construct, lay down, maintain and operate railways, poles and wires and underground conduits in the City of Portland, Oregon.'"

Owned by the Oregon Electric Railway Company. Expires, 25 years. Became a law June 5, 1906, without Mayor's signature.

Ordinance No. 16730, entitled: "An Ordinance granting to the Economy Gas Company, its successors and assigns, the right to construct, acquire, own, maintain, conduct and operate a plant or plants for the manufacture and distribution of gas in the City of Portland, Oregon, to sell gas for domestic and other purposes, and to lay pipes and mains for the purpose of conducting and distributing said gas through, in and over said city." Owned by the Economy Gas Company. Expires, 25 years. Proclamation by the Mayor, June 14, 1907.

Ordinance No. 17853, entitled: "An Ordinance granting to the United Railways Company, its successors and assigns, the right to construct, lay down, maintain and operate railways and poles and wires and underground conduits in the City of Portland, Oregon, and repealing Ordinance No. 14564." Owned by the United Railways Company. Expires, 25 years. Approved May 26, 1908.

Ordinance No. 19176, entitled: "An Ordinance granting to Portland Railway, Light & Power Company, its successors and assigns, the right to construct, acquire and own, and to maintain, operate and use railways and street railways and poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon." Owned by the Portland Railway, Light & Power Company. Expires, 25 years. Passed over Mayor's veto April 28, 1909.

Ordinance No. 20479, entitled: "An Ordinance granting to the Oregon Railroad & Navigation Company, a corporation, its successors and assigns, the franchise and right to construct and equip, own, maintain and operate a railway track and sidetracks, all of standard gauge, extending from a connection with the constructed railroad of said company at the intersection of East Ankeny street and East Second street, and thence in a southeasterly direction crossing East Ash street to East Third street, and extending thence southerly along East Third street from a point between East Ash street and East Pine street to Hawthorne avenue, and to operate locomotives and cars over the same, in the City of Portland." Owned by the Oregon Railroad & Navigation Company. Approved December 10, 1909. Expires, 25 years.

Ordinance No. 21735, entitled: "An Ordinance granting to Heights Trust Company, its successors and assigns, the right to construct, acquire and own, and to maintain, operate and use railways and street railways, poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon." Amended by Ordinance No. 23554. Owned by the Heights Trust Company. Approved July 28, 1910. Expires, December 31, 1932.

Ordinance No. 22539, entitled: "An Ordinance granting to the Oregon Electric Railway Company, a corporation, its successors and assigns, the right to construct, lay down, maintain and operate railways, poles and wires and underground conduits in the City of Portland, Oregon." Amended by Ordinance No. 25998. Owned by the Oregon Electric Railway Company. Approved December 14, 1910. Expires, 25 years.

Ordinance No. 22540, entitled: "An Ordinance granting to Abe Tichner, his heirs, executors, administrators and assigns; the Oregonian Publishing Company, a corporation; the Portland Railway, Light & Power Company, a corporation; and College Endowment As-

sociation, a corporation, their successors and assigns, the right and privilege to construct, maintain and use an underground conduit for the purpose of conducting pipes for steam heat, fuel-oil and water across Alder street between Sixth and Seventh streets in the City of Portland, Oregon." Owned by Abe Tichner, Oregonian Publishing Company, Portland Railway, Light & Power Company and College Endowment Association. Approved December 17, 1910. Expires, 25 years.

Ordinance No. 22989, entitled: "An Ordinance granting to the Mount Hood Railway & Power Company, its successors and assigns, for a period of twenty-five years, the right and privilege to erect, construct, maintain and operate an electric plant, heat and power system in the City of Portland, Oregon, and the right and privilege to erect poles and stretch wires thereon, and thereover, through, over and upon the streets, alleys and public highways, and to construct underground conduits or pipes, with all necessary man-holes and other appliances in and under the said streets, alleys and public highways in the City of Portland, for conducting and conveying electricity for light, heat and power, to charge rents and tolls therefor, and to collect the same, and authorize the said Mount Hood Railway & Power Company to trim shade and ornamental trees in the said streets, alleys and public highways, and granting right of way for conduit, canal or flume over and across the northwest quarter of the southwest quarter of section five (5), township two (2) south, range five (5), east of the Willamette Meridian, and to provide for the punishment of those injuring or interfering with its property." Owned by Mount Hood Railway & Power Company. Approved March 31, 1911.

Ordinance No. 23237, entitled: "An Ordinance granting to Heights Trust Company, its successors and assigns, the right to construct, acquire and own, and to maintain, operate and use railways and street railways, and poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon." Owned by Heights Trust Company. Approved April 29, 1911. Expires, December 31, 1932. Amended by Ordinance 23554.

Ordinance No. 23256, entitled: "An Ordinance designating certain public streets of the City of Portland across and over which the Oregon-Washington Railroad & Navigation Company, a railway corporation of the State of Oregon, its successors and assigns, may and shall locate and construct its railroad and railroad tracks for the purpose of making connection with its proposed tracks on its new steel bridge being constructed across the Willamette River, with the tracks of the said company on the west side of the river in the City of Portland, and with the tracks and terminal facilities to be used by said company in connection therewith, and designating certain other public streets in the City of Portland across and over which said Oregon-Washington Railroad & Navigation Company, its successors and assigns, may and shall locate and construct its railroad and tracks to make connection between its present tracks, now located on Railroad street, with the railroad tracks of its new line of railroad constructed and being constructed by way of the peninsula between the Willamette and Columbia rivers to facilitate the entrance into the City of Portland of said new line of railroad; and designating likewise certain other streets on the east side of the Willamette River and in the neighborhood of the east approach to the new steel railroad

bridge being constructed by said Oregon-Washington Railroad & Navigation Company across the Willamette River, over and across which said Oregon-Washington Railroad & Navigation Company, its successors and assigns, may and shall locate and construct its railroad and tracks to make connection between the railroad tracks of said company to be laid over the said railroad bridge and the line of railroad of the said company on the east side of the Willamette River." Owned by the Oregon-Washington Railroad & Navigation Company. Approved May 11, 1911. Expires, 25 years.

Ordinance No. 23257, entitled: "An Ordinance authorizing the Oregon-Washington Railroad & Navigation Company, its successors and assigns, to occupy certain parts of Glisan, First and Front streets for the construction and maintenance thereon and thereover of a bridge approach to the proposed new railroad bridge being constructed over the Willamette River by the Oregon-Washington Railroad & Navigation Company, successor to the Oregon Railroad & Navigation Company." Owned by The Oregon-Washington Railroad & Navigation Company. Approved May 11, 1911. Expires, 25 years.

Ordinance No. 24198, entitled: "An Ordinance designating certain streets of the City of Portland across, over and along which the Oregon-Washington Railroad & Navigation Company, a railway corporation, of the State of Oregon, its successors and assigns, may and shall locate and construct its railroad and railroad tracks for its line from St. Johns to Troutdale." Owned by the Oregon-Washington Railroad & Navigation Company. Approved October 22, 1911. Expires, 25 years.

Ordinance No. 25930, entitled: "An Ordinance granting to the Northwestern Electric Company, a corporation, its successors and assigns, for a period of 25 years the right and privilege to erect, construct, maintain and operate an electric light, heat and power system in the City of Portland, Oregon, and the right and privilege to erect poles and stretch wires thereon and thereover, through, over, and upon streets, alleys and public highways, and to construct underground conduits or pipes with all necessary manholes and other appliances in and under the said streets, alleys and public highways in the City of Portland for the conducting and conveying electricity for light, heat and power, to charge rents and tolls therefor, and to collect the same, and authorizing the said Northwestern Electric Company to trim shade and ornamental trees in the said streets, alleys and public highways." Owned by the Northwestern Electric Company. Approved October 1, 1912.

Ordinance No. 25997, entitled: "An Ordinance granting to F. E. Dooley, John H. Hall, L. H. Tarpley and W. O. Van Schuyver, their successors or assigns, the right to lay and maintain pipes, conduits and apparatus for the construction of a hot water and steam heating plant under certain streets, avenues, alleys and public places of the City of Portland, Oregon, and to charge rents and tolls therefor; and to regulate the construction of said heating plant and provide penalties for the violation of this ordinance." Owned by F. E. Dooley, John H. Hall, L. H. Tarpley and W. O. Van Schuyver. Approved October 8, 1912. Expires, 25 years.

Ordinance No. 26080, entitled: "An Ordinance granting to Portland Railway, Light & Power Company, its successors and assigns, the right to construct, acquire and own, and to maintain, operate and

use railways and street railways and poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon." Owned by the Portland Railway, Light & Power Company. Approved October 10, 1912. Expires, December 31, 1932.

Ordinance No. 26511, entitled: "An Ordinance granting to the Oregon & California Railroad Company, a corporation, its successors, lessees, and assigns, the right to construct, lay down, maintain and operate railways, poles and wires, and underground conduits in the City of Portland, Oregon." Owned by the Oregon & California Railroad Company. Approved January 16, 1913. Expires, 25 years.

Ordinance No. 26512, entitled: "An Ordinance granting to the Oregon & California Railroad Company, a corporation, its successors, lessees and assigns, the right to lay, construct, and maintain railway tracks and to operate cars thereover, and to transport passengers, mail, baggage and express thereon, and to erect, construct, maintain and operate necessary power, telephone and telegraph lines on Fourth street in the City of Portland, Multnomah County, Oregon, and along and over the right of way of the Oregon & California Railroad Company now there, within the corporate limits of the City of Portland, Multnomah County, Oregon, and the right to cross any and all streets to the southern limits of the said City of Portland, or any extension thereof, intersecting said right of way." Owned by the Oregon & California Railroad Company. Approved January 16, 1913. Expires, 25 years.

Ordinance No. 26513, entitled: "An Ordinance granting to Spokane, Portland & Seattle Railway Company, a corporation, its successors and assigns, the right and privilege of laying down, constructing and maintaining standard gauge railway tracks for a commercial railroad, and to operate locomotives and cars, and to transport passengers, mail, baggage, express and freight, on certain streets." Owned by Spokane, Portland & Seattle Railway Company. Approved January 16, 1913. Expires, 25 years.

Ordinance No. 26648. An Ordinance granting to Portland Railway, Light & Power Company, its successors and assigns, the right to construct, acquire and own, and to maintain, operate and use railways and street railways and poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon. Franchise owned by the Portland Railway, Light & Power Company. Approved February 21, 1913. Expires, December 31, 1932.

Ordinance No. 27160. An Ordinance granting to Northwestern Electric Company, a corporation, its successors and assigns, for a period of twenty-five years, the right and privilege to lay down, maintain and operate steam pipes and conduits through and under the streets, alleys and public highways in the City of Portland for the transmission of heat and the operating of a steam heating plant and business in said city. Franchise owned by Northwestern Electric Company. Approved June 6, 1913. Expires, 25 years.

Ordinance No. 27235. An Ordinance granting to the Errol Heights Railway Company (an Oregon Corporation), grantee, its successors and assigns, the franchise, right and privilege of constructing, maintaining and operating a line of railway, with the necessary poles, wires, underground conduits, conductors and other appliances for the operation thereof, in, upon and over certain streets in the City

of Portland, Oregon. Franchise owned by the Errol Heights Railway Company. Approved June 14, 1913. Expires, 25 years.

Ordinance No. 28481. An Ordinance granting to United Railways Company, its successors and assigns, the right and privilege of laying down, constructing and maintaining a commercial railway, with poles, wires and underground conduits in the City of Portland. Passed by the Council February 4, 1914. Expires, 25 years.

Ordinance No. 28619. An Ordinance granting to Portland Railway, Light and Power Company, its successors and assigns, the right to construct, acquire and own, and to maintain, operate and use railways and street railways and poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon. Passed by the Council March 4, 1914. Expires December 31, 1932.

Ordinance No. 28803. An Ordinance granting to Heights Trust Company, its successors and assigns, the right to construct, acquire and own, and to maintain, operate and use railways and street railways, and poles and wires and underground conduits, cables and conductors in the City of Portland, Oregon. Passed by the Council April 8, 1914. Expires December 31, 1932.

Ordinance No. 29238. An Ordinance granting to Portland Railway, Light and Power Company, its successors and assigns, rights, privileges and franchises to operate cars on and over bridges across the Willamette River in the City of Portland, Oregon, and the approaches of such bridges. Passed by the Council July 22, 1914. Expires December 31, 1932.

Ordinance No. 29481. An Ordinance granting to the Portland and Oregon City Railway Company, a corporation, already formed, its successors and assigns, the right and privilege of laying down, constructing and maintaining railways, poles, wires and underground conduits in the City of Portland, Oregon. Passed by the Council September 9, 1914. Expires, 25 years.

(Signed)

Respectfully submitted,

A. L. BARBUR,
Auditor of The City of Portland.

LIST OF REVOCABLE PERMITS GRANTED BY ORDINANCE SINCE 1890.

TEMPORARY RAILWAY TRACKS AND SWITCHES

Ordinance No. 6742. Temporary railway track in "U" street between westerly line of Fourteenth street and 100 feet west of west line of Sixteenth street. Northern Pacific Terminal Co.

Ordinance No. 7626. Side track in front of block 20, Stephen's Addition for accommodation of Dr. J. Surman. Oregon & California Railway Co.

Ordinance No. 7811. Side track in Front street from intersection of Front and Quimby streets to connect with coal bunkers on lots 38, 39, 40 and 41, block 318, Couch's Addition. Oregon Improvement Co.

Ordinance No. 8099. Side track on Fourth street from 10 feet north of the north line of Hoyt street to north line of Glisan street for accommodation of Union Meat Co. Oregon & California R. R. Co.

Ordinance No. 8209. Spur track on East First street in front of block 22, Stephen's Addition for accommodation of R. M. Wade & Co. Oregon & California Railway Co.

Ordinances Nos. 8263 and 8339. Side track on East First street from 120 feet south of south line of block 22, Stephen's Addition to center line of East Main street for accommodation of R. M. Wade and Wm. M. Ladd. Oregon & California Railway Co.

Ordinance No. 9278. Side track on Ninth street from 100 feet north of the north line of Johnson street to north line of Irving street for accommodation of J. McCracken Co. Northern Pacific Terminal Co.

