

ANNUAL REPORT
OF THE
PRINTING DEPARTMENT,
FOR THE YEAR 1900.

[DOCUMENT 30 — 1901.]

OFFICE OF THE SUPERINTENDENT OF PRINTING,
BOSTON, MASS., March 5, 1901.

HON. THOMAS N. HART,

Mayor of the City of Boston :

SIR,—In accordance with the requirements of chapter 3, section 24, of the Revised Ordinances of 1898, and the Order of the City Council of January 7, 1901, I herewith respectfully submit a detailed report of the business of the Printing Department of the City of Boston for the financial year beginning on February 1, 1900, and ending on January 31, 1901.

The rooms now occupied by the Department, 152 Purchase street, are well appointed for carrying on the business, and were taken possession of, finally, after several weeks' time having been consumed in the moving, in January, 1900. The Department, from the establishment of a municipal printing office, had occupied rooms in the building 611 Washington street.

The total expense of moving from the old quarters to the new, including alterations and fittings necessary to the requirements of a modern, first-class printing office, amounted to \$5,313.43. Of that amount, \$275 was taken from the appropriation of the previous year. The balance, \$5,038.43, was paid from the appropriation of 1900.

The quarters of the Department, containing 14,000 square feet of floor space, are leased by the City for a term of six years, beginning on January 1, 1900, and ending on December 31, 1906. The rent is \$4,200 per year, including heat, power, and elevator service.

The number of persons employed in this Department varies at different seasons of the year, according to the amount of work in hand. On February 1, 1901, the number of employees was: Composing-room, 75; press-room, 30; proof-room, 8; office, 8; Superintendent, Assistant Superintendent, and Purchasing Agent, aggregating 124 persons, which may be considered an average force of the year.

Good salaries are paid, and the customs of the several unions affiliated with the Allied Printing Trades are observed.

On June 12, 1900, the management of the Department came under my supervision, and from July 1, 1900, to January 31, 1901, the total receipts and expenses have been as follows (see Report of Harvey S. Chase, Special Examiner, dated February 23, 1901, hereto appended):

Total Receipts (seven months)	\$107,721 11
Total Expenditures (including depreciation)	103,452 47
Surplus from operation (seven months)	4,268 64

Beginning with September of last year, a new price-list was put into effect, to comply more closely with the conditions under which the office was then working. The price-list was first submitted for revision to experts in the respective branches of the printing trade. Previous to that time, charges were made substantially on the basis of the old contract system, when the City printing was done by a private concern working ten hours per day.

Private concerns are now working under a nine-hour day, with an advanced wage scale. Therefore, it is reasonable to presume that the City would have advanced the price for printing, had it continued to be done by a private concern.

The old contract system established years ago, which applied to the different grades of work at that time, is obsolete. The present price-list, which shows a variation in prices (some higher and some lower) has proved more equitable and satisfactory.

When the old contract was made, ten hours constituted a day's work. The Department is now working under an eight-hour law, with the additional expense of the half holiday on Saturdays (six months in the year) and all legal and special holidays, for all of which the men are paid.

Against private concerns averaging perhaps nine hours per day, or 2,808 hours per year (holidays not paid for), at the average rate of \$16.50 per week, or $30\frac{3}{4}$ cents per hour, the Municipal Printing Department, working eight hours per day, Saturdays until 12 o'clock for six months, until 5 o'clock the other six months, 305 working days, or 2,392 hours, at \$16.50 per week, would pay 36 cents per hour; add eight holidays, that the employees are paid for, \$23.04 each, making 37 cents per hour for the year. As labor is by far the largest item of cost involved in the printing business, it will be seen that the Municipal Printing Department, owing to the fewer number of hours worked therein, is practically paying twenty per cent. more for wages.

With the exception of about seven weeks, this Department was run on a nine-hour basis during the previous year. Compared with the hours now worked in the Department, which is one hour less a day than those worked the previous year, to which must also be added a half-holiday on Saturdays for three extra months, making in all a half-holiday for six months of the year on Saturdays, there appears an increase in the pay-roll of \$13,027.76.

Even with the changed conditions of the printing business, under the price-list now in operation in this Department, the old contract price is adhered to on some of the largest work; for instance, the Voting and Assessors' Lists, both of which have gradually developed to vast proportions. These jobs would tax the capacity of the largest printing establishments in the City, considering the short time allotted for the completion of the work. With the kind and courteous co-operation of the Assessing and Election Departments, the important work of printing the Assessors' List and Voting List was consummated very successfully last year.

This Department is now equipped and systematized to do the City's printing with speed, accuracy, and quality of workmanship second to no printing establishment in the country.

Practically the entire Plant of the Department as

originally purchased has been sold or laid aside, and the Plant at present consists of new presses, with the latest and necessary improvements. During the four years of its operation, over \$19,000 has been expended for type, rules, galleys, etc.

Considering the great volume of printing done for the City, few complaints have reached this office, while many letters of commendation on the promptness and accuracy of the work have been received.

I must respectfully suggest to patrons of this Department that a careful revision of copy before reaching the printer would avoid what oftentimes appears to be an excessive charge for work when completed. "Authors' corrections" are always items of considerable expense. To take a job, after it has first been placed in type, and change the construction, the phraseology, the ruling, etc., makes a new job of it, and the brunt of its extra cost must be placed somewhere. Holding back proofs is another unprovided-for item of expense to this Department. If the different Departments were to return their proofs promptly, many items of cost would be saved. Keeping type standing from week to week delays the progress of other work and increases the bills for extra material. In justice to this Department it may be necessary to charge for standing type, after holding a reasonable time, as is customary in private concerns.

Believing that the only way to carry on the Department to a successful issue is to conduct it on purely business principles, and have it conform to the rules governing a private competitive concern, the management has been resolved to handle it on that line. This resolution requires all the strengthening that can possibly be given it, for if employment for other reasons than proficiency and skill are to be encouraged and permitted, then, certainly, we may look for the deterioration of the force to whose hands good work is to be entrusted; the City's interest in good printing, at moderate cost, will pass away, and municipal ownership will receive a very considerable set-back.