Ordinance No. 11405. Side track in Wilson street from Sherlock avenue to point 300 feet west. Northern Pacific Terminal Co.

Ordinance No. 13183. Side track on Fourth street opposite south one-half of block W, Couch's Addition. Oregon & California R. R. Co.

Ordinance No. 14004. Side track on Upshur street from intersection Terminal and Upshur street to 20 feet east of east line of Seventeenth street for accommodation of Everding & Farrell. Northern Pacific Terminal Co.

Ordinance No. 14241. Move sidewalk and lay railway track in diagonal roadway between Union Depot and Front street. Northern Pacific Terminal Co.

Ordinance No. 14724. Side track on Ninth street from 100 feet south of Irving street to Hoyt street for accommodation of Woodard Clarke & Co. Northern Pacific Terminal Co.

Ordinance No. 14861. Side track on North Front street near intersection of Tenth and Quimby streets to connect with coal bunker of Holmes Coal & Ice Co. Northern Pacific Terminal Co.

Ordinance No. 14964. Side track on Upshur street in front of block 28, Watson's Addition. Northern Pacific Terminal Co.

Ordinance No. 15462. Spur track on Sherlock avenue at 100 feet north of Hull street to boiler works in block 37, Sherlock's Addition. Willamette Iron & Steel Works.

Ordinance No. 15713. Side track on North Thirteenth street from 100 feet south of Irving street to Glisan street. Northern Pacific Terminal Co.

Ordinance No. 16003. Side track on York street from Sherlock avenue to 150 feet west of Twenty-fourth street. Northern Pacific Terminal Co.

Ordinance No. 16152. Side track and switches on Fifteenth street from Upshur street to Marshall street. Portland & Seattle Railway Co.

Ordinance No. 16235. Side track in Railroad street in front of block 59, Albina for accommodation of E. H. Ingham. Oregon Railway & Navigation Co.

Ordinance No. 16480. Side track and switches on East First street between East Morrison street and East Main street for accommodation of Fisher, Thorsen & Company. Oregon & California Railway Co.

Ordinance No. 17359. Side track and switches on Fifteenth street from north line of Marshall street to north line of Johnson street. Portland & Seattle Railway Co.

Ordinance No. 17798. Side track and switches on Thirteenth street between Glisan street and 100 feet north of Burnside street. Northern Pacific Terminal Co.

Ordinance No. 18323. Single track on north side Upshur street between Seventeenth and Nineteenth streets. Northern Pacific Terminal Co.

Ordinance No. 18388. Side track and switch on East First street between East Morrison street and East Taylor street. Oregon & California Railway Co.

Ordinance No. 18649. Side track on East First street between East Oak and East Washington street. National Cold Storage & Ice Co.

Ordinance No. 19344. Side track and switches on Fifteenth street from north line of Johnson street to north line of Glisan street. Spokane, Portland & Seattle Railway Co.

Ordinance No. 19905. Single track on Hoyt street from south line of block 113 to north line of block 112, Couch's Addition. Northern Pacific Terminal Co.

Ordinance No. 20147. Two railroad tracks across Front street to lots 22 and 23, River Block 2, Doscher's Addition. B. E. Martin.

Ordinance No. 21716. Side track and spur across a portion of Russell and Marion street for accommodation of Edlefsen Fuel Co. Oregon Railway & Navigation Co.

Ordinance No. 22147. Single track railway on Upshur street from 100 feet west of North Eighteenth street to east line of North Twentieth street. Northern Pacific Terminal Co.

Ordinance No. 22253. Spur track on North Front street at North Tenth street. Northern Pacific Terminal Co.

Ordinance No. 22293. Spur track on Macadam street from United Railways Co. track. Portland Furniture Manufacturing Co.

Ordinance No. 22534. Spur track from P. R. L. & P. Co.'s track at intersection of Lombard and Newell streets to point in Newell street 450 feet north therefrom. Francis I. McKenna.

Ordinance No. 22536. Electric railway on Villa avenue and Hasalo street. Mt. Hood Railway & Power Co.

Ordinance No. 22708. Railway track on East Main street from East Water street to Willamette River. Columbia Contract Co.

Ordinance No. 23336. Side track on East First street between East Washington and East Alder. H. H. Brown.

Ordinance No. 23627. Spur track from main line of O.-W. R. &

N. Co. crossing Williams avenue and Winchell street. Oregon-Washington Railway & Navigation Co.

Ordinance No. 23628. Single track railway from west line of Tenth street between Lovejoy and Marshall to block 199, Couch's Addition, and return. Spokane-Portland & Seattle Railway Co.

Ordinance No. 23633. Spur track from a point 700 feet west of Brandon street across Brandon and Derby streets. Oregon Railway & Navigation Co.

Ordinance No. 23796. Spur track on Macadam street between Gaines street and Lane street connecting with United Railway Co.'s track. Fisher Thorsen & Co.

Ordinance No. 24029. Single track railway over certain streets (expires Sept. 26, 1913). Mt. Hood Railway & Power Co.

Ordinance No. 24328. Spur track east side of Front street from 30 feet north of Davis street to north line of East Couch street. United Railways Co.

Ordinance No. 24329. Side track east side of Ninth street from north line of Hoyt street to 100 feet south of south line of Hoyt street. Northern Pacific Terminal Co.

Ordinance No. 24704. Street railway track on Bybee avenue and Reed College Place. Reed Institute.

Ordinance No. 24892. Change from double track to single track on Raleigh street from 85 feet east of Twenty-fifth street to 90 feet east of Twenty-fourth street. Portland Railway, Light & Power Co.

Ordinance No. 25154. Spur track from point in block 32, East Portland, southeasterly across East Second street to East Flanders; thence easterly to a point between Union avenue and Grand avenue. Oregon-Washington Railway & Navigation Co.

Ordinance No. 25592. Railroad track across Tenth street and Pettygrove street. Spokane-Portland & Seattle Railway Co.

Ordinance No. 25643. Single track electric railway on Pettygrove street, Quimby street, Westover Road and Cumberland Road. Lewis-Wiley Hydraulic Co.

Ordinance No. 25776. Side track in front of block B, Creston (expires Aug. 21, 1913). Percy & Strickler Co.

Ordinance No. 25781. Electric railway on Lewelling avenue, Knapp avenue and Eschelmann street. Fred A. Jacobs et al (see Ord. 25986).

Ordinance No. 25896. Single track railroad across Division street near Tenth street. Ford Motor Co.

Ordinance No. 26138. Railway track across Clackamas street 100 feet west of east line of block 45, Laurelhurst. Rose City Coal & Supply Co.

Ordinance No. 26246. Railway tracks across Northrup, Overton street and Tenth street connecting with block 224, Couch's Addition. Spokane-Portland & Seattle Railway Co.

Ordinance No. 26388. Side track on East First street in front of block 42, East Portland for accommodation of Portland Seed Co. Oregon & California Railway Co.

Ordinance No. 26395. Spur track from connection with block 32, East Portland, southeasterly across East Second and East Flanders, East Davis, East Everett, and East Couch streets. Oregon-Washington Railway & Navigation Co.

Ordinance No. 26461. Railway track on East Salmon street, East Ninth street and East Tenth street. Pacific Bridge Co.

Ordinance No. 26801. Railway track on Dekum avenue from East Thirteenth street to East Twenty-fourth street. Portland Railway, Light & Power Co.

Ordinance No. 27227. Spur track from point between Peninsular avenue and Calvert street to south line of block 56, Peninsular Addition No. 4. Oregon-Washington Railway & Navigation Co.

Ordinance No. 27660. Spur track on East First street between East Main street and East Salmon street for accommodation of Edlefsen Fuel Co. Oregon & California R. R. Co.

Ordinance No. 28347. Industrial spur track on East First street from a point six feet north of East Alder street to a point 216 feet south from beginning point. Oregon & California R. R. Co.

Ordinance No. 28348. Erect and maintain trolley poles through a tract of land owned by City of Portland at Palatine Hill. Portland, Eugene & Eastern Ry. Co.

Ordinance No. 28349. Industrial spur track on East First street from East Flanders street to East Burnside street. Southern Pacific Co.

Ordinance No. 28350. Industrial spur track on York street between Twenty-first and Twenty-second streets. M. F. Brady & Son.

Ordinance No. 28640. Switch cars on Stark street from Twelfth street to West Park street between 12 P. M. and 6 A. M. United Railways Co.

Ordinance No. 28655. Electric railway spur track across intersection of Third and Hoyt streets. Oregon & California R. R. Co.

Ordinance No. 28671. Operate freight trains on North Front street in the daytime. Spokane, Portland & Seattle Ry. Co.

Ordinance No. 28771. Railroad track to connect North Front street with Municipal Dock No. 1. Northern Pacific Terminal Co.

Ordinance No. 28790. Side track across Powell Valley Road near East Fiftieth street. A. M. Ellsworth, Receiver.

Ordinance No. 29361. Industrial railway track on East First street from East Pine street to East Stark street. O. & C. R. R. Co. & S. P. Co.

PORTE COCHERE, AWNINGS, ETC.

Ordinance No. 11735. Porte Cochere over Alder street entrance of Meier & Frank Co. Meier & Frank Co.

Ordinance No. 13645. Porte Cochere over sidewalk at 149 Seventh street. L. E. Hamilton.

Ordinance No. 13909. Porte Cochere at 126 Sixth street. Bijou Theatre Co.

Ordinance No. 14394. (See Stairways.)

Ordinance No. 14584. Two Porte Cochere in front of Hotel Belvidere at Fourth and Alder streets. F. Stroebel & Co.

Ordinance No. 14758. Porte Cochere on Stark street between Seventh and Park streets. Wright Dickinson Co.

Ordinance No. 17714. Porte Cochere in front of 311 Alder street and 128 Sixth street. Strobel & Barenstecher.

Ordinance No. 17865. Porte Cochere in front of 131 Sixth street. Bakeronian Amusement Co.

Ordinance No. 21413. Wire glass awnings on buildings constructed on blocks 138 and 141, Couch's Addition. Fidelity Investment Co.

Ordinance No. 26254. Marquise entrance on building on Fourth street known as Dekum Annex. Circle Amusement Co.

Ordinance No. 26672. Marquise on south side of building located on lot 1, block 91, Couch's Addition. Wadhams & Kerr Bros.

Ordinance No. 26892. Marquise at northeast corner of Third and Alder streets. Owners.

Ordinance No. 26904. Marquise in front of theatre on lot 7, block 175. Rector Realty Co.

Ordinance No. 28269. Marquise at southeast corner of Thirteenth and Hoyt streets. Ella Eisenbach.

SIDEWALKS, BRIDGES AND STAIRWAYS

Ordinance No. 12082. Elevated bridge across Front street at Seventeenth street. J. A. Martin & Co.

Ordinance No. 13181. Raised sidewalk on Thirteenth street in front of lots 5 and 8, block 137, Couch's Addition. M. Seller & Co.

Ordinance No. 13511. Open stairway on Park street in front of lot 1, Park block 3. L. Therkelsen.

Ordinance No. 13761. Open stairway on Yamhill street in front of lot 5, block 251. J. D. Brown.

Ordinance No. 14088. Elevated sidewalk in front of lots 6 and 7, Block 136, Couch's Addition. Pacific Grain Co.

Ordinance No. 14394. Stairway and Porte Cochere in front of lot 1, south one-half of block 85, Portland. Western American Co.

Ordinance No. 14593. Open stairway on Fourteenth street in front of lot 1, block 312. Robert Wilson.

Ordinance No. 15008. Raised sidewalk in front of east 100 feet of south one-half of block 184, Couch's Addition. John A. Roeblings Sons Co.

Ordinance No. 15458. Stairway on Jefferson street near Second street. Meier & Frank Co.

Ordinance No. 15670. Stairway to basement of building on east side of Fourteenth street, 100 feet north of Washington street. Edgar M. Lazarus.

Ordinance No. 15723. Raised sidewalk on East Salmon street in front of lots 1 and 8 in block 134, Hawthorne Park. Crystal Ice & Storage Co.

Ordinance No. 15996. Steps from sidewalk on east side of Williams avenue 36 feet south of south line of Clackamas street. A. F. Swenson & Co.

Ordinance No. 16884. Elevated sidewalk on Third, Fourth and Hoyt streets in front of north one-half of block "O," Portland. Jos. & Sam Simon.

Ordinance No. 16887. Raised sidewalk on East Second street in front of lots 1, 2, 3 and 4, block 58, East Portland. Mitchell, Lewis & Staver Co.

Ordinance No. 17038. Elevated sidewalk on north side of Holladay avenue between 750 feet and 800 feet west of west line of East Twenty-eighth street. Blake-McFall Co.

Ordinance No. 17395. Vent in sidewalk on east side of Fifth street 40 feet south of Morrison street. H. W. Corbett Estate.

Ordinance No. 18965. Elevated sidewalk in front of lots 1 and 4, block 27, Watson's Addition. Carman Manufacturing Co.

Ordinance No. 19061. Elevated sidewalk in front of lot 2, block 204, Couch's Addition. F. V. Holman.

Ordinance No. 19177. Elevated sidewalk on east side of Thirteenth street between Davis and Everett streets. W. P. Fuller Co.

Ordinance No. 19984. Elevated sidewalk along Fifteenth street in front of lot 8, block 140, Couch's Addition. Owners.

Ordinance No. 19985. Elevated sidewalk along Fifteenth street in front of lot 7, block 183, Couch's Addition. Owners.

Ordinance No. 20831. Elevated sidewalk on East First street in front of lots 5 and 6, block 18, East Portland. Owners.

Ordinance No. 21414. Elevated sidewalk on east side of Fifteenth street between Johnson and Lovejoy streets. Fidelity Investment Co.

Ordinance No. 22302. Open stairway on Park street leading into Medical Building. F. O. Downing.

Ordinance No. 22633. Elevated plank roadway on north side of East Alder street between East Water street and Willamette River, including standard gauge track thereon. Nikum & Kelly.

Ordinance No. 22858. Elevated sidewalk on East Second street between East Morrison and East Alder streets. John Deere Plow Co.

Ordinance No. 22962. Elevated sidewalk on East Stark street from 50 feet east of East Water street to 100 feet east of East Water street. Owner of lot 1, block 21, East Portland.

Ordinance No. 24907. Elevated sidewalk on Eighteenth street between Thurman and Upshur streets. Owner lot 5, block 21, Watson's Addition.

Ordinance No. 25222. Elevated platform in front of pier 4, Broadway bridge. Albers Bros. Milling Co.

Ordinance No. 25670. Elevated platform at northwest corner of Fifteenth and Kearney streets. A. N. Moores.

Ordinance No. 26151. Elevated platform at southwest corner of Fifteenth and Hoyt streets. Multnomah Building Co.

Ordinance No. 26232. Elevated platform in front of lot 1, block 2, Blackistone's Addition. Macleay Estate Co.

Ordinance No. 26233. Elevated platform in front of lot 1, block 3, Blackistone's Addition. Macleay Estate Co.

Ordinance No. 26394. Elevated platform in front of lots 1 and 4, block 91, Couch's Addition. Wadhams & Kerr Bros.

Ordinance No. 27661. Elevated platform on east side of Fifteenth street between Thurman and Xavier streets. Owners of lots 6 and 7, block 13, Watson's Addition.

Ordinance No. 27802. Wooden platform on south side of Irving street between Fifth and Sixth streets. Lutke Manufacturing Co.

Ordinance No. 28074. Elevated walk near northwest corner of Seventeenth and Upshur streets. Bridge & Beach Manufacturing Co.

Ordinance No. 28380. Wooden stairway on Occident street near Oregon street. Southern Pacific Co.

Ordinance No. 28636. Elevated platform in front of lots 6 and 7, block 99, Couch Addition. W. P. Crawford.

Ordinance No. 28832. Elevated platform in front of lots 1 and 2, block 44, East Portland. D. P. Thompson Co.

Ordinance No. 28940. Elevated platform on York street near Twenty-second street. W. M. Brady.

Ordinance No. 29186. Elevated platform on west side of Thirteenth street between Flanders and Glisan streets. The Goodyear Tire & Rubber Co.

Ordinance No. 29187. Trestle driveway on East Madison street west of East Water street.

Ordinance No. 29726. Elevated wooden sidewalk on east side of Second street north of Belmont street. Owner of lots 3 and 4, block 58, East Portland.

FUEL OIL AND GASOLINE STORAGE

Ordinance No. 15101. Fuel oil tank at southwest corner of Sixth and Oak streets. Wells Fargo & Co.

Ordinance No. 16518. Gasoline tank at southwest corner of Sixteenth and Alder streets. Portland Motor Car Co.

Ordinance No. 16572. Gasoline tank on East Third street between East Ash and East Ankeny streets. Herman Enke.

Ordinance No. 17001. Fuel oil tank in front of lot 2, Park Block 2, on west side of Park street between Washington and Alder streets. C. W. Cornelius.

Ordinance No. 17037. Two fuel oil tanks on east side of Fifth street between 64 feet and 84 feet south of south line of Morrison street. H. W. Corbett Estate.

Ordinance No. 17358. Two tanks for storage of lubricating oils under sidewalk on Thirteenth street in front of lots 2 and 3, block 18, Couch's Addition. W. P. Fuller & Co.

Ordinance No. 17617. Oil tank on block 7, Couch's Addition. Portland Gas Co.

Ordinance No. 17713. Fuel oil tank in Seventh street in front of lots 6 and 7, north one-half of block 85, Portland. Beck Investment Co.

Ordinance No. 18207. Fuel oil tank on south one-half of block 8, East Portland. Warren Bros. Co.

Ordinance No. 18525. Two fuel oil tanks under east sidewalk on Sixth street between Morrison and Alder streets. Meier & Frank Co.

Ordinance No. 18708. Fuel oil tank on west side of Fifteenth street 75 feet south of south line of Glisan street. Lipman Wolfe & Co.

Ordinance No. 19137. Fuel oil tank on west side of East Sixth street 100 feet south of East Taylor street. Neustadter Bros.

Ordinance No. 19178. Fuel oil tank on north side of Broadway, 75 feet west of Grand avenue. State Laundry.

Ordinance No. 19259. Fuel oil tank on east side of Fourth street 50 feet north of Stark street. Owners of Chamber of Commerce Bldg.

Ordinance No. 19602. Fuel oil tank on East Yamhill street between Grand avenue and East Sixth street. United States Laundry Co.

Ordinance No. 20144. Fuel oil tank on East Water between East Washington street and East Stark street. National Cold Storage & Ice Co.

Ordinance No. 20556. Fuel oil tank, east side of Seventh street 100 feet north of north line of Washington street. Imperial Hotel Co.

Ordinance No. 20695. Fuel oil tank on west side of Second street 30 feet north of Everett street. Opera House Laundry Co.

Ordinance No. 20699. Fuel oil tank in West Park street between Taylor and Salmon streets. Arlington Club.

Ordinance No. 20944. Two fuel oil tanks on west side of Third street 90 feet north of Washington street. Jas. Stewart & Co.

Ordinance No. 20945. Fuel oil tank on Alder street 80 feet west of Fourth street. Morgan Fliedner & Boyce.

Ordinance No. 21149. Fuel oil tank on north side of East Everett street 75 feet east of East Tenth street. Palace Laundry Co.

Ordinance No. 21926. Fuel oil tank on north side Belmont street 100 feet east of East Seventh street. New York Bakery Co.

Ordinance No. 22044. Fuel oil tank on Alder street between Fourth and Fifth streets. J. B. Yeon.

Ordinance No. 22051. Fuel oil tank on northeast corner of Twenty-first and Irving streets. S. B. Barker.

Ordinance No. 22294. Fuel oil tank under sidewalk on Yamhill street 50 feet east of east line of Third street. Donald Mackay.

Ordinance No. 22330. Fuel oil tank on Sixth street between Taylor and Yamhill streets. Y. M. C. A.

Ordinance No. 22532. Fuel oil tank on lots 6 and 7, block 2, Sherlock's Addition. Coconut Products Co.

Ordinance No. 22535. Fuel oil tank in front of lots 5 and 6, block 318, Couch's Addition. Albers Bros. Milling Co.

Ordinance No. 22614. Fuel oil tank in front of west 50 feet of lots 5 and 6, block 220, Portland. F. M. Warren.

Ordinance No. 22615. Fuel oil tank on west side of Sixth street 100 feet south of Alder street. Ben Selling.

Ordinance No. 22859. Fuel oil tank on Seventeenth street 112 feet south of south line of Raleigh street. Stein Bros.

Ordinance No. 22863. Fuel oil tank on south side of Jefferson street at southeast corner of Thirteenth street. Carmelita Apartments.

Ordinance No. 22864. Fuel oil tank in front of 43 Trinity Place. Trinity Place Investment Co.

Ordinance No. 22977. Fuel oil tank on East Water street 5 feet north of East Washington street. Charles Smith.

Ordinance No. 22978. Fuel oil tank on block 11, East Portland. O'Reilly and Burpee.

Ordinance No. 23040. Fuel oil tank at northwest corner of Sixth and Alder streets. "The Oregonian."

Ordinance No. 23041. Fuel oil tank at southwest corner of Burnside and Fourteenth streets. I. Lowengart.

Ordinance No. 23140. Fuel oil tank at southwest corner of Sixth and Washington streets. T. B. Wilcox.

Ordinance No. 23141. Fuel oil tank on west side of East Ninth street 80 feet north of East Yamhill street. Oregon Packing Co.

Ordinance No. 23231. Fuel oil tank on west side of Seventh street 100 feet north of Mill street. School District No. 1.

Ordinance No. 23232. Fuel oil tank on East Clay street in front of lot 4, block 80, Stephen's Addition. National Laundry Co.

Ordinance No. 23545. Fuel oil tank in front of 789 Northrup street. H. C. Stevens.

Ordinance No. 23546. Fuel oil tank on southwest corner of East Davis and East Sixth streets. F. F. Haradon & Son.

Ordinance No. 23548. Fuel oil tank on north side of Hawthorne avenue, 80 feet west of Grand avenue. E. A. Baldwin.

Ordinance No. 23631. Fuel oil tank on west side of Fifth street, 80 feet north of north line of Oak street. Portland Commercial Club.

Ordinance No. 23632. Fuel oil tank on east side of North Tenth

street, 40 feet north of the north line of Burnside street. Z. Swett et al.

Ordinance No. 23788. Fuel oil tank at southwest corner of Twelfth and Taylor streets. Fred Fritz.

Ordinance No. 23789. Fuel oil tank on lot 4, block 134, City of Portland. Edward Holman.

Ordinance No. 23790. Fuel oil tank on west side of Sixth street 40 feet north of Washington street. H. E. Wood and E. R. Pittelkau.

Ordinance No. 23792. Fuel oil tank on East Ninth street, 80 feet north of Schuyler street. P. J. McDonalds.

Ordinance No. 23793. Fuel oil tank in front of 432 Hawthorne avenue. Damascus Creamery.

Ordinance No. 23794. Fuel oil tank at foot of Tenth street. Bal-four-Guthrie Co.

Ordinance No. 23803. Fuel oil tank at northeast corner of Marion avenue and East Ninth street. Mt. Hood Brewing Co.

Ordinance No. 23805. Fuel oil tank at northwest corner of East Stark and East Thirteenth streets. Enterprise Bakery.

Ordinance No. 23806. Fuel oil tank at northeast corner of Park and Morrison streets. Joseph Healey.

Ordinance No. 23932. Fuel oil tank southwest corner Third and Washington streets. Sweeny Investment Co.

Ordinance No. 23933. Fuel oil tank east side of North Twenty-second street 85 feet north of north line of Glisan street. M. Ballay.

Ordinance No. 24026. Fuel oil tank at southwest corner of Third and Oak streets. Wm. Sherlock Co.

Ordinance No. 24027. Fuel oil tank at southeast corner of Oak and Third streets. Portland Trust Co.

Ordinance No. 24094. Fuel oil tank at southeast corner of Hooker street and Southern Pacific right of way. Multnomah County.

Ordinance No. 24095. Fuel oil tank on south side Washington street, 80 feet west of Fifth street. Corbett Estate et al.

Ordinance No. 24097. Fuel oil tank on west side of Twenty-first street, 50 feet south of Washington street. Covey Motor Car Co.

Ordinance No. 24109. Fuel oil tank on north side of Davis street, 90 feet east of Third street. R. R. Thompson Estate Co.

Ordinance No. 24110. Fuel oil tank at southeast corner of East Eleventh and East Flauders streets. Franz Bros.

Ordinance No. 24111. Fuel oil tank south side of Ash street, 30 feet west of Third street. R. R. Thompson Estate Co.

Ordinance No. 24330. Fuel oil tank at southeast corner of St. Clair and Washington streets. Mrs. E. J. Frohman.

Ordinance No. 24341. Fuel oil tank on west side of Twelfth street in front of lot 1, block 107, Couch's Addition. H. J. Ottenhamer.

Ordinance No. 24398. Fuel oil tank on east side of Ninth street at intersection of Irving street vacated. Northern Pacific Terminal Co.

Ordinance No. 24399. Fuel oil tank on north side of East Oak street, 75 feet east of East Sixth street. International Laundry Co.

Ordinance No. 24400. Fuel oil tank on east side of West Park street, 80 feet north of Alder street. L. G. Clarke and W. F. Woodward.

Ordinance No. 24401. Fuel oil tank on east side of Twelfth street, 75 feet north of Washington street. Cramer & Fries.

Ordinance No. 24496. Fuel oil tank on north side of East Flanders street between Union avenue and East Third street. E. Henry Wemme.

Ordinance No. 24497. Fuel oil tank on north side of Washington street, 60 feet west of west line of Fifth street. Estate of Stephen Meade.

Ordinance No. 24498. Fuel oil tank on north side of Washington street, 85 feet east of east line of Twentieth street. Mrs. P. M. Dekum.

Ordinance No. 24635. Fuel oil tank on east side of Third street, 50 feet south of south line of Washington street. W. C. Alvord, Agt.

Ordinance No. 24636. Fuel oil tank on south side of East Davis street, 90 feet west of west line of Union avenue. W. O. Jackson.

Ordinance No. 24637. Fuel oil tank at southeast corner of Seventh and Yamhill streets. Journal Publishing Co.

Ordinance No. 24787. Fuel oil tank on north side of Taylor street, 150 feet west of Seventh street. Heilig Theatre Co.

Ordinance No. 24826. Fuel oil tank at northeast corner of East Twenty-first and East Glisan streets. Crystal Laundry Co.

Ordinance No. 24996. Fuel oil tank at northwest corner of Twentieth and Kearney streets. R. F. Wassell.

Ordinance No. 24997. Fuel oil tank at northwest corner of East Fifteenth and Belmont streets. Bailey, Taylor & Lambert.

Ordinance No. 25068. Fuel oil tank at southeast corner of First and Multnomah streets. M. Olsen.

Ordinance No. 25213. Fuel oil tank at southwest corner of East Twenty-first and Irving streets. House of Good Shepherd.

Ordinance No. 25396. Fuel oil tank on block 19, Riverside Homestead. Portland Railway, Light & Power Co.

Ordinance No. 25397. Fuel oil tank at southwest corner of Tenth and Stark streets. Crown Trust Co.

Ordinance No. 25398. Fuel oil tank at southwest corner of Seventh and Oak streets. S. Benson.

Ordinance No. 25426. Fuel oil tank in front of 26 North Fifteenth street. Laher Auto Spring Co.

Ordinance No. 25473. Fuel oil tank at southeast corner of Twentieth and Hoyt streets. Wright Investment Co.

Ordinance No. 25474. Fuel oil tank at southeast corner of Fifth and Alder streets. Failing Estate.

Ordinance No. 25475. Fuel oil tank in front of 178 Hooker street. School Board.

Ordinance No. 25499. Fuel oil tank on north side of Yamhill street, 80 feet west of the west line of Lownsdale street. Rufus Mallory.

Ordinance No. 25589. Fuel oil tank at 206 Porter street. Miss A. R. Rundle.

Ordinance No. 25590. Fuel oil tank at northeast corner of East Couch street and Union avenue. Chambers & Widmer.