And this would be much regretted, for this office, in its present excellent condition, ought to be able not only to meet its running expenses, but, as the examiner states, should also be able to make a profit from its earnings sufficient to cover the interest upon its capital of \$50,000, and an amount of surplus or reserve equiva-

lent to payment into a sinking-fund to redeem the original expenditure by the City for its establishment. This, I feel confident, can be done when the Department is conducted as a private concern is conducted, and when the tenure of office of those in its employ depends only on their ability and attention to business.

The printing business is a technical trade, with accumulated and increasing technique, and requires constant study and watchfulness to keep pace with the onward march, and those who expect to make a livelihood thereby must keep themselves prepared and be abreast of the modern improvements and requirements, or else be thrown out as drones from the busy hive of active business.

In conclusion, I urge that all undue influences be withheld from the Municipal Printing Department, so that it may be conducted without hindrance on a business basis, according to the Revised Ordinances.

SUMMARY OF RECEIPTS AND EXPENDITURES.

1. *Receipts During the Year.*

From City Departments	\$125,214 40
For Documents (charged to Appropriation)	25,675 77
For rebates on heating	36 50
From increase of stock on hand	3,046 03
Total	<u>\$153,972 70</u>

2. *Expenditures During the Year.*

Pay rolls (including salaries)	\$94,105 66
Paper stock, etc.	21,492 54
Binding, ruling, etc.	22,547 03
Engraving, electros, etc.	2,965 11
Outside printing	546 78
Stationery	304 12
Rent	4,200 00
Rollers, supplies, etc.	758 24
Ink	1,068 88
Lighting	457 94
Telephone	262 98
Oil	116 58
Water	137 47
Repairs, ordinary	883 74
Repairs, extraordinary	562 49
Electric construction	181 32
Time clock	16 45
Car tickets	301 00
Teaming	331 39
Cleaning office, towels, etc.	234 82
Messengers	4 00
Miscellaneous	380 25
Moving and storing engine	125 50
Rules and orders	570 00
Moving expenses	272 79
Rebates	182 48
Purchase of postage	<u>\$153,009 56</u>
<i>Carried forward</i>	10,510 55
	<u>\$163,520 11</u>

PRINTING DEPARTMENT.

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<i>Brought forward</i>	\$163,520	11
Deduct the amount charged to appropriations,	6,500	00
<hr/>		
Total operating expenses	\$157,020	11
Depreciation on Plant @ 10%	4,961	66
" " Construction <i>a/c</i> @ 20%	1,062	68
Bad accounts of previous years charged off	468	20
<hr/>		
Total expenses	\$163,512	65
Total receipts	153,972	70
<hr/>		
3. <i>Loss for year on operation</i>	\$9,539	95
<hr/> <hr/>		

APPROPRIATIONS.

Appropriations for year	\$45,400	00
Charges to Appropriation:		
For Documents	\$25,675	77
For general expense	6,500	00
<hr/>		
	32,175	77
<hr/>		
Surplus from appropriations	\$13,224	23
Deduct loss from operation	9,539	95
<hr/>		
Net surplus from appropriations	\$3,684	28
<hr/> <hr/>		

4. *Cost of Plant.*

1897-8:		
John Cashman	\$30,000	00
Type, etc.	10,318	61
Furniture for office	295	62
Safe	187	50
Type	545	35
<hr/>		
	\$41,347	08
Deduct presses sold	\$1,500	00
Deduct material sold	125	00
<hr/>		
	1,625	00
<hr/>		
Jan. 31, 1898	\$39,722	08
1898-9:		
Presses	\$3,000	00
Type, etc.	2,296	99
Office furniture	680	50
<hr/>		
<i>Carried forward</i>	\$5,977	49
<hr/>		
	\$39,722	08

<i>Brought forward</i>			
Presses		\$5,977 49	\$39,722 08
Type		4,400 00	
		286 48	
		<hr/>	
Deduct presses sold		\$10,663 97	
		1,700 00	
		<hr/>	8,963 97
Jan. 31, 1899. Total			<hr/>
1899-1900 :			\$48,686 05
Presses		\$7,755 00	
Type		2,106 40	
" (Jan.)		43 78	
Office furniture		371 00	
		<hr/>	
Deduct presses sold	\$750 00	\$10,276 18	
And material sold	27 75		
	<hr/>	777 75	
			9,498 43
Jan. 31, 1900. Total			<hr/>
1900-1901 :			\$58,184 48
Type, presses, etc.			4,598 86
Office furniture <i>a/c</i>			250 95
			<hr/>
Jan. 31, 1901. Total cost of Plant (4 years),			<u>\$63,034 29</u>

5. Value of Plant.

(Depreciation taken out.)

1898 :			
Jan. 31. Cost as above		Value.	Depreciation.
		\$39,722 08	
Less depreciation at 10%		3,972 21	\$3,972 21
		<hr/>	
Jan. 31. Value at date		\$35,749 87	
1899 :			
Jan. 31. Additions for year as above (net)		8,963 97	
		<hr/>	
Less depreciation at 10%		\$44,713 84	
		4,471 38	4,471 38
		<hr/>	
Jan. 31. Value at date		\$40,242 46	
		<hr/>	
<i>Carried forward</i>		\$40,242 46	<u>\$8,443 59</u>

PRINTING DEPARTMENT.

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1900:	<i>Brought forward</i>	\$40,242 46	\$8,443 59
Jan. 31.	Additions for year (net),	9,498 43	
		<u>\$49,740 89</u>	
	Less depreciation at 10%	4,974 09	4,974 09
Jan. 31.	Value at date	<u>\$44,766 80</u>	
1901:			
Jan. 31.	Additions for year	4,849 81	
		<u>\$49,616 61</u>	
	Less depreciation at 10%	4,961 66	4,961 66
	Total depreciation (four years)		<u>\$18,379 34</u>
	<i>Present value of Plant,</i>	<u>\$44,654 95</u>	
	Total cost of Plant		\$63,034 29
	Total depreciation		<u>18,379 34</u>
	Present value of Plant (as above)		<u>\$44,654 95</u>

FINANCIAL STATEMENT.