Ordinance No. 25738. Fuel oil tank on west side of Front street, 60 feet south of southerly line of Nicolai street. Portland Railway, Light & Power Co.

Ordinance No. 25739. Two fuel oil tanks on west side of Tenth street between Pettygrove and Quimby streets. Spokane-Portland & Seattle Co.

Ordinance No. 27650. Fuel oil tank at northeast corner of Third and Alder streets. Fred Fritz.

Ordinance No. 27651. Fuel oil tank at southwest corner of Eighth and Flanders streets. W. R. Griffith.

Ordinance No. 27688. Gasoline filling station at 708 Division street. Augusta Jahnke.

Ordinance No. 27774. Fuel oil tank at East Eighth and Burnside streets. Page Investment Company.

Ordinance No. 27775. Gasoline filling station corner East Forty-fifth and Sandy Boulevard. Hartman & Thompson.

Ordinance No. 27776. Fuel oil tank at Park and Oak streets. Pacific Telephone & Telegraph Co.

Ordinance No. 27777. Gasoline filling station at 368 Union avenue. Fred K. Viereck.

Ordinance No. 27835. Fuel oil tank at Fourth and Alder streets. Henry Weinhard Estate.

Ordinance No. 27836. Fuel oil tank at East Sixteenth and Weidler streets. Chas. Frazier.

Ordinance No. 27837. Fuel oil tank at West Park and Washington streets. T. B. Wilcox.

Ordinance No. 27838. Gasoline filling station at Broadway and Couch streets. C. Henri Labbe.

Ordinance No. 27880. Gasoline filling station at 207 East Sixth street North. Geo. W. Bracey.

Ordinance No. 27921. Fuel oil tank at Tenth and Hall streets. W. L. Woods.

Ordinance No. 27963. Fuel oil tank at 3 First street. Biddle, Thompson & Kelly.

Ordinance No. 27992. Fuel oil tank at Grand avenue and East Burnside streets. C. W. Williamson.

Ordinance No. 28029. Gasoline filling station at 840 Mississippi avenue. A. L. Sauvie.

Ordinance No. 28052. Eight fuel oil tanks at Tenth between Stark and Washington streets. N. W. Electric Company.

Ordinance No. 28070. Fuel oil tank at Sixth and Irving streets. J. M. James Estate.

Ordinance No. 28113. Fuel oil tank at Williams avenue and Stanton street. A. Christie.

Ordinance No. 28114. Gasoline filling station at East Twenty-fourth street and Broadway. J. C. Baird.

Ordinance No. 28264. Gasoline filling station at 127 Broadway. Ralph Hoyt.

Ordinance No. 28265. Gasoline filling station at 181 Sixth street. Corbett Estate.

Ordinance No. 28266. Gasoline filling station at 314 East Morrison street. J. S. Beall.

Ordinance No. 28267. Gasoline filling station at 995 Hawthorne avenue. J. D. Harms.

Ordinance No. 28298. Gasoline filling station at northeast corner of East Thirty-eighth street and Sandy Boulevard. A. Spier.

Ordinance No. 28299. Gasoline filling station at 15 North Ninth street. E. Meyers.

Ordinance No. 28345. Gasoline filling station at southwest corner of East Water and East Madison streets. O'Riley and Burpee.

Ordinance No. 28346. Fuel oil tank at southwest corner of East Eleventh and Division streets. Ford Motor Co.

Ordinance No. 28392. Gasoline filling station at 1610 East Thirtieth street. D. M. Donagh.

Ordinance No. 28393. Fuel oil tank at northwest corner of Tenth and Hall streets. W. L. Woods.

Ordinance No. 28497. Gasoline filling station at 12 Second Street. Biddle-Thompson & Kelly.

Ordinance No. 28498. Gasoline filling station at southeast corner of Sixteenth and Alder streets. Leslie Scott.

Ordinance No. 28499. Gasoline filling station at 128½ Broadway. McGinn Estate.

Ordinance No. 28550. Gasoline tank at 430 Hawthorne avenue. Peter & Andrew Vetsch.

Ordinance No. 28589. Gasoline filling station at southeast corner of East Second and Broadway. R. J. O'Neil.

Ordinance No. 28590. Fuel oil tank at southeast corner East Twenty-third and East Irving streets. E. M. Rasmussen & Son.

Ordinance No. 28591. Gasoline filling station at 478 East Eleventh street. Milton Hager.

Ordinance No. 28605. Gasoline filling station at 886 Union avenue North. C. A. Colfelt.

Ordinance No. 28606. Gasoline filling station at 191 Fourth street. L. B. Menefee.

Ordinance No. 28650. Gasoline filling station at 726 Division street. Martin Fromme.

Ordinance No. 28700. Gasoline filling station at 526 Alder street. H. E. Coleman.

Ordinance No. 28701. Gasoline filling station at 704 Kearney street. Wm. Reidt.

Ordinance No. 28747. Gasoline filling station at 335 Ankeny street. C. A. Malarkey.

Ordinance No. 28830. Gasoline filling station at southeast corner of Tenno avenue and East Seventeenth street. W. W. Wing and W. F. Neild.

Ordinance No. 28831. Fuel oil tank at southwest corner of Second and Everett streets. A. J. Peaper.

Ordinance No. 28860. Gasoline filling station at 431 East Eleventh street. H. P. Whitman.

Ordinance No. 28861. Gasoline filling station at 188 Chapman street. John McKinney.

Ordinance No. 28862. Fuel oil tank in front of lot 1, block 154, East Portland. Herman Enke.

Ordinance No. 28863. Gasoline filling station at 357 Burnside street. M. Rothfos.

Ordinance No. 28884. Gasoline filling station at 495 Alder street. Jos. Bergman.

Ordinance No. 28885. Gasoline filling station at 244 Second street. College Endowment Association.

Ordinance No. 28934. Gasoline filling station at 1614 East Seventeenth street. Alex. and Minnie Campbell.

Ordinance No. 28935. Gasoline filling station at 93 North Park street. D. S. Williams and Jas. Beggs.

Ordinance No. 28936. Gasoline filling station at 67 Sixth street. Corbett Estate.

Ordinance No. 28937. Gasoline filling station at 755 Belmont street. Bella P. Dailey.

Ordinance No. 28938. Gasoline filling station at southeast corner of Fourteenth and Burnside streets. Paul Van Fridagh.

Ordinance No. 28939. Gasoline filling station at 335 Burnside street. John and Jos. Matschiner.

Ordinance No. 28968. Gasoline filling station at 10 Broadway. C. A. Malarkey.

Ordinance No. 28969. Gasoline filling station at 1043 Williams avenue. Lumsden Estate.

Ordinance No. 28976. Fuel oil tank at northwest corner East Water and East Madison streets. S. P. & S. Ry. Co.

Ordinance No. 29009. Gasoline filling station at 103 East Water street. Ladd Estate Co.

Ordinance No. 29073. Gasoline filling station at southeast corner Knott street and Williams avenue. T. W. B. London.

Ordinance No. 29074. Gasoline filling station at 993 Belmont street. W. M. Bradford.

Ordinance No. 29075. Gasoline filling station at northwest corner of East Stark and East Twenty-ninth streets. W. B. Smith.

Ordinance No. 29110. Gasoline filling station at 335 North Seventeenth street. Ned Munger.

Ordinance No. 29101. Fuel oil tank at 145 Monroe Street. Mrs. W. A. Thompson.

Ordinance No. 29127. Gasoline filling station at 42 Third street. R. R. Thompson Estate.

Ordinance No. 29128. Gasoline filling station at 209 Front street. Fletcher Linn.

Ordinance No. 29129. Fuel oil tank at northeast corner of East Thirty-seventh and East Market streets. Mrs. Burnette.

Ordinance No. 29156. Fuel oil tank at northeast corner of East Fifty-fourth street and Sandy Boulevard. Sisters of the Holy Child.

Ordinance No. 29157. Fuel oil tank at 1092½ Hawthorne avenue. Rudolph Christman.

Ordinance No. 29212. Gasoline filling station at 361 East Eleventh street. I. F. Beales.

Ordinance No. 29213. Gasoline filling station at southeast corner of East Tenth street and East Burnside street. D. C. Powell.

Ordinance No. 29214. Gasoline filling station at 340 Oregon street. Thos. Farrel.

Ordinance No. 29215. Gasoline filling station at 429 Belmont street. Jessie B. Dawley.

Ordinance No. 29216. Gasoline filling station at southeast corner of Willamette Boulevard and Gay street. Peter Schnell.

Ordinance No. 29217. Fuel oil tank at northeast corner of Ninth and Lovejoy streets. Royal Arms Co.

Ordinance No. 29236. Fuel oil tank at southeast corner of First and Main streets. Jos. Clossett.

Ordinance No. 29237. Gasoline filling station at 1733 Derby street. Huesner and Heisler.

Ordinance No. 29241. Fuel oil tank at southeast corner of Ninth and Marshall streets. Jos. Simon.

Ordinance No. 29242. Fuel oil tank at southeast corner of Ninth and Flanders streets. City Laundry Co.

Ordinance No. 29243. Gasoline filling station at 1254 Belmont street. Mike Arndt.

Ordinance No. 29244. Gasoline filling station at 506 Williams avenue. J. Johnston.

Ordinance No. 29248. Gasoline filling station at 209 Fourth street. H. J. Morrison.

Ordinance No. 29249. Gasoline filling station at 269 Sixteenth street. John H. Montgomery.

Ordinance No. 29266. Gasoline filling station at 266 Eleventh street. W. S. Biddle.

Ordinance No. 29301. Gasoline filling station at 434 Alder street. D. P. Thompson Estate Co.

Ordinance No. 29327. Fuel oil tank at northwest corner of East Twenty-fourth street and Sandy Boulevard. E. M. Rasmussen & Son, Inc.

Ordinance No. 29328. Gasoline filling station at 409 Williams avenue. E. V. Berwick.

Ordinance No. 29413. Fuel oil tank at 262 Park street. M. and A. Shogren.

Ordinance No. 29414. Fuel oil tank at northwest corner of Twentieth and Marshall streets. Mary E. Couch.

Ordinance No. 29415. Fuel oil tank at 429 Harrison street. H. D. Triplett.

Ordinance No. 29480. Gasoline filling station at 1372 Division street. C. W. Eiler.

Ordinance No. 29652. Gasoline filling station in front of lot 5, block 7, Etna Addition. Thos. Edwards.

Ordinance No. 29592. Fuel oil tank at 250 Twelfth street. I. L. Harper.

Ordinance No. 29593. Fuel oil tank at 273 Salmon street. A. & C. Feldenheimer.

Ordinance No. 29630. Fuel oil tank at 656 Flanders street. O. J. Sherman.

Ordinance No. 29631. Fuel oil tank at Imperial Heights. H. L. Pittock.

Ordinance No. 29658. Fuel oil tank at 91 East Fourteenth street. School District No. 1.

Ordinance No. 29659. Fuel oil tank at 561 East Alder street. School District No. 1.

Ordinance No. 29660. Fuel oil tank at 1040 East Ankeny street. H. R. Albee.

Ordinance No. 29661. Fuel oil tank at 26½ Twentieth street. North. Clara N. Hall.

Ordinance No. 29662. Fuel oil tank at 925 The Crescent. H. J. & L. D. Murphy.

Ordinance No. 29663. Fuel oil tank at 281 East Salmon street. Security Savings & Trust Co.

Ordinance No. 29664. Fuel oil tank at 291 East Salmon street. Security Savings & Trust Co.

Ordinance No. 29665. Fuel oil tank at 278 East Salmon street. Columbia Contract Co.

Ordinance No. 29666. Gasoline filling station at 754 East Morrison street. Bella P. Dailey.

Ordinance No. 29696. Gasoline filling station at 552 Union avenue North. B. Ehlinger.

Ordinance No. 29697. Gasoline filling station at 369 Hawthorne avenue. Ambrose Scott.
 Ordinance No. 29699. Gasoline filling station at southeast corner of East Twelfth and East Burnside streets. Adolph A. Dekum.

WAGON SCALE

Ordinance No. 9504. Wagon scale on Main street in front of lot 1, block 7, Portland. Thos. Schneider.
 Ordinance No. 16782. Wagon scale on East Washington street in front of lot 4, block 42, East Portland. Pearson-Page Co.
 Ordinance No. 17111. Wagon scale on east side of East Sixth street 30 feet south of Hawthorne avenue. Long and Kitching.
 Ordinance No. 19893. Wagon scale—move from 312 Hoyt street to 310 Hoyt street. Oregon Transfer Co.
 Ordinance No. 20145. Street scale in front of 128-130 Union avenue. Andrews & Son.
 Ordinance No. 21722. Wagon scale in front of 55 Nesmith street, Albina. Edlefsen Fuel Co.
 Ordinance No. 22364. Street scale in east side of Borthwick street between Page and Russell streets. George and Shannon.
 Ordinance No. 23544. Street scale on north side East Washington street between East Second street and East Third street. G. W. Simpson.
 Ordinance No. 23795. Street scale on west side of Front street under Broadway bridge. Albers Bros. Milling Co.
 Ordinance No. 24100. Street scale on west side of Union avenue 80 feet south of East Mill street. Phoenix Iron Works.
 Ordinance No. 25155. Wagon scale on south side of East Ash street in front of lot 3, block 5, Frush's Square. Owner.
 Ordinance No. 27591. Wagon scale in front of lot 5, block 192, East Portland. Star Sand Co.
 Ordinance No. 27689. Wagon scale at 374 Front street. Ingham & Cogswell.
 Ordinance No. 28654. Wagon scale at south side of East Alder street between East First street and East Second street. Pearson Page Co.
 Ordinance No. 28672. Track scale on west side of Macadam street between Lane street and Gainer street. Fisher Thorsen & Co.

STREET CLOCKS

Ordinance No. 9810. Clock, northwest corner of Third and Washington streets. Albert Feldenheimer.
 Ordinance No. 13452. Clock on Third street in front of Mohawk building. Butterfield Bros.
 Ordinance No. 19744. Clock in front of 268 Washington street. F. Friedlander.
 Ordinance No. 19979. Clock at 149 Third street. I. Holsman.
 Ordinance No. 20306. Clock at 548 Williams avenue. Hamilton Jewelry Co.
 Ordinance No. 20463. Clock at 40 Third street. Holzman Bros.
 Ordinance No. 21819. Clock at 283 Morrison street. Marx & Bloch.
 Ordinance No. 22295. Clock at 324 Washington street. A. & M. Delovage.

Ordinance No. 23139. Clock at 1144 Albina avenue. Dillen Rogers.
 Ordinance No. 23549. Remove clock from 286 Morrison street to 130 Fifth street. G. Heitkemper Co.
 Ordinance No. 23787. Clock on north side of Washington street near Sixth street. Holzman Bros.
 Ordinance No. 24006. Clock in front of 225 First street. A. E. Hurwitz.
 Ordinance No. 25011. Remove clock from 284 Washington street to 386 Washington street. L. C. Henrichsen Co.
 Ordinance No. 26575. Street clock at 162 First street. Isaac E. Staples.
 Ordinance No. 27226. Street clock on south side of Washington street, 20 feet south of Broadway. I. Aronson.
 Ordinance No. 27882. Move street clock from 403 East Morrison to 105 Grand avenue. A. E. Burke.
 Ordinance No. 27923. Public clock at 121 Third street. O. Korber.
 Ordinance No. 28030. Street clock at 254 Alder street. Lindquist and Nelson.
 Ordinance No. 28115. Move street clock from 285 Washington street to corner of Washington and Park streets. A. & C. Feldenheimer.
 Ordinance No. 28158. Street clock at 268 Washington street. Lefert Jewelry Co.
 Ordinance No. 28656. Street clock at 373 East Burnside street. Rogers Bros.

SIGNS—ILLUMINATED

Ordinance No. 15324. Illuminated sign at 109 Sixth street. Fred Fritz.
 Ordinance No. 22050. Permission to move electric signs from Third and Yamhill streets to Eleventh and Morrison streets. Geo. L. Baker.
 Ordinance No. 22617. Electric sign at First and Washington streets. Apollo Roller Skating Rink Co.
 Ordinance No. 23230. Electric sign across Burnside street between Second and Third streets. Fritz and Russell.
 Ordinance No. 24245. Electric sign across Alder street at West Park street. Peoples Amusement Co.
 Ordinance No. 24499. Two electric signs across Third street and Fourth street. Philip Gevurtz.
 Ordinance No. 25411. Electric sign across Alder street at First street. Portland Railway, Light & Power Co.
 Ordinance No. 25653. Electric sign across Washington street between Tenth and Eleventh streets. Globe Theatre Co.
 Ordinance No. 26216. Electric sign on east side of Fifth street south of Oak street. Kilham Stationery & Printing Co.
 Ordinance No. 26494. Electric sign across Seventh street. Orpheum Theatre.
 Ordinance No. 26675. Electric sign across Seventh street at Oak street. Wright-Dickinson Hotel Co.
 Ordinance No. 26728. Electric sign across Sixth street between Stark and Washington streets. Columbia Theatre Co.
 Ordinance No. 26729. Electric sign across Seventh street and Park street. Empress Theatre.
 Ordinance No. 26797. Remove electric sign from 111 Third street

to southwest corner of Sixth and Washington streets. Brasfield & Porges.

Ordinance No. 29443. Electric sign across Washington street at Fourth street. Lyric Theatre Co.

SIGNS

Ordinance No. 22046. Metallic sign in front of 30-32 North Fifth street. The Rosenfeld-Smith Co.

Ordinance No. 24007. Signs marking Pacific Highway on certain streets. Pacific Highway Association.

Ordinance No. 26251. Signs on telephone poles. Library Association of Portland.

Ordinance No. 26827. Two post signs. Portland Fruit & Flower Mission.

SIGN PERMITS

GRANTED UNDER PROVISIONS OF ORDINANCES 27662 AND 27933

Location	Date	Granted to
269 Crosby St.....	12-18-13	Wurtenberger & Heinrich
200 Morrison St.....	12-19-13	J. A. Clemenson Drug Co.
340 Morrison St.....	12-19-13	The Wiley B. Allen Co.
124 Russell St.....	12-19-13	H. H. Heide
332 Washington St.....	12-20-13	J. H. Leighton
61 N. 14th St.....	12-20-13	Howard Automobile Co.
740 Union Ave. N.....	12-20-13	Henry Maier
132 Fourth St.....	12-22-13	The Louvre
205 First St.....	12-22-13	Lankin & Wildi
56 N. Fourth St.....	12-22-13	Tom K. Tanaka
4638 67th St. S. E.....	12-22-13	A. Bonellis
268 Russell St.....	12-22-13	Earl F. Hall
346 1/2 Morrison St.....	12-22-13	W. E. Songer
729 Williams Ave.....	12-22-13	Sam and Bert West
164 Second St.....	12-22-13	L. T. Outhier
263 First St.....	12-22-13	Kamusher & Nudelman
523 Union Ave. N.....	12-23-13	Donohue & Wagnitz
93 1/2 Sixth St.....	12-23-13	Chan Hi
212 Yamhill St.....	12-23-13	Athos & Claude Ciattino
348 Morrison St.....	12-23-13	W. H. Hamilton
124 Union Ave.....	12-23-13	Accommodation Bag. & Tr. Co.
686 1/2 Lombard St.....	12-23-13	Peninsula Lodge 128, I. O. O. F.
28 1/2 N. Third St.....	12-23-13	B. C. Larson
410 Stark St.....	12-23-13	Schnbert Bros.
210 Morrison St.....	12-23-13	Gerspach & Stroup
652 1/2 Alberta St.....	12-23-13	Alherta Lodge 233, I. O. O. F.
167 Third St.....	12-23-13	F. W. Winter
107 1/2 Sixth St.....	12-23-13	Hong Kong Cafe
107 1/2 Sixth St.....	12-23-13	Hong Kong Cafe
347 1/2 Morrison St.....	12-23-13	New Republic Grill
347 1/2 Morrison St.....	12-23-13	New Republic Grill
347 1/2 Morrison St.....	12-23-13	New Republic Grill
167 Broadway.....	12-23-13	Chambers & Son
567 Washington St.....	12-24-13	Bert E. Allen
314 Second St.....	12-24-13	Al Seguin
107 1/2 Fourth St.....	12-24-13	Ola J. Sharp
109 Broadway.....	12-24-13	Wyckoff & Botler
82 1/2 Sixth St.....	12-24-13	E. C. Ball
275 Third St.....	12-24-13	Martin Denny
227 First Street.....	12-26-13	Joe Sigris
106 Grand Ave.....	12-26-13	Strowbridge Hdwe. & Pt. Co.
128 6th and 311 Alder St.....	12-26-13	Hof Brau-Quelle
441 Washington St.....	12-26-13	Julius P. Levy
1693 E. 13th St.....	12-26-13	L. Charack
49 N. Third St.....	12-26-13	Splidsboel & Nelson
311 Alder St.....	12-26-13	Hof Brau-Quelle
108 Nelson St.....	12-26-13	A. Brugger
233 Burnside St.....	12-26-13	A. Clark
639 Washington St.....	12-27-13	Geo. Moulton
126 Broadway.....	12-27-13	Western Union Tel. Co.
266 1/2 Front St.....	12-29-13	T. Sumida
326 Alder St.....	12-29-13	Gemose & Ellis
247 Alder St.....	12-29-13	Holden & Schlickeiser
68 1/2 N. Sixth St.....	12-30-13	H. B. Roberts (Jack. 10c Store)
287 Alder St.....	12-30-13	Alder Hotel Co.
187 Fourth St.....	12-30-13	Ham Bros.
292 Burnside St.....	12-30-13	Wm. Schmidt
29 W. Fourth St.....	12-30-13	M. Kawata
6 1/2 N. Third St.....	12-30-13	Anton Canduyler
246 1/2 Yamhill St.....	1-6-14	Hotel D'Moy
253 1/2 Washington St.....	1-12-14	American Sign Co.
400 Hawthorne Ave.....	1-29-14	American Sign Co.
385 E. Morrison St.....	1-29-14	American Sign Co.
72 and 74 Fifth St.....	1-29-14	American Sign Co.

SIGN PERMITS—Continued

Location	Date	Granted to
350 Morrison St.....	2- 5-14	W. D. Fraley
174 Fourth St.....	2-10-14	C. E. Ohrist
210 First St.....	2-13-14	Globe Liquor Co.
127 Broadway.....	2-18-14	Postal Telegraph Co.
49 Third St.....	2-20-14	American Lens Sign Co.
293 Morrison St.....	2-21-14	American Sign Co.
128½ Broadway.....	2-24-14	American Sign Co.
283 Washington St.....	3-26-14	Portland Sign Co.
810 East Broadway.....	3-26-14	American Lens Sign Co.
Forty-second and Sandy Road...	3-26-14	Portland Sign Co.
127 Eleventh St.....	3-26-14	Portland Sign Co.
Eleventh and Alder Sts.....	3-26-14	Portland Sign Co.
350 Alder St.....	4- 1-14	Hyatt Talking Machine Co.
348 Alder St.....	4- 8-14	Lang & Kruse
191 Morrison St.....	4-14-14	American Lens Sign Co.
265 Morrison St.....	4-15-14	Boardman & Burgoal
107 Third St.....	4-20-14	Ry. Exchange Bldg.
48 N. Second St.....	4-21-14	Portland Sign Co.
Fourth and Morrison Sts.....		R. M. Gray
75 N. Third St.....	4-29-14	Portland Sign Co.
147 Third St.....	4-29-14	Portland Sign Co.
143 Broadway.....	5- 4-14	American Sign Co.
148 Park St.....	5- 4-14	Portland Sign Co.
146 Sixth St.....	5- 4-14	Columbia Optical Co.
161 Third St.....	5- 9-14	Brownsville Woolen Mills
231½ Morrison St.....	5-11-14	Meek Sign Co.
69 N. Third St.....	5-12-14	Wm. Schmidt
86 Tenth St.....	5-13-14	Portland Sign Co.
Tenth and Burnside Sts.....	5-14-14	Indian Grille
66½ Sixth St.....	5-14-14	C. H. Green
Broadway and Everett Sts.....	5-16-14	Portland Sign Co.
1320 Sandy Blvd.....	5-16-14	American Lens Sign Co.
Sixth and Washington Sts.....	5-16-14	American Lens Sign Co.
113 N. Sixth St.....	5-18-14	Peter Lamkes

SIGN PERMITS—Continued

GRANTED UNDER PROVISIONS OF ORDINANCE 28959.

Location	Date	Granted to
428 Washington St.....	5-25-14	Gately's Credit Cloth. Co.
108 Third St.....	6- 3-14	Nichol the Tailor
309 Burnside St.....	6- 3-14	Gus Petropolis
270 Burnside St.....	6- 3-14	Mike Dowgiallo
16 North Fourth St.....	6- 3-14	Mike Dowgiallo
124½ Fourth St.....	6- 9-14	Montgomery & Lumadue
West Park and Alder Sts.....	6-15-14	Woodward, Clarke & Co.
537 Union Ave.....	6-23-14	N. W. Hart
148 Broadway.....	7- 2-14	Weber Sign Co.
Foster Rd., bet. E. Main and Marion	7- 6-14	H. H. Spring
109 Eleventh St.....	7-31-14	Butterworth-St. Helen Co.
226 Pine St.....	8- 4-14	Weber Sign Co.
537 Union Ave.....	8-14-14	American Lens Sign Co.
144 Fourth St.....	8-14-14	American Lens Sign Co.
74 Third St.....	8-14-14	American Lens Sign Co.
92 N. Third St.....	8-14-14	American Lens Sign Co.
Fourth and Burnside Sts.....	8-24-14	American Lens Sign Co.
Second and Couch Sts.....	9-15-14	American Lens Sign Co.
Couch, bet. Second and Third...	9-15-14	American Lens Sign Co.
322½ Williams Ave.....	9-15-14	Theodore Rieger
241 Couch St.....	9-16-14	Stasewich & Galash
Fourth, bet. Washington & Alder	9-17-14	M. H. McMahon

SIGN PERMITS—Continued

Location	Date	Granted to
280 Morrison St.....	10-13-14	Portland Sign Co.
Sixth and Burnside Sts.....	10-13-14	Elephant Pharmacy
Broadway, bet. Stark and Wash.	10-14-14	Orpheum Theatre
126 Broadway.....	10-15-14	Meek Sign Co.
117 Main St.....	10-15-14	Theckla Bright
Stark and West Park Sts.....	10-17-14	American Lens Sign Co.
291½ Tenth St.....	10-26-14	Puritan Delicatessen
552 Union Ave.....	10-27-14	J. H. Fenton
Twelfth and Washington Sts....	10-27-14	Nortonia Hotel Co.
West Park and Washington Sts.	10-27-14	Washnell's Studio
151 Fourth St.....	11- 4-14	Portland Sign Co.
530 Mississippi Ave.....	11-12-14	Wray & Wray
246 Burnside St.....	11-14-14	American Lens Sign Co.
Sixth, bet. Alder and Morrison..	11-19-14	Portland Sign Co.
Second bet. Burnside and Couch	11-19-14	Portland Sign Co.
80 Third St.....	11-19-14	Portland Sign Co.
Park bet. Stark and Washington	11-27-14	Portland Sign Co.
West Park bet. Stark and Wash.	11-27-14	Portland Sign Co.
60th Ave. bet. 82nd & 10th Aves.	11-28-14	W. S. Bennett
349 Washington St.....	11-28-14	American Lens Sign Co.
126 Fourth St.....	11-28-14	American Lens Sign Co.