The following is a statement of the appropriations and revenue received from printing, postage, etc.; also expenditures, paid to January 31, 1901:

CREDITS OF PRINTING DEPARTMENT COLLECTED FROM FEBRUARY 1, 1900, to JANUARY 31, 1901.

Balance January 31, 1900	\$6,403 36
Appropriation	45,400 00
Revenue from printing, uncollected Feb. 1, 1900	20,152 25

Printing done at Plant, as follows:

Assessing Department	\$12,130 97
Auditing Department	731 19
Abolishing Grade Crossings	63 43
Building Department	1,685 56
Board of Appeal	4 60
Board of Aldermen, Contingent Fund	3,760 68
Bath Department	311 76
Collecting Department	1,661 56
City Clerk Department	322 05
City Messenger Department	1,161 89
Clerk of Committees Department	230 90
City Council, Incidental Expenses	120 69
City Council Proceedings	2,691 81
Cemetery Department	478 29
City Record	570 28
Common Council, Contingent Fund	436 82
Election Department	18,604 70
Engineering Department	477 89
Fire Department	1,057 55
Franklin Fund	41 65
Health Department	4,512 97
Hospital Department	3,092 49

Institutions:

Pauper Institutions Trustees—	
Boston Almshouse and Hospital,	
Long Island	258 45
Charlestown Almshouse	6 51
Office Expenses	230 78

<i>Carried forward</i>	\$54,645 47	\$71,955 61
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<i>Brought forward</i>	\$54,645 47	\$71,955 61
Penal Institutions Trustees —		
House of Correction, South Boston	60 43	
Deer Island	63 41	
Office Expenses	152 41	
Trustees for Children —		
House of Reformation, R.I.	42 92	
Placing Out and Office Expenses, Parental School	206 08	
Boston Insane Hospital Trustees	7 50	
Institutions Registration	184 21	
Lamp Department	852 93	
Law Department	156 04	
Law Department	209 36	
Law Incidentals	45 42	
Library Department	688 80	
Laying-Out and Construction of Highways	291 38	
Market Department	2 98	
Mayor's Department	289 18	
Music Department	67 45	
Overseeing of the Poor	301 75	
Park Department	863 99	
Public Parks	103 26	
Police Department	3,784 93	
Police Signal Service	434 36	
Liquor License	282 39	
House of Detention	149 13	
Public Celebrations	94 52	
Public Buildings	612 27	
Electrical Construction Division	59 20	
Repairs Division	20 65	
Public Grounds	90 43	
Registry Department	5,702 09	
Statistics Department	1,566 54	
Soldiers' Relief	84 40	
Schools	4,999 87	
School-house Agent	83 31	
Sinking Fund	234 25	
Sealing of Weights and Measures	245 30	
Street Laying-Out Department	272 78	
Street Laying-Out, Sewer Assessment, Street Sewerage Works	25 00	
Stony Brook Improvement	416 76	
Street Department :		
Central Office	39 59	
Paving Division	293 23	
	3,817 52	
<i>Carried forward</i>	\$82,543 49	\$71,955 61

<i>Brought forward</i>	\$82,543 49	\$71,955 61
Bridge Division	459 37	
Sanitary Division	1,365 60	
Street Cleaning Division	842 75	
Watering Division	662 79	
Ferry Division	1,044 05	
Cambridge Bridge	112 82	
Sewer Division	4,271 14	
Treasury Department	464 53	
Wire Department	648 70	
Wayfarers' Lodge	24 78	
 Water Department :		
Income Division	2,046 86	
Distribution Division	796 96	
Commissioner's Office	559 55	
 County of Suffolk :		
Superior Civil Court	6,271 30	
Superior Criminal Court	957 94	
Superior Court	3 70	
Treasurer	72 89	
Registry of Deeds	551 85	
Court of Registration	166 17	
Probate Court	72 17	
Jail	5 20	
North District Medical Examiner	75 23	
Municipal Court, Charlestown	87 47	
Brighton	89 00	
West Roxbury	84 32	
South Boston	57 83	
	<hr/>	104,338 46
 Revenue outside of City Departments :		
Printing	\$91 33	
Old material, type, and machinery,	827 49	
Steam-power	50 00	
	<hr/>	968 82
 Total		<u>\$177,262 89</u>

EXPENDITURES OF PRINTING DEPARTMENT PAID FROM FEBRUARY 1, 1900, TO JANUARY 31, 1901.

Printing Plant.

Accounts unpaid January 31, 1900 \$12,722 65

Pay Roll:

February	\$5,329 72	
March	7,927 94	
April	6,524 20	
May	8,767 05	
June	8,239 28	
July	8,790 17	
August	10,264 44	
September	6,497 05	
October	7,800 43	
November	8,443 83	
December	6,649 25	
January	6,871 76	
Extra overtime	272 99	
	<hr/>	\$92,378 11

Binding, ruling, numbering, and perforating	\$19,067 31	
Stock	13,547 63	
Type	4,491 83	
Rent	3,500 00	
Sundry misc. expenses	2,132 29	
Electro, engraving, etc.,	2,113 72	
Press-room supplies, etc.,	1,947 12	
Stationery, etc.	940 24	
Steam-power and lighting	590 83	
Outside printing	542 28	
Repairs, plumbing, carpenter work, etc.	403 37	
Moving expenses	272 79	
Office furniture	250 95	
Postage	96 20	
	<hr/>	49,896 56

Drafts for postage, supplied to all Departments 11,000 00

153,274 67

Total \$165,997 32

Balance unexpended January 31, 1901 11,265 57

\$177,262 89

City Documents, etc., Charged to the Printing Appropriation.

No. of Copies.	Doc. No.		
3,500	4,	Auditor's Annual Report	\$3,135 28
2,500	43,	Municipal Register	2,255 45
2,000		Revised Ordinances 1898	1,772 56
		Auditor's Monthly Exhibit, 12 lots	1,748 67
900	38,	Annual Report, Street Department	1,472 76
900	41,	Annual Report, Water Commissioners	1,102 18
900	17,	Annual Report, Hospital Department	952 47
1,525		Fourth of July Oration	794 85
900	14,	Annual Report, Engineering Department	736 72
		Collector's Monthly Reports, 11 lots	653 07
		Council Calendars, 38 lots	447 48
900	16,	Annual Report, Health Department	633 87
900	23,	Annual Report, Library Department	585 37
900	7,	Annual Report, Cemetery Department	346 11
900	6,	Report of Building Department	307 57
1,900	30,	Report of Printing Department	279 96
900	27,	Annual Report, Park Department	277 45
900	13,	Annual Report, Election Department, City Treasurer's Monthly Statements, 11 lots	274 59
			262 01
900	29,	Annual Report, Penal Institutions Department	260 72
900	40,	Annual Report of the Treasury Department	249 62
900	8,	Annual Report of the Children's Institutions Department	242 58
		Order of Business, Aldermen, 37 lots	234 37
900	12,	Annual Report, Collecting Department	192 84
900	42,	Annual Report, Wire Department	158 54
900	3,	Annual Report, Assessing Department	149 71
900	28,	Annual Report, Pauper Institutions Department	134 77
900	39,	Annual Report, Street Laying-out Department	104 83
900	31,	Annual Report, Public Buildings Department	103 61
900	18,	Annual Report, Boston Insane Hospital	92 23
900	33,	Annual Report, Registry Department	85 12
900	21,	Annual Report, Lamp Department	77 95
900	26,	Annual Report, Overseeing of Poor Department	76 50
900	22,	Annual Report, Law Department	73 25
900	19,	Annual Report, Institutions Registration Department	63 72

Carried forward\$20,338 78

<i>Brought forward</i>		
No. of Copies.	Doc. No.	
		\$20,338 78
900	15, Annual Report, Fire Department	57 43
900	37, Annual Report, Statistics Department,	55 82
900	32, Annual Report, Public Grounds Department	52 08
900	35, Annual Report, Sinking-Funds Department	29 30
900	5, Annual Report, Bath Department	22 05
900	25, Annual Report, Music Commissioners	19 67
900	34, Annual Report, Sealing Weights and Measures Department	17 85
900	10, Annual Report, City Messenger Department	11 40
900	24, Annual Report, Market Department	8 20
900	11, Annual Report, Clerk of Committees Department	4 61
900	36, Annual Report, Soldiers' Relief Department	4 21
900	2, Annual Report, Art Department	3 00
	Binding 600 Executive Documents	1,207 50
	Binding 800 City Documents	1,014 00
	City Documents, 600 each	1,620 86
	Clerk of Common Council	52 39
	Printing Office	951 47
	Postage, Printing Office	205 15
		<hr/>
		\$25,675 77

Clerk of Common Council :

Printing	\$52 39
Stationery	8 50
Binding records	5 00
Stock	7 00
	<hr/>
	\$72 89

The following is a statement of the expenditures for City Council — City Council Proceedings :

Newspaper reports from February 1, 1899, to February 1, 1900	\$8,500 00
Stenographic reports	5,100 00
Printing	2,691 81
Indexing proceedings	1,200 00
Binding	312 50
Stationery	3 95
	<hr/>
	\$17,808 26

Printing and Stationery Expenditures.

Stationery, printing, binding, etc., supplied to the
different Departments of the City Government,
and paid for by same, outside of the City of
Boston Printing Plant

\$40,919 30

Respectfully submitted,

MICHAEL T. MONAHAN,

Superintendent of Printing.

REPORT

TO THE

MAYOR OF THE CITY OF BOSTON

UPON THE

BOOKS AND ACCOUNTS OF THE PRINTING DEPARTMENT

BY

HARVEY S. CHASE,

PUBLIC ACCOUNTANT AND AUDITOR,

8 Congress St., Boston.

REPORT.

8 CONGRESS STREET,
BOSTON, February 23, 1901.

HON. THOS. N. HART,

Mayor of the City of Boston :

SIR,—In accordance with the instructions of James H. Dodge, Esq., City Auditor, I have audited the books and accounts of the Printing Department of the City of Boston, and report as follows :

The Department's printing plant was established March 1, 1897, and has therefore been carried on for four years (nearly).

In connection with a careful audit of the past year in every detail, I have examined the published reports of the Department for the three years previous.

The results of each of the first two years were carefully audited in an excellent manner by a well-known accountant, and I accepted the details of the figures given in those years as correct, while rearranging the tabulations of these figures somewhat in order to get comparative results for all four years.

The report for the third year (1899-1900) was, however, not examined by an expert before publication, and I find certain errors therein. For instance, the report of last year showed a net gain for the year of \$2,127.97, including an item of stock of materials on hand at the end of the year, which was properly credited in the accounts, but the stock at the beginning of the year was not charged against the accounts, as should have been done, and when this correction is entered the supposed profit of \$2,127.97 is changed into a deficit of \$2,248.04.

Further, I find that while a special appropriation of \$2,000 was made that year for moving expenses, only \$275 was actually paid on moving account, which, as the total expense of removing and setting up the plant was given as \$5,313.43, left \$5,038.43 additional to be paid in the fourth year (1900-1901).

If this be added to the item above (\$2,248.04), the deficit for 1899-1900 becomes \$7,286.47.

FORM OF DEPARTMENT REPORT.

Finding these differences between the facts and the published figures, and, moreover, noting the great difficulty of interpreting the present form of report—which, while displaying excellently the details for comparison with the City Auditor's accounts (which is, of course, necessary and proper) does not contain a clear and comprehensive summary of the year's results, which is the thing most important for a report of this character to

show, in order that members of the City Government and the taxpayers may readily understand the figures and be able to draw correct deductions from them—I have, therefore, considerably changed the form of the report, and have introduced—

- First:* A statement of the total receipts for the year from all sources, in summary form.
- Second:* A statement of the total expenditures for the year, in similar form.
- Third:* The net gain or net loss for the year in detail, showing (a) what portion is derived from the operation of the printing plant; (b) what portion is derived from the ordinary appropriation for the Department; and (c) what portion is derived from special appropriations for new plant or other purpose.
- Fourth:* A statement of the cost of the plant to date, together with the charges which have been made on account of depreciation (at the rate previously adopted, viz.: 10% upon cost), giving
- Fifth:* The present structural value, of the plant per the books.
- From the above I deduce
- Sixth:* The actual gain or loss to the City on account of the Printing Department, to the date of the report in question.
- Seventh:* The "Balance Sheet" of January 31, showing the total assets and liabilities of the Department on that date.