MISCELLANEOUS

- Ordinance No. 14514. Wooden cornice on building constructed on lots 5, 6, 7 and 8, block 3, Frush's Square. Owner of building.
- Ordinance No. 14960. Coal shed on lot 8, block "S," Couch's Addition. W. A. Storey.
- Ordinance No. 15006. Brick sidewalk in front of lots 5 and 6, block 43, Stephens' Addition. A. Van Hoomisen.
- Ordinance No. 15673. Steam pipe underneath street at intersection of Third and Montgomery streets. Edw. and Julia Holman.
- Ordinance No. 16873. Subway across Twelfth street between blocks 81 and 82, Couch's Addition. Henry Weinhard Estate.
- Ordinance No. 17667. Exterior decoration extended 8 inches on sidewalk at northeast corner of Fifth and Washington streets. Perkins Hotel Co.
- Ordinance No. 17671. Wooden passageway to connect wooden buildings on lots 1, 2, 3 and 4, block 61, East Portland (in fire limits). Nottingham & Co.
- Ordinance No. 17910. Cement steps and cement walk on Marshall street from west line of Twenty-sixth street to easterly line of Cornell street. L. Goldsmith and E. L. Lowell.
- Ordinance No. 19148. Underground conduit for electric light, steam heat and power from Lewis building, Fourth and Oak streets, to Couch building, 90 feet north of Washington street on Fourth street. Lewis Investment Co.
- Ordinance No. 19268. Underground steam pipe from southeast corner of Fourth and Oak streets to southwest corner of Fourth and Oak streets. C. K. Henry.
- Ordinance No. 19347. Bay window on wooden building at 363 Yamhill street. Mrs. P. W. Gillett.
- Ordinance No. 19620. Two additional stories on Chamber of Commerce building. Owners.
- Ordinance No. 20858. Permission to change stable at northwest corner of Eleventh and Morrison streets to theater. Baker Theatre Stock Co.
- Ordinance No. 20991. Permission to construct wooden building on lot 2, block 8, East Portland. Atlas Mixed Mortar Co.
- Ordinance No. 21613. Underground refrigerator pipe line from point 40 feet south of northeast corner block 89, Couch's Addition, to point 40 feet north of southeast corner of block 89. Swift & Co.
- Ordinance No. 21621. Tunnel under Stark street between Third and Fourth streets for water and steam pipes. Railway Exchange Building Co.
- Ordinance No. 22045. Stairway on Hall street at intersection of Heights Terrace. Jos. Jacobberger.
- Ordinance No. 22254. Install heater under sidewalk on Park street 95 feet north of Washington street to be used as heating plant for Star Theatre. Owner of lot 2 Park, block 1.
- Ordinance No. 22436. Retaining wall and steps along First street and Lowell avenue in front of lots 1 and 2, block "B," First Street Terraces. J. B. Laber.
- Ordinance No. 22543. Underground pipes and conduits for steam and hot water from lot 5, block 176, to lot 8, block 177, Portland. Imperial Hotel Co.
- Ordinance No. 22856. Allowing Oregon Electric Railway Co. to

use wooden poles instead of iron poles until February 13, 1912. Oregon Electric Co.

Ordinance No. 22860. Allowing Spokane, Portland & Seattle Railway Co. to erect certain buildings in its terminal yards without conforming to City Ordinances. Not good after February 13, 1912. Spokane, Portland & Seattle Railway Co.

Ordinance No. 24012. Temporary wooden auditorium building on Kamm tract. G. F. Johnson.

Ordinance No. 24093. Underground pipes across Seventh street between Washington and Stark streets. Brooke Estate.

Ordinance No. 24183. Wooden fence 8 feet high on north side of Pettygrove street and west side of Thirteenth street. Vulcan Coal Co.

Ordinance No. 24339. Exempting block 4, Railroad Shops Addition, from provisions of Ordinance No. 23716 relating to stables.

Ordinance No. 24422. Underground steam pipe across Oak street from Wells-Fargo building to Benson building. Owners Benson building.

Ordinance No. 24650. Permitting owners of lot 3, Park block 2, to connect with sewer in Washington street. L. G. Clarke and W. F. Woodward.

Ordinance No. 24887. Public watering trough in front of lot 8, block 5, Watson's Addition. Owner.

Ordinance No. 24904. Steam pipes across Yamhill street near Seventh street. Journal Building Co.

Ordinance No. 26304. Uncovered driveway under Broadway bridge. Albers Bros. Milling Co.

Ordinance No. 26557. Steps 28 inches over property line. Vernon Presbyterian Church.

Ordinance No. 26629. Garage in Elm street west of Montgomery Street Drive. Mrs. John Brooke.

Ordinance No. 26630. Sidewalk elevator on east side of Twelfth street 55 feet north of Washington street. H. W. Fries.

Ordinance No. 27093. Crane on west side of Thirteenth street between Northrup and Overton streets. Portland Iron Works.

Ordinance No. 27210. Stretch wires across Broadway between Yamhill and Taylor streets for wireless telegraphy purposes. Y. M. C. A.

Ordinance No. 27243. Steps 6 inches over property line at 845 Milwaukie street. Owner.

Ordinance No. 27299. Barber pole at 1267 Macadam street. A. Margulis.

Ordinance No. 27434. Underground conduit in Marshall street between Twenty-second street and Twenty-third street. Board of Hospital Trustees.

Ordinance No. 27617. Gas main on Grand avenue bridge. Portland Gas & Coke Co.

Ordinance No. 27655. Steam conduit across Park street between Washington and Alder streets. Northwestern Electric Co.

Ordinance No. 27734. Attach span wires for support of trolley wires to Fire Department building on Fourth street between Morrison and Yamhill streets. Portland, Eugene & Eastern Railway Co.

Ordinance No. 27998. Four lamp posts on Salmon street between Park and West Park streets for Arlington Club. Portland Railway, Light & Power Co.

Ordinance No. 28501. String electric wires across Holgate street near East Eighteenth street. Oregon & California Railroad Co.

Ordinance No. 28502. Flume across certain timber land owned by City of Portland in Sections 30 and 31, T. 1 S., R. 5 E. W. M. Walker Creek Lumber Co.

Ordinance No. 28635. Underground steam pipe from Perkins Hotel to Swetland building. Perkins Hotel Co.

Ordinance No. 28642. Blasting, Westover Terraces. Lewis-Wiley Hydraulic Co.

Ordinance No. 28702. Enclose with board fence certain blocks and intervening streets in University Park. Marion Erceg.

Ordinance No. 28813. Temporary freight depot on block 86, East Portland. Spokane, Portland & Seattle Railway Co.

Ordinance No. 28840. Suspended pneumatic tubes across Fifth street between Alder and Morrison streets. Meier & Frank Co.

Ordinance No. 28898. Ornamental arches and lights on Third street between Yamhill and Glisan streets. Owners and Tenants.

Ordinance No. 29076. Exempting First M. E. Church at Twelfth and Taylor streets from provisions of Ordinance No. 21455 till July 1, 1916, under certain conditions.

Ordinance No. 29363. Overhead sawdust conveyor across foot of Spokane avenue. East Side Mill & Lumber Co.

Ordinance No. 29438. Exempting buildings at 311 and 311½ Burnside street from provisions of Ordinance No. 21455 until January 1, 1915. Andrew C. Smith.

Ordinance No. 29597. Bracket lights on Fourth street from Jefferson street to Burnside street for 5 years. Owners and Tenants.

Ordinance No. 29757. Seven ornamental iron lamp posts in Georgian Court. F. W. Hild.

Ordinance No. 29758. Underground conduit across Oak street between Broadway and Park street for steam pipes and electric wires. Benson Hotel Co.

Ordinance No. 29850. Drill well on south side of Marshall street 130 feet west of Twentieth street. Portland Electric Ice Co.

Ordinance No. 25570. Ellis bumping post on Fourth street 20 feet north of Glisan street. Union Meat Co.

STREET IMPROVEMENT FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914

Page No.	Streets	Warrants.	Balance.
5.	East Thirty-eighth Street et al.	\$ 1,053.00	\$.....
	Minnesota Avenue, Fremont to Skidmore Streets..	3.51	3.51
27.	Waverleigh Boulevard, East Twenty-eighth to East Thirty-seventh Streets.....	2,779.37	.....
	East Yamhill Street et al.	2.10	2.10
	First Street et al.	1,486.89	1,269.77
64.	Killingsworth Avenue, Patton Avenue to Willamette Boulevard.....	828.53	360.68
	East Twenty-second Street et al.	483.42	.....
	East Seventy-third Street, East Glisan Street to Barr Road.....	78.55	.....
103.	East Thirty-first Street, Brooklyn to Clinton Streets	.....	.50
	Twenty-first Street, Northrup Street to Sherlock Avenue	13.71	.....
114.	Jarrett Street, Patton to Wabash Avenues.....	.36	5.03
116.	Albina Avenue, Stanton to Fargo Streets.....	652.69	.....
121.	Nineteenth Street, Overton to Wilson Streets.....	2,545.52	.77
122.	Iowa Street, Front to Macadam Streets.....	6.02	.....
127.	Brooklyn Street, Southern Pacific Railway Company's track to East Twenty-sixth Street.....	229.20	.....
135.	District Improvement Scott Avenue and East Stark Street	353.61	.....
138.	East Sixth Street, East Oak to East Washington Streets	4.20	.....
156.	East Twelfth Street, Failing to Fremont Streets..	55.18	.....
169.	Hawthorne Avenue, East Third to East Forty-first Streets .....	.....	.01
191.	Tillamook Street, East Fourteenth to East Twenty-fourth Streets	1,487.23	.07
195.	East Thirty-fifth Street, Hawthorne Avenue to East Harrison Street.....	2.89	.....
207.	Kelly Street, Custer Street to Fulton Park.....	169.68	16.36
228.	Cornell Street, Lovejoy Street to Fordham Heights	4.50	4.50
249.	Monteith Street, Lombard Street to Willamette Boulevard	222.88	21.77
252.	Bertha Avenue et al.	1,200.00	.....
276.	Hall Street, Fourteenth Street et al.	20,304.07	75.04
282.	East Glisan Street et al.	936.24	.05
295.	East Twenty-eighth Street, Wasco to Halsey Streets	3,038.81	.....
296.	Halsey Street, Holladay Addition to East Twenty-second Street.....	67.32	67.32
301.	East Seventy-fifth Street, Base Line Road to Barr Road	100.93	.....
302.	Division Street, East Tenth to East Forty-first Streets	1,031.53	.....
304.	Brooklyn Street et al.	.....	.09
	Fourth Street, Burnside to Glisan Streets.....	.....	51.58
317.	Second Street, Sheridan to Arthur Streets.....	679.67	330.20
330.	Belmont Street et al.	.....	.....
	Corbett Street, south line of Lot 6, Block 11, to north line of Lot 3, Block 10, Terwilliger Homestead	3,279.58	.....
337.	Westanna Street, Willamette Boulevard to Houghton Street.....	14.94	14.37
346.	East Twenty-ninth Street, Killingsworth to Alinsworth Avenues.....	41.10	41.10
349.	East Twenty-first Street, Division to Powell Streets	2,678.48	6.37
360.	Monteith Street et al.	.....	.40
377.	Jarrett Street, East Twenty-second to East Thirty-third Streets.....	190.51	.....
384.	East Sixteenth Street, Powell to Holgate Streets..	348.60	.....
	Knott Street, East Twenty-fourth to East Thirty-third Streets.....	9.29	.....
394.	Concord Street, Jarrett Street to Alinsworth Avenue	4.51	.....
	Union Avenue, Belmont to East Oak Streets.....	.....	7.85

STREET IMPROVEMENT FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914—Continued

Page No.	Streets	Warrants.	Balance.
402.	Portions of Mason Street, Rodney Avenue et al...	\$ 27.00	\$.02
409.	Alberta Street, Vernon Avenue to East Thirtieth Street	40.39	.....
419.	East Thirty-fourth Street et al.....	249.85	.....
	Sumner Street, Union Avenue to Serene Park.....	.....	.10
	Corbett Street, Arthur Street to Terwilliger Home- stead	.....	.10
425.	Sixty-seventh Street Southeast, Powell Valley Road to Foster Road.....	2.41	.79
437.	Sumner Street, Vernon Avenue to East Thirtieth Street	11.95	11.95
446.	Portions of W. Congress Street et al.....	.68	.....
449.	East Twenty-sixth Street, East Stark to East Burn- side Streets.....	211.79	.....
454.	Lombard Street, Westanna Street to Wabash Ave- nue	5,036.09	.25
	Patton Avenue, Portland to Columbia Boulevards..	.....	.02
458.	East Glisan Street, East Sixtieth to East Eighty- second Streets.....	97.55	4.03
465.	East Eleventh Street, Brooklyn Street to Dents Addition	306.30	.....
470.	Killingsworth Avenue, Union Avenue to County Road	73.99	.10
480.	Lane Street et al.....	292.41	.....
488.	Hood Street et al.....	3,480.06	.....
496.	Sixtieth Street et al.....	280.94	.....
498.	Fourth Street, Jefferson to Sheridan Streets.....	2,685.84	284.05
499.	Skidmore Street et al.....	.....	.....
503.	East Forty-seventh Street, Belmont to East Stark Street	3.00	3.00
519.	Fiske Street, Willamette to Willis Boulevards.....	859.58	.....
522.	Glenn Avenue et al.....	327.64	10.97
524.	Corbett Street et al.....	1,674.62	.24
527.	Macadam Street, Section 15 to Dakota Street.....	539.20	90.05
533.	Kingston Avenue et al.....	197.73	.....
535.	East Forty-fourth Street et al, Dist. No. 103.....	182.77	.....
545.	N. Sixteenth Street, "B" to "G" Streets.....	.....	.80
547.	Marguerite Avenue, Division Street to Hawthorne Avenue	881.89	845.49
	Brandon Street, Lombard to Argyle Streets.....	43.40	1,155.39
548.	Front Street, Couch's Addition to Watson's Addition	5.05	.....
552.	Fiftieth Avenue Southeast et al.....	9.00	9.00
564.	North Eighteenth Street, "M" Street to Sherlock Addition	86.44	.....
	Chapman Street, Jefferson to Taylor Streets.....	1,052.91	88.14
	S. Front Street, Gaines to First Avenue.....	88.14	.....
	S. Second Street, Sheridan to Gibbs Streets.....	251.52	.....
	Williams Avenue, Grant to Going Streets.....	2,500.00	68.37
	"M" Street, Fourth to Twelfth Streets.....	68.37	532.28
	Clinton Street, Twelfth to Twenty-first Streets...	532.28	65.34
	Fifth Street, "C" to "I" Streets.....	65.34	.....
	Grand Avenue, East Clay street to East Stark Street	2.36	2.36
	"G" Street, East and West End.....	4.62	4.62
	Water Street.....	86.32	22.66
	N. Twenty-second Street, "J" to "P" Streets.....	22.66	120.01
	Clinton Street, Twenty-first to Thirty-sixth Streets	88.18	9.10
	Multnomah Street, Grover to Curry Streets.....	961.44	.....
	Belmont Street, Water to East Thirty-fourth Streets	12.00	12.00
	Eighth Street, Flanders Street to Riverside Home- stead	1,025.53	.....
	Fourth Street, "B" to "G" Streets.....	23.60	23.60
	Twenty-fourth Street, Irvings Addition to Tilla- mook Street.....	29.96	29.96