Following these statements comes the detailed "Financial Statement," corresponding with the Auditor's account of receipts and disbursements, and any other tabulations which may be required by ordinance or are customary and useful.

Having arranged this form for one year, I then rearranged the figures of the preceding years in similar form, and tabulated the whole of them as given in appendices attached hereto.

RESULTS.

The results of these tabulations are as follows:

1897-98.

Total receipts from the business	\$127,601 66	
Total expenses (excluding plant, but including depreciation)	132,716 87	

Deficit or loss (first year)		\$5,115 21
<i>Carried forward</i>		\$5,115 21

<i>Brought forward.</i>		\$5,115 21
	1898-99.	
Total receipts	\$147,484 48	
Total expenses	144,655 25	
	<hr/>	
Gain (second year)		2,829 23
		<hr/>
Net loss (two years)		\$2,285 98
	1899-1900.	
Total receipts	\$137,451 06	
Total expenses	140,978 23	
	<hr/>	
Deficit or loss (third year)		3,522 17
		<hr/>
Total loss for three years		\$5,808 15
	1900-1901.	
Total receipts	\$153,972 70	
Total expenses	170,012 65	
	<hr/>	
Deficit (fourth year)		16,039 95
		<hr/>
Total loss for four years		<u>\$21,848 10</u>

FIXED EXPENSES.

In considering the above results, it must be remembered that even if there were no printing plant, the City would be (had previously been) obliged to appropriate money for a Superintendent of Printing, to receive bids, etc., from private contractors for the printing, and also carry on the postage department (now a part of the printing).

The expense of this work — Superintendent's salary, clerks, stationery, expense, etc. — would figure about \$6,500 per year, probably, and if allowance of this amount is made for the four years above (viz.: charge \$26,000 to appropriations account instead of expense account) the results of the period would be as follows:

Total receipts for the four years		\$566,509 90
Total expenses	\$588,358 00	
Deduct for fixed expenses (as explained above)	26,000 00	
	<hr/>	
Also item	\$562,358 00	
	1,330 11	
	<hr/>	
		561,027 89

(Which is the balance of various items entered twice, and other corrections in the first three years' accounts.)

<i>Apparent profit from operation for four years</i>		<u>\$5,482 01</u>
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CAPITAL INVESTED BY THE CITY IN THE PLANT.

I have divided the appropriations made during these four years into two kinds, viz.: (a) "Capital appropriations," which consist of the \$40,000 originally appropriated to purchase the Plant in 1897, and \$10,000 appropriated for *Working Capital* in 1899; total of \$50,000 which would correspond to the capital account of a private concern; and (b) Ordinary appropriations for expenses, etc.

This "Capital Appropriation" may be considered as loaned by the City to the Printing Plant, and the latter should earn interest thereon (enough to pay at least the rate the City has to pay on its bonds), and also should earn enough additional to create a sinking-fund, which would pay off the loaned capital in a reasonable number of years (say twenty).

If we figure this interest charge on \$50,000 as 4 per cent. per year, the total for four years would be	\$8,000 00
And if the payment to sinking-fund be taken at \$1,500 per year, the total for four years would be,	6,000 00

Making a total to be deducted from the apparent profits from operation	\$14,000 00
These profits (as above) being only	5,482 01

We have as a practical deficit upon the operation of the Plant for four years	<u>\$8,517 99</u>
-------------------------------------------------------------------------------	-------------------

Or a net loss of \$2,129.50 per year.

BALANCE SHEET.

January 31, 1901.

<i>Assets.</i>	<i>Liabilities.</i>
Plant	Capital account
Construction account	Accounts not yet paid
Stock on hand	Pay-roll not paid,
Cash on hand	Surplus to balance
Old accounts receivable	
Balance, City Treasurer	
Due from Departments	
<u>\$93,501 27</u>	<u>\$93,501 27</u>

The "Surplus" above (\$27,671.18) as shown by the books, if diminished by the \$14,000 for interest and sinking-fund (described on previous page) would then become \$13,671.18 and this amount has been derived from the ordinary appropriations of the past year, which were \$45,400 as against the usual appropriation of from \$28,000 to \$30,000 per year (in previous years).

ORDINARY APPROPRIATIONS.

The total ordinary appropriations in the four years were	\$135,461 71
The total charges against them for public documents (\$87,272.54) and fixed expenses (\$26,000) should be	113,272 54
Leaving a balance	\$22,189 17
Deducting the loss from operation (previous page)	8,517 99
Gives us the surplus (as above)	<u>\$13,671 18</u>

The establishment of the above figures, which mutually prove the correctness of the results, was only brought about by a prolonged investigation, and complicated tabulation of the book accounts for all four years, as it has been the custom of the bookkeepers at the beginning of each year (February 1), to open the books with a fresh trial balance based on the apparent assets and liabilities which were properly reconciled with the City Auditor's balance of January 31, but which also contained other assets and liabilities than those which had (up to that date) reached the Auditor's office, and these were not always reconciled with the closing accounts of the previous year. Partly from this cause arises the item of \$1,330.11 entered above.

Hereafter the accounting in the Department's books will be continuous, and the balance sheet of the new year will be identical with the closing of the old year.

BOOKKEEPING.

The general details of the bookkeeping have been satisfactorily carried on, the books have been neatly and accurately kept and reflect much credit upon the bookkeepers, so far as their appearance is concerned.

The lack has been in the failure to lay out suitable new accounts to keep up with the facts of the business and the form of the Department's reports upon the various years' work. The bookkeepers are now heartily in accord with the changes instituted and in full sympathy with the desire to make the Department's annual reports clear, concise and accurate.

COST COMPARED WITH CONTRACT WORK.

All of the figures so far given have been based on the prices charged by the Printing Department to the other Departments for their printing and to the appropriation account for City Documents.

It is, therefore, apparent that if the Departments have been paying more than would be charged by outside private contractors for the same work, then these apparent profits to the City may be wholly fictitious, and the fact be that a heavier loss has occurred from the operation of the Plant than has been already set forth.

On the other hand, if these prices are less than outside contractors will accept, then the City would have made greater gains (or rather less losses) than those stated.

It is, of course, probable that the first alternative is the true one, rather than the second. Some of the reasons for such a conclusion are: Shorter hours of labor for the same, or higher wages; extra expenses for unnecessary men; difficulty of disciplining the employees and getting the work done as rapidly and economically as in a private plant, etc.

On the other hand, it is doubtless true that a plant such as this one, with all the presses, type, rules, etc., especially designed to handle the regular work of the City, would save money (other things equal) over a private plant not so well fitted and arranged, and as the printing required by the City is now greater than ever before, and contains many half-tone illustrations, etc., which add to the cost very materially, it is quite a problem to decide whether or not it would be to the City's advantage to dispense with the Plant entirely and rely upon private contractors, as was formerly done.

Also against the expenses and losses to the City should be credited whatever benefit there has been to the various Departments by having their work done at the Municipal Plant, which might arise from quicker completion of work, due to better facilities, better quality of printing, paper, etc., and better opportunities for corrections and additions by the Departments of their original copy furnished to printer, provided, of course, that the facts agree with the above statements. So far as I have been able to determine, there is considerable difference of opinion among heads of Departments, some being satisfied with the work and others dissatisfied.

Another and more evident merit of the Municipal Plant is the direct benefit to the employees therein, whose hours of labor have been shortened, holidays granted, and wages increased. This consideration is an important one, and one to be highly commended and continued, but the good results of such a policy should, of course, be made evident in the financial results of the Plant, which can scarcely be said to have been the case by the present showing, or else in the marked improvement in the work done for the Departments over that which would be done by less fortunate workmen in private concerns.

CONCLUSIONS.

It is evident that the Municipal Printing Plant has not had the financial success which was anticipated when the Plant was established in 1897, and it is further evident that unless a marked improvement is made in the results, the Plant must necessarily be dispensed with and the City printing handled by private contracts as formerly.

This would be a public misfortune, but, in my opinion, it can be avoided only by a rigid adherence to business principles in the management of the Plant, including the appointment and removal of employees. There is no doubt in my mind, after a careful examination of all the circumstances, that fifteen to twenty per cent. of the expenses of the Department would be saved, if the pressure of political influence in favor of applicants for positions were wholly removed, and the Superintendent left entirely free to run his Department as a private business is carried on, appointing experienced and capable employees only, and purchasing his materials wherever they can be bought at the lowest prices.

The present management is, I believe, endeavoring to do this and has the encouragement and support of the Mayor, but the absolute necessity for greater efforts in this direction is clearly evident from the figures submitted above.

If it is decided to continue the operation of the Plant for another year the results should be watched carefully. During this time the expenses should be markedly reduced, and the charges for printing to the Departments should be made, so far as possible, upon the exact basis of outside printers' charges for the same work (without allowance for the extra labor required by shorter hours at the Plant), then the actual deficiency which the Municipal Plant causes can be correctly understood and proper action can be taken.

With the Plant run as a business solely for the benefit of the City as a whole, there is no doubt in my mind that all expenses can be paid, the cost to Departments reduced, and a profit shown by the Plant sufficient to pay the interest upon its capital and accumulate a surplus or sinking fund, sufficient to ultimately reimburse the City for the capital expenditures in the Plant.

Such a result will require marked ability and independence in the management and due forbearance on the part of all others from interference with the business of the City's printing.

Respectfully submitted,

HARVEY S. CHASE,
Public Accountant and Auditor.

APPENDIX.

REPORT TO THE MAYOR

BY

HARVEY S. CHASE, SPECIAL EXAMINER.

(a.) *Change of Administration.*

On June 12, the present Superintendent, Mr. M. T. Monahan, took charge of the Department, and in order that correct inferences should be drawn, I have made a tabulation of the Receipts and Expenses of the Department for the seven months from July 1, 1900, to January 31, 1901, the results of which follow:

Receipts — Seven Months.

	<i>Cr.</i>
Total Printing for Departments	\$85,077 13
Total Documents printed	20,867 17
$\frac{1}{2}$ of Increase of Stock on hand (\$3,046.03)	1,776 81
Total Receipts	\$107,721 11

Expenditures.

	<i>Dr.</i>
Pay Roll	\$57,183 32
Stock	15,202 31
Binding, Ruling, etc.	14,775 17
Press Room Supplies	1,724 55
Engraving, etc.	2,187 67
Power, Heat, and Light	206 88
Repairs	697 73
Rent	2,450 00
Stationery	760 27
Miscellaneous	1,129 57
Outside Printing	515 28
Purchase of Postage, etc.	6,616 94
$\frac{1}{2}$ of Bad Debts charged off (\$480.20)	280 14
$\frac{1}{2}$ of Depreciation on Plant	2,894 29
$\frac{1}{2}$ of Depreciation on Construction	619 85

Carried forward \$107,243 97

<i>Brought forward.</i>	\$107,243 97
Deduct $\frac{7}{8}$ of General Expense, etc. (\$6,500)	3,791 50
Net Expense of Operation	\$103,452 47
Surplus for seven months	4,268 64
	<u>\$107,721 11</u>

Appropriation Account. — Seven Months.