STREET IMPROVEMENT FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914—Continued

Page No.	Streets	Warrants.	Balance.
	Grand Avenue, East Clay to Grant Streets.....	\$ 1.47	\$ 1.47
	East Eighth Street, Ainsworth to Dekum Avenues	27.64	27.64
	Columbia Street, Third to Water Streets.....	.77	61.28
	Tacoma Avenue, Willamette River to Sellwood...	50.00	.77
	Morrison Street, Front to Chapman Streets.....	27.57	50.00
	Grand Avenue, East Grant to East Caruthers Streets	21.40	.....
	Cable Street, Mill Street to Terrace Road.....	60.51	82.10
	Elm Street, Sixteenth to Chapman Streets.....	3.75	3.75
	Front Street, Madison to Burnside Streets.....	5.40	6.05
	Hood Street, Sheridan to Curry Streets.....	6.05	6.05
	Corbett Street, Hood to Bancroft Streets.....	401.80	.....
	Davis Street, Twelfth to Fourteenth Streets.....	2.90	2.90
	Union Avenue, East Twelfth Street to Broadway..	37.78	37.78
	Water and Hood Streets.....	4.50	.....
	Stark Street, Seventh to Twelfth Streets.....	7.00	7.00
	Tenth Street, Hoyt to Northrup Streets.....	2,879.79	.....
	Rodney Avenue, Hancock to Knott Streets.....	62.42	62.42
	Falling Street, Williams to Union Avenues.....	77.01	77.01
	Front Street, "Q" Street to 404 feet south thereof	36.33	36.33
	Hancock Street, East Fifteenth to East Seven- teenth Street.....	1.41	1.41
	Kelly Street, Grover to Seymore Streets.....	175.38	.....
	First Street, Madison to Stark Streets.....	183.59	183.31
	Sherman Street.....	.16	.16
	Salmon Street, East Fifteenth to East Thirty- third Streets.....	38.35	38.35
	Kelly Street, Hamilton Avenue to Macadam Street	25.25	134.53
	Washington Street, "B" Street to City Park.....	9.48	9.48
	Fourth Street, Glisan to Jefferson Streets.....	.05	.05
	Albina Avenue, Page Street to River.....	9,641.85	447.54
	River Street, Albina Avenue to 100 feet south...	477.05	.....
	Third Street, Main to Glisan Streets.....	5,593.59	.....
	Front Street, Arthur to Seymore Streets.....	3,755.43	21.52
	Macadam Street, Grover Street to Block 188....	406.95	.....
	Hood Street, 88 feet north to 58 feet south of Sheridan Street.....	47.25	45.06
	Seventeenth Street, Vaughn to Marshall Streets...	3,275.30	154.37
	Goldsmith Street, Albina Avenue to Russell Street	5,822.90	2.56
	Mississippi Avenue, Morris to Prescott Streets...	1,019.37	5.36
	Union Avenue, Alberta Street to Love's D. L. C...	7,065.99	69.11
	Karl Street, Milwaukie to East Twentieth Streets	2,076.93	18.22
	First Street, Grover to Gaines Streets.....	45.03	.....
	Corbett Street, Hood Street to Seymore Avenue...	.....	122.18
	Shaver Street, Union Avenue to East Twelfth Street	227.64	.....
	Hooker Street, east line of Third Street to ter- minal of Hooker Street.....	310.98	.....
	Front Street, fill at Lane Street.....	500.00	103.71
	Corbett Street, fill at Pennoyer Street.....	1.50	322.32
	First Street, fill at Grover Street.....	.....	103.61
	Front Street, fill at Woods Street.....	2.75	387.13
	East Washington Street, Union Avenue to Water Street	.....	.....
	Sixteenth Street, Washington to Thurman Streets	52.08	296.06
	Weidler Street, East First to East Twenty-first Streets	.....	52.08
	Corbett Street, fill Grover Street to 230 feet north	92.01	92.01
	Grand Avenue, East Stark to East Oak Streets...	1,180.86	1,099.12
	Colfax Street, Union Avenue to Garfield Streets...	5.39	1.02
	Sixteenth Street, College to Davenport Streets...	17.20	5.39
	Union Avenue, East Oak to Belmont Streets.....	7.85	11.05
	Fourteenth Street, Burnside to Savier Streets...	1,048.99	.....
	Denver Avenue, Killingsworth Avenue to Patton Boulevard	62.95	68.17

STREET IMPROVEMENT FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914—Continued

Page No.	Streets	Warrants.	Balance.
	Oak Street, Union Avenue to East Sixth Street....	\$ 5,340.40	\$ 12.96
	Hibbard Street, Hibbard Addition to Base Line Road	4.60	.....
	East Thirteenth Street, Leo to Malden Avenues...	27.15	27.15
	Dekum Avenue, Piedmont Park to Columbia Heights	372.47	435.53
	Van Houten Street, Strong Street to Columbia Boulevard	368.68	87.10
	East Thirty-fourth Street, Brooklyn Street to Powell Valley Road .....	.....	830.28
	Oak Street, Fourth to Sixth Streets	42.00	.....
	Frankfort Street, Milwaukie Street to Feurer's Addition	373.76	133.15
	Goldsmith Street	101.43	.....
	Multnomah Street et al. ....	.....	1,566.77
	East Forty-third Street, Hawthorne Avenue to East Main Street .....	.....	13.33
	Oak Street, Park to Ninth Streets .....	.....	.01
	Stark Street, Sixteenth to Twentieth Streets .....	.....	13.82
	Fifteenth Street, Clinton Street to Oregon & California right of way	139.60	.....
	Twenty-first Street, Carter Street to Vista Avenue	1,264.01	.....
	Sandy Boulevard, Laurelhurst Addition to East Seventy-second Street .....	.....	.50
	Thirty-ninth Avenue Southeast .....	.....	.01
	Nineteenth Street, Broadway to Multnomah Street	.....	.01
	East one-half of East Twenty-ninth Street	1,717.85	39.34
	Milwaukie Street, Holgate to Nehalem Street	11,251.30	.....
	Hall Street et al. ....	.....	46.54
	Fremont Street, Commercial Street to Albina Avenue	73.73	.....
	East Tenth Street, Benedictine Heights to Lofty View	106.05	.....
	Farragut Street et al, Dist. No. 226 .....	.....	.03
	East Twenty-ninth Street, East Glisan Street to Sandy Boulevard	100.00	75.78
	Southwest one-half of Front Street	65.43	30.44
	East Forty-sixth Street et al, Dist. No. 249	342.92	26.75
	Holgate Street et al, Dist. No. 190	7,944.17	.....
	East Ninth Street, Webster to Emerson Streets...	.....	.02
	Alberta Street, East Thirtieth to East Thirty-third Streets	1.00	1.00
	Fifty-sixth Street Southeast et al, Dist. No. 255 .....	.....	2.00
	Rhone Street, East Seventh to Milwaukie Streets...	153.11	.....
	East Fifty-fifth Street et al, Dist. No. 199 .....	.....	.01
	Burnside Street et al.	607.56	48.00
	Williams Avenue et al, Dist. No. 180 .....	.....	.10
	Forty-first Street, Southeast, Sixtieth Avenue Southeast to Fifty-third Avenue Southeast	249.16	247.18
	Kingston Avenue et al, Dist. No. 231	15,959.77	35.77
	Front Street, Arthur to Porter Streets .....	.....	796.32
	Fremont Street, East Eighth to East Thirty-third Streets	330.00	11.28
	Lombard Street, Wabash to Patton Avenues	19.66	1.00
	Pendleton Avenue et al, Dist. No. 288	1,300.00	43.33
	Terrace Road, Spring Street to Patton Avenue...	14.00	12.50
	Wistaria Avenue et al, Dist. No. 256	217.64	.....
	Willamette Boulevard, Wabash Avenue to Curry Street	193.51	.....
	East Stark Street et al, Dist. No. 253	234.24	18.00
	Thompson Street et al, Dist. No. 251	327.88	.10
	East Glisan Street, East Eighty-second to East Ninety-second Streets	189.18	.....
	East Thirty-second Street, Division to Sherman Streets	5.26	.....
	Seventieth Street Southeast, from Sixty-third Avenue Southeast to Sixty-fifth Avenue Southeast..	.80	.....

STREET IMPROVEMENT FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914—Continued

Page No.	Streets	Warrants.	Balance.
	Whitman Avenue, East Seventy-second to East Sixty-eighth Street	\$ 4.68	\$
	Weidler Street, East First to Wheeler Streets	201.98	200.00
	East Sixth Street, Hawthorne Avenue to East Washington Street .....	.....	56.70
	Fifty-first Street Southeast, Blocks 13 and 15, Firland, to Sixty-eighth Street Southeast	300.00	.....
	Portions of Summit Avenue and Summit Court, Dist. No. 237	1.73	.....
	Portions of East Fourteenth Street and South Avenue, Dist. No. 322	200.00	14.58
	East Sherman Street, et al, Dist. No. 264	36.12	.....
	Knott Street, East Twenty-ninth to East Thirty-third Streets	479.50	.....
	Saratoga Street et al.	19.53	.....
	Fortieth Avenue Southeast, Sixty-second Street Southeast to Sixty-seventh Street Southeast	1,180.23	142.75
	Sixty-ninth Avenue Southeast and Fortieth Avenue Glenwood Avenue et al.	20.60	1.14
	Sixty-fifth Street Southeast, Powell Valley Road to Sixty-fifth Avenue Southeast	289.00	*4.99
	Hamilton Avenue, Third to Fourth Streets	481.07	.....
	Alley, Spruce and Elliott Streets	177.80	8.68
	East Thirty-third Street, East Pine Street to a line parallel	10.82	.....
	Alley, Maple Street and Ladd Avenue	100.00	9.44
	Forty-eighth Avenue Southeast, Seventieth Street Southeast to Seventy-fourth Street Southeast	47.25	.....
	Thirty-seventh Avenue Southeast, Sixtieth Street Southeast to Sixty-second Street Southeast	60.00	.44
	East Twenty-fifth Street, East Irvington to Thompson Street	4.00	.80
	Harrison Street et al, Dist. No. 334	106.28	.....
	Emerson Street, Vernon Avenue to East Nineteenth Street	326.24	.....
	East Eighteenth Street, Clinton to Powell Streets	1,000.00	1,000.00
	Jessup Street et al, Dist. No. 318	43.00	2.75
	Portions of East Harrison Street, in Ladd's Addition, Dist. No. 355	404.26	404.26
	East Sixty-third Street, East Glisan to East Davis Streets	2.58	.....
	East Sixty-ninth Street, East Glisan to Pacific Wall Street, Lombard to Edwards Streets	1,400.00	72.53
	East Third and East Glisan Streets, Dist. No. 306	125.00	.26
	McKenna Avenue, Lombard Street to Willis Boulevard	118.94	118.94
	East Twenty-seventh Street, Thompson to Tillamook Streets	14,473.25	20.32
	East Forty-first Street et al, Dist. No. 284	6,848.35	863.30
	East Twenty-sixth Street, Irvington to Thompson Street	52,085.66	109.51
	Fifty-seventh Avenue Southeast, Sixty-ninth Street Southeast to Seventy-second Street Southeast	14.33	.80
	Lexington Avenue, East Seventh to Milwaukie Streets	125.14	.....
	Stanton Street, Club Avenue to East Seventy-second Street	111.97	40.68
	Thirty-ninth Avenue Southeast, Fifty-eighth Street Southeast to Sixtieth Street Southeast	59.73	.....
	Fiftieth Street, East Stark Street to Wallace Addition	1,492.43	366.48
	.....	12,732.75	82.78
	.....	525.07	146.24
	.....	981.32	190.92
	.....	2,132.02	6.94

STREET IMPROVEMENT FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914—Continued

Page No.	Streets	Warrants.	Balance.
	Sixty-fourth Street, Fiftieth Avenue Southeast to right of way of Portland Railway, Light & Power Company	\$ 2,291.71	\$ 285.90
	East Forty-fifth Street et al, Dist. No. 300.....	18,047.02	21.83
	East Ash Street, East Third to East Twelfth Streets	11,067.94	32.31
	Edwards Street, Bridge to Columbia Boulevard... Mill Street, Sixteenth to Chapman Streets.....	4,083.87	.95
	East Salmon Street, East Eightieth to East Eighty-second Streets	486.65	.....
	Forty-fourth Avenue Southeast, Seventieth Street Southeast to Seventy-second Street Southeast... Forty-third Avenue Southeast, Hawthorne Avenue to Division Street.....	1,338.27	74.36
	Fifty-sixth Street Southeast, Fifty-fifth Avenue Southeast to Fifty-seventh Avenue Southeast.... Sixtieth Avenue Southeast, Forty-fifth Street Southeast to Fifty-seventh Street Southeast.....	1,247.12	68.39
	Eas Twenty-third Street, Crane to Prescott Streets Edwards Street, Wall Street to Spokane-Portland & Seattle right of way.....	9,553.09	23.52
	Portions of Slmpson Street et al, Dist. No. 321... Skidmore Street et al, Dist. No. 317.....	807.42	24.70
	Thompson Street et al, Dist. No. 302..... Upper Drive, Lot 4, Block "B," Smith's Addition.. Albina Avenue, Lombard Street to Killingsworth Avenue	3,168.06	52.71
	East Twenty-second Street, Crane to Prescott Streets	1,173.32	62.20
	Lombard Street, Patton Avenue to Albina..... East Fifty-second Street, East Stark Street to Melrose Addition.....	187.97	.....
	East Glisan Street, East Forty-fourth Street to East Sixtieth Street.....	5,990.73	45.06
	Albina Avenue, Prescott Street to a line 40 feet 4 inches north.....	2,252.40	58.69
	Brazee Street, East Twenty-seventh Street to East Twenty-eighth Street.....	11,188.75	324.68
	East Seventh Street, Webster to Sumner Streets... Seventy-first Street Southeast, Foster Road to Forty-fifth Avenue Southeast.....	12,304.94	59.44
	Fifty-ninth Avenue Southeast and Sixty-ninth Avenue Southeast, Dist. No. 328.....	32,134.24	360.40
	Sixty-sixth Avenue Southeast, Fiftieth Street Southeast to Fifty-fifth Street Southeast.....	1,163.53	59.65
	Sixty-ninth Avenue Southeast, Whitman Avenue to County Road.....	11,534.49	551.63
	East Market Street, East Fiftieth Street to Hawthorne Place.....	2,628.01	52.38
	Deficit	36,426.03	65.98
	Totals.....	385.28	.....
		1,307.39	48.11
		466.94	44.06
		1,692.64	*62.71
		3,787.19	52.37
		2,709.60	477.74
		1,387.62	56.54
		315.23	9.02
		\$ 25,562.61	67.70
		\$443,710.84	\$ 25,494.91

*Deficit.