June Appropriation		\$21,500 00
Charge for Documents	\$20,867 17	
Charge for General Expense, etc.,	3,791 50	
Deficit to Balance		3,158 67
	<u>\$24,658 67</u>	<u>\$24,658 67</u>

Surplus from Operation		\$4,268 64
Deficit from Appropriation		3,158 67
Net Surplus seven months		<u>\$1,109 97</u>

These figures make a favorable showing for the present management, inasmuch as the result of operation was a gain of \$4,268.64, while as the greater part of the Documents charged to Appropriations came in the seven months (\$20,867.17 out of a total of \$25,675.77), the deficit on Appropriations Account can be reasonably explained.

(b.) *Comparisons by Percentages.*

In order to get data for an impartial judgment upon the record of the Printing Department, I tabulated what percentage of the total expense each of the different kinds of expenditure showed, viz.:

Of the Net Receipts in four years of operation		<u>\$552,241 00</u>
The cost of Labor was about		58.7%
“ “ “ Stock		11.8%
“ “ “ Binding, Ruling, etc..		13.5%
“ “ “ Engraving and Outside Printing		3.3%
“ “ “ Rent and Insurance		3.4%
“ “ “ Depreciation		3.3%
<i>Carried forward</i>		<u>94.0%</u>

<i>Brought forward</i>		94.0%
The cost of Repairs, Supplies, etc.	3.1%	
“ “ “ Office Expenses	1.3%	
“ “ “ Miscellaneous	0.9%	
	<hr/>	5.3%
Apparent Profits		<u>0.7%</u>

For comparison I give figures of the average cost, based on the results at one of the most successful printing concerns in Boston, which, when brought down to the basis of an output of \$150,000, on a capital of \$50,000, the relative proportions of different expenses would be about as follows:

Labor, about	50 % of output	\$75,000 00
Stock, about	20 % “ “	30,000 00
Ruling, Binding	11 % “ “	16,500 00
Rent and Insurance	3½ % “ “	5,250 00
Depreciation	3 % “ “	4,500 00
	<hr/>	
	87½ % “ “	\$131,250 00
Leaving for Incidentals, Expenses, Losses, and Profits	12½ % “ “	18,750 00
	<hr/>	
	100 % “ “	\$150,000 00

The comparison shows the labor cost at the Municipal Plant to be considerably higher.

The stock, ruling, binding, etc. (taken together), about the same.

Rent and depreciation about the same, while profits, after deducting repairs, office expenses, etc., are reduced in the Municipal Plant to about three-quarters of one per cent., which, of course, would be an entirely inadequate return for a private plant.

Moreover, it must be remembered that no charge for interest on the City's capital is included in the figures of expenses just given, nor is there allowance for sinking-fund (reserve or surplus account, as it would be called in a private plant), and when proper allowance is made for these items, then the "profits" of the Municipal operation disappear entirely.

(c.) *Value of Plant.*

The total cost of the Plant in the four years has been (see details in Superintendent's report)	\$63,034 29
Total charges for Depreciation	18,379 34
	<hr/>
Present value of Plant	\$44,654 95

which should be compared with the estimate made by the Superintendent for Mayor Hart's Annual Address to the City Council, January 7, 1901, of \$46,819.49, and with the figures given by the committee who reported to Mayor Quincy on June 15, 1899, viz.: \$43,009.11.

It appears that the present value, as given by the books (\$44,654.95), is conservative and sufficient.

(d.) "*Construction Account.*"

This account was opened by the Examiner, in order to distribute the expense of construction at the new Plant: shafting, belting, carpenter work, etc. (amounting to \$5,313.43), over a period of five years instead of charging it all off in one year, which would be manifestly unfair to that year.

By the method adopted, one-fifth (20%) will be charged off each year, and at the expiration of the present lease the total will have been wiped out.

MUNICIPAL PRINTING DEPARTMENT — RECEIPTS.

	1897-8.	1898-9.	1899-0.	1900-1.	TOTAL. (Four Years.)
From City Departments.....	\$95,764 47	\$120,929 59	\$106,229 10	\$125,214 40	\$448,137 56
Documents charged to Appropriation	16,905 63	22,405 14	22,286 00	25,675 77	87,272 54
Rent, Heat and Power	4,122 42	4,149 75	3,788 26	36 50	12,096 93
Increase of Stock on Hand	5,473 00	.....	5,147 70	3,046 08	13,666 78
City Hall Office, Stationery Sold	824 54	.....	.....	.....	824 54
City Hall Office, Postage Sold	4,501 60	.....	.....	.....	4,501 60
<i>Total Receipts from the Business.</i>	127,601 66	147,484 48	137,451 06	153,972 70	566,509 90
Appropriations	28,800 00	28,800 00	30,250 00	45,400 00	135,461 71
Transfers	2,211 71	.....	.....	.....	.....
Special Appropriations: For Plant.....	158,613 37	176,284 48	167,701 06	199,372 70	701,971 61
For Working Capital.....	40,000 00	.....	.....	.....	.....
<i>Grand Total</i>	\$198,613 37	\$176,284 48	\$177,701 06	\$199,372 70	\$751,971 61
<i>Total Receipts from Operation and Ordinary Appropriations (as above)</i>	\$158,613 37	\$176,284 48	\$167,701 06	\$199,372 70	\$701,971 61
<i>Total Expenses of all kinds (next page)</i>	149,622 50	167,060 39	163,259 23	195,688 42	675,630 54
<i>Excess or "Surplus" for Year</i>	\$8,990 87	\$9,224 09	\$4,441 83	\$3,684 28	26,341 07
Add balance various accounts (See Examiner's Report).....	.....	.....	.....	.....	1,330 11
<i>Total Surplus as stated in Report</i>.....	.....	.....	.....	.....	\$27,671 18

PRINTING DEPARTMENT.

MUNICIPAL PRINTING DEPARTMENT—EXPENDITURES.

	1897-8.	1898-9.	1899-0.	1900-1.	TOTAL. (Four Years.)
Pay Rolls.....	\$69,779 23	\$78,024 87	\$81,077 90	\$94,105 66	\$322,987 66
Paper Stock, purchased.....	13,465 59	15,992 22	14,476 94	21,492 54	65,427 29
Binding, Ruling, etc.....	16,149 40	19,683 26	16,046 55	22,547 03	74,426 24
Engraving, Electros, etc.....	3,366 02	2,998 44	1,987 21	2,965 11	11,316 78
Outside Printing.....	3,570 75	251 85	449 02	546 78	4,818 40
Stationery.....	367 90	1,076 87	748 02	304 12	2,496 91
Insurance.....	864 37	738 00	369 00	.....	1,971 37
Rent.....	3,538 37	4,696 24	4,438 37	4,200 00	16,872 98
Rollers, Supplies, etc.....	769 27	420 54	478 72	758 24	2,426 77
Ink.....	253 60	272 54	202 57	1,068 88	1,797 59
Lighting.....	442 98	596 72	622 98	457 94	2,120 62
Telephone.....	316 52	250 38	383 06	262 98	1,212 94
Fuel.....	1,270 53	1,337 97	1,003 68	.....	3,612 18
Oil.....	197 25	146 65	160 11	116 58	620 59
Water.....	138 50	220 30	129 60	137 47	625 87
Repairs, Ordinary.....	354 11	296 90	225 74	883 74	1,760 49
Repairs, Extraordinary.....	1,130 67	1,894 93	268 10	562 49	3,856 19
Electric Construction.....	249 48	.....	105 24	181 32	536 04
Time Clock.....	170 00	72 55	.....	16 45	259 00
Car Tickets.....	121 00	250 00	280 00	301 00	952 00
Teaming.....	87 70	87 99	67 64	331 39	574 72
Cleaning office, towels, etc.....	130 44	171 90	167 94	234 82	705 10
Typewriter.....	149 75	.....	100 00	.....	249 75
Express.....	10 50	.....	.....	.....	10 50
Messengers.....	15 70	15 50	7 55	4 00	42 75
Miscellaneous.....	244 63	675 37	334 31	380 25	1,634 56
Moving and Storing Engine.....	.....	.....	.....	125 50	125 50
Appraising Plant, etc.....	251 75	.....	.....	.....	251 75
Examiner.....	.....	.....	418 92	.....	418 92
Totals carried forward.....	\$117,406 01	\$180,171 99	\$124,549 17	\$151,984 29	\$524,111 46

(*S. continued*) MUNICIPAL PRINTING DEPARTMENT — EXPENDITURES (Continued).

	1897-8.	1898-9.	1899-0.	1900-1.	TOTAL. (Four Years.)
<i>Totals brought forward</i>					
Rules and Orders.....	\$117,406 01	\$130,171 99	\$124,549 17	\$151,984 29	\$524,111 46
Municipal Register.....	540 00	540 00	540 00	570 00	2,190 00
Moving Expenses.....	332 40				332 40
Rebates.....	466 25	250 00			989 04
Bad Debts.....		64 35	199 25	272 79	446 08
Postage Stamps and Envelopes Bought.....				468 20	468 20
Postage Bought at Stationers.....	10,000 00	7,500 00	9,500 00	10,297 15	
Decrease of Stock on hand.....		560 44	148 04	213 40	38,219 03
		1,097 09			1,097 09
Total Expense including Superintendent.....	128,744 66	140,183 87	134,936 46	163,988 31	507,853 30
Deduct Superintendent, etc., charged to Appropriation.....	6,500 00	6,500 00	6,500 00	6,500 00	26,000 00
Add Depreciation @ 10% on Plant.....	122,244 66	133,683 87	128,436 46	157,488 31	541,853 30
Add Depreciation @ 20% on Construction account.....	3,972 21	4,471 38	4,974 09	4,961 66	18,379 34
			1,062 68	1,062 68	2,125 36
<i>Total Expense of Operation</i>	126,216 87	138,155 25	134,473 23	163,512 65	562,358 00
Add Amounts charged to Appropriation, viz.:					
Documents.....	16,905 63	22,405 14	22,286 00	25,675 77	87,272 54
Superintendent, General Expense, etc.....	6,500 00	6,500 00	6,500 00	6,500 00	26,000 00
Total Expense (except Plant).....	149,622 50	167,060 39	163,259 23	195,688 42	675,630 54
SURPLUS AND DEFICIT.					
Surplus of Receipts over Expenses.....	1,384 70	9,329 23	2,977 83		4,151 90
Deficit of Receipts over Expenses.....					-9,539 95
Surplus of Appropriation over Charges.....	7,906 08		1,464 00	13,224 23	22,189 17.
Deficit of Appropriation over Charges.....		-105 14			
Totals.....	\$158,613 37	\$176,284 48	\$167,701 06	\$190,372 70	\$701,971 61

<i>Brought forward</i>	\$76,398	85
Public Grounds	100	76
Registry	5,764	79
Street—Bridge	650	78
Ferry	1,300	52
Paving	4,830	60
Sanitary	1,437	17
Sewer	4,392	29
Cleaning	1,033	34
Watering	733	08
Central Office	330	98
Sewerage Works	548	26
Laying Out and Construction of Highways	291	38
Cambridge Bridges	121	10
Street Laying-out	418	55
Street Laying-out and Sewer Assessment	54	57
Stony Brook Improvement	39	59
Congress street, Grade Crossing	51	43
Dorchester avenue, Grade Crossing	12	00
Sinking-Fund	234	25
Soldiers' Relief	196	62
Sealing Weights and Measures	307	06
Statistics	3,974	27
Schools	5,848	72
Treasury	620	16
Water Commissioner	630	99
Income	2,762	93
Distribution	905	45
Wire	902	80
Wayfarers' Lodge	46	66
Suffolk Superior, Civil	7,226	38
Criminal	1,137	67
Treasurer	72	89
Superior Court	5	38
Probate	72	17
Jail	23	60
Medical Examiner	108	02
Registry Deeds	551	85
Municipal Court, Brighton	164	03
West Roxbury	105	04
South Boston	93	01
Charlestown	87	47
Public Celebrations	94	52
Music	223	53
Board of Appeal	4	60
Market	9	31
Franklin Fund	41	65
N. Mathews, jr.	91	33
Boston Gear Works damages	162	00

\$125,214 40