SEWER FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914

Page No.	Sewers	Warrants.	Balance.
600.	Brooklyn District.....	\$ 952.08	\$ 357.50
646.	Gideon Street District, East Fourteenth Street, Division Street, et al.....	.75	.....
652.	Marquam Gulch District.....	8.80	.....
675.	Milwaukie Street and East Seventeenth Street Sewer System.....	2.70	.....
	Powell Valley Sewer System.....	.85	.....
	Grand Avenue and Beacon Street.....	26.55	26.55
	Wood Street Gulch Sewer.....	.....	20.00
	East Twentieth Street et al, N. Branch of Brooklyn District Sewer.....	292.10	193.10
702.	East Alder Street et al.....	73.40	4.90
	Johnson Creek District.....	.....	.75
	North Branch of Brooklyn District.....	1,000.00	774.00
725.	Westmoreland Sewer System.....	222.30	211.30
731.	Eastmoreland Sewer System.....	.....	11.80
736.	System of Sewers in Olmstead Park.....	337.20	337.20
	Sewer System known as "Taylor's Ferry Road"....	43.70	.....
747.	Jasper and First Streets.....	52.80	23.95
	Belmont Street et al.....	.....	.20
	Riverside District Sewer.....	11,273.60	1.30
	Holgate Extension of South Branch of Brooklyn District Sewer.....	5,573.66	7,880.16
787.	Rhine Street Extension of South Branch of Brooklyn District Sewer.....	943.57	939.82
792.	St. Johns Road Branch of Riverside District Sewer East Stark Street Trunk Sewer No. 1, East Twenty-first Street to Willamette River.....	.....	.10
500.	Whitaker Street, 100 feet east of Kelly Street to Thomas Creek.....	198.00	39.91
	First Street, Whitaker to Grover Streets.....	92.00	.....
	Cook Avenue District Sewer.....	34.16	.....
	Williams Avenue, Alberta to Fremont Streets.....	250.00	.....
	Tanner Creek.....	42.00	.....
	Irvington District Sewer.....	300.00	51.04
	Division Street, Sixth Street to Willamette River..	147.24	1.64
	N. Thirteenth and "D" Streets.....	.10	.....
	"T" Street, N. Fourteenth to "W" Streets.....	.....	1.65
501.	Alder Street et al.....	.....	5.00
	Curry Street, Second Street to Thomas Creek....	.....	13.98
	Harrison Street, River to Tenth Streets.....	.....	117.26
	Hood Street, Lincoln to Sheridan Streets.....	.....	1.80
	East Twenty-sixth Street, 150 feet north of Brazee Street to Brazee Street.....	.....	25.68
516.	Sullivan's Gulch Trunk Sewer No. 1.....	.....	.60
	East Stark Street Trunk Sewer No. 2.....	1.60	.....
	Eastmoreland Main Sewer System.....	208.60	5.50
	Sullivan's Gulch Trunk Sewer No. 2.....	.....	6.00
560.	East Thirty-third Street Extension of Sullivan's Gulch	6.60	11.80
572.	Canyon Road Extension of Tanner Creek Sewer....	1,750.00	54.30
586.	Insley Avenue Trunk Sewer.....	2,000.00	2.40
	An Extension of Marquam Gulch Sewer.....	.90	30.20
	East Thirty-second Street, Holgate to Cora Streets	426.40	.....
	East Thirty-first Street System, Dist. No. 9.....	21.45	21.45
	Ralph Avenue Division.....	1.00	1.00
	East Fifty-second Street Sewer System.....	336.20	336.20
	East Morrison and Terrace Street.....	479.60	.03
	Forty-ninth and East Hoyt Street Sewer System...	17.50	.....
	Upper Drive, Smith Street to Canyon Road.....	700.00	3.85
	Lambert Avenue Sewer System.....	100.00	8.50
	East Sixty-third Street Extension of East Stark Street Trunk Sewer No. 2.....	144.45	.....
	East Davis Street and East Glisan Street District, Dist. No. 4.....	993.27	20.00
		.....	22.50

SEWER FUND BALANCES AND OUTSTANDING WARRANTS TO
NOVEMBER 30, 1914—Continued

Page No.	Sewers	Warrants.	Balance.
	East Sixty-eighth Street, 160 feet south of Royal Avenue to Royal Avenue.....	\$ 9.20	\$ 9.20
	East Fifty-fifth Street, East Fifty-sixth Street and Klickitat Street, Dist. No. 24.....	104.95	.....
	Reedway, 120 feet east of east line of Milwaukie Street.....	27.30	.02
	Fremont Street, East Forty-first Street to East Thirty-eighth Street.....	691.54	38.90
	East Forty-fourth Street, Division to East Sherman Street.....	272.95	5.50
	East Sixtieth and East Davis Street Sewer System	8,571.66	84.35
	East Twenty-fifth Street, Siskiyou to Klickitat Streets.....	633.13	416.17
	Rural Avenue and East Thirteenth Street.....	784.45	5.67
	Bybee Avenue, East Fourteenth and East Sixteenth Streets.....	567.44	168.08
	Blandena Street, Williams Avenue to Vance.....	192.33	38.15
	Totals.....	\$ 40,910.08	\$ 12,370.96

STREET EXTENSION FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914

Page No.	Extensions.	Warrants.	Balance.
	East Killingsworth Avenue.....	\$ 11.50	\$ 12.30
	East Thirteenth Street, Williams Avenue to Rural Avenue.....	11.00	11.00
	Thompson Street, East Twenty-fourth to East Thirty-third Streets.....	50.00	50.00
	East Taylor Street, Paradise Spring Tract to East Forty-fifth Street.....	25.00	25.00
	Villa Avenue, East Thirty-second Street to Mt. Tabor Avenue.....	57.00	58.30
	Cactus Drive, Cedar Hill to 55 feet east.....	530.00	530.00
	East Sherman Street, Park View Annex to Marguerite Avenue.....	4.10	4.10
	East Forty-second Street, Hawthorne Avenue Addition.....	1.00	1.00
	East Forty-third Street, Hawthorne Avenue Addition.....	1.00	1.00
	Jessup Street, Piedmont to Commercial Street.....	.....	400.50
	Malden Avenue, East Thirteenth Street to Milwaukie Road.....	1.00	1.00
	East Forty-first Street, Hawthorne Avenue Addition	1.00	1.00
	East Forty-eighth Street, Hawthorne Avenue Addition.....	1.00	1.00
	East Forty-seventh Street, Hawthorne Avenue Addition.....	1.00	1.00
	Belmont Street, Section 6, to East Sixty-ninth Street.....	3.00	3.00
	Wall Street, North Bank Addition to Edwards Street.....	74.67	74.67
	Harrison Street, Block "Z," City, to Sixteenth Street.....	.....	3.00
	Lombard Street, Patton Avenue to Wabash Street	122.00	126.00
	East Sherman Street, Murraymead to East Twenty-sixth Street.....	.....	.70
	Simpson Street, Piedmont to Commercial Street..	8.50	8.50
	Vanderbilt Street, Portsmouth Villa to Hodge Street.....	.....	70.00
	Sandy Road, East Twenty-eighth Street to east line of City.....	203.20	203.20
	East Twenty-sixth Street, Division Street to Simon's Addition.....	12.20	12.25
	East Seventy-eighth Street, North, Villa to Oregon Street.....	.....	.07
	Claremont Street, Oneonta to Madrona Streets...	2.00	2.00
	Villa Avenue.....	60.00	60.00
	A New Street, East Fiftieth to East Sixtieth Streets	9.00	9.00
	East Eightieth Street, Base Line Road to Hawthorne Avenue.....	5.00	4.95
	East Glisan Street, Weiberglane to East Sixtieth Street.....	1.00	51.00
	East Thirtieth Street, East Stark Street to Hawthorne Avenue.....	16.00	16.00
	Sumner Street, Minnesota Avenue to Patton Addition.....	81.00	81.00
	East Fortieth Street, Francis Avenue to Powell Valley Road.....	.....	11.20
	East Seventy-sixth Street, Hawthorne Avenue to Base Line Road.....	1.00	1.00
	East Forty-fifth Street, North, and south line Block "B," Hawthorne Avenue Annex.....	1.00	1.00
	East Forty-sixth Street, North, and south line lot "A," Hawthorne Avenue Annex.....	1.00	1.00
	Wisconsin Street, Block 17, South Portland, to Block 48, Fulton Park.....	.....	155.70
	East Twentieth Street, Insley Avenue to Zanita Avenue.....	103.50	103.50

STREET EXTENSION FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914—Continued

Page No.	Extensions.	Warrants.	Balance.
	East Forty-fourth Street, north and south lines		
	Lot "C," Hawthorne Addition.....	\$ 1.00	\$ 1.00
	South Fourth Street.....	150.00	.....
	Heights Terrace.....		70.00
	East Burnside Street, East Twenty-eighth Street to Goodsell Avenue.....		.50
	Nevada Street.....		4.00
	Union Avenue, Alberta Street to Love's D. L. C....		3.74
	Clinton Street, East Thirty-sixth to East Thirty-seventh Streets.....		73.68
	East Fifteenth Street, Belmont to East Yamhill Streets.....	14.00	14.00
	St. Helens Road, Twenty-ninth to Front Streets....		110.15
	Dekum Avenue, west line of Camden to Vancouver County Road.....	14.00	14.00
	Francis Avenue, east to north line of Block 11, Kenilworth.....	3.00	3.00
	Belmont Street, Prettyman to City Limits.....		6.00
	East Twenty-ninth Street, Broadway to Tillamook Street.....	57.00	57.00
	East Twenty-sixth Street, Hawthorne to Dolan's Addition.....	35.00	35.00
	Dekum Avenue, Camden to Vancouver County Road	190.40	190.40
	Emerald Avenue, Pippin Street to Willis Boulevard	21.20	21.20
	East Nineteenth Street, Powell to Edgar Street...	150.00	150.00
	Portland Boulevard, Vancouver Avenue to Union Avenue.....	3.75	3.75
	Seventeenth Street, Highland Park to Howe Street	69.00	69.00
	East Twenty-ninth Street, East Portland Heights to Ellsworth Street.....	3.00	3.00
	East Twenty-seventh Street, East Portland Heights to Ellsworth Street.....	117.80	117.80
	East Thirtieth Street, East Portland Heights to Ellsworth Street.....	76.15	76.15
	East Twenty-eighth Street, East Portland Heights to Ellsworth Street.....	40.90	40.90
	Pearl Street, Mt. Tabor Villa Annex to Hibbard..	450.50	33.00
	East Twenty-sixth Street, Hawthorne Avenue to Dolan's Addition.....	78.00	78.00
	East Thirty-ninth Street, East Salmon to East Stark Streets.....	23.90	23.90
	East Salmon Street, Sunnyside Addition to Glencoe Park.....	17.00	17.00
	Villard Avenue, Pippin Street to Portland Boulevard	31.12	31.33
	East Twenty-fifth Street, East Irvington to Thompson Street.....		.50
	East Seventeenth Street, Midway Annex to Yukon Avenue.....	449.05	449.10
	East Fifty-second Street, O.-W. R. & N. right of way to Halsey Street.....	1,566.00	1,566.00
	East Main Street, South Sunnyside Addition to Glencoe Park.....	10.00	10.00
	East Thirteenth Street, Rural Avenue to East Fourth Street and Bybee Avenue.....		536.00
	Fifty-fourth Street Southeast, Forty-second Avenue Southeast to Forty-fourth Avenue Southeast.....		268.50
	Union Avenue, Love's D. L. C. to Columbia Slough	1.00	1.00
	Totals.....	\$ 4,971.44	\$ 6,174.54

WATER MAIN FUND BALANCES AND OUTSTANDING WARRANTS TO NOVEMBER 30, 1914

Page No.	Water Mains.	Warrants.	Balance.
	Irvington Chain.....	\$ 925.25	\$ 881.05
	East Twenty-fifth Street, Broadway to East Irvington.....	210.03	155.53
	Richardson Avenue, Boundary Avenue to Corbett and Front Streets.....	283.47	211.27
	Broadway, East Thirty-third to East Thirty-seventh Streets.....	136.98	77.08
	Laurelhurst District.....	805.10	576.75
835.	Hancock Street, East Twenty-seventh to East Thirty-seventh Streets.....		62.12
855.	East Harrison Street, East Twentieth to East Thirtieth Streets.....	.....	341.31
	Council Crest Chain.....	1,183.55	1,072.75
	East Burnside Street, East Sixtieth to East Sixty-ninth Streets.....	262.35	203.35
	East Glisan Street et al, Laurelhurst.....		14.15
	Chain of Water Mains, Yukon Avenue et al.....	2,329.52	1,166.72
	Totals.....	\$ 6,136.25	\$ 4,762.08

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