

ANNUAL REPORT
OF THE
SEALER OF WEIGHTS AND MEASURES
DEPARTMENT,

FOR THE YEAR 1900.

[DOCUMENT 34 — 1901.]

BOSTON, February 1, 1901.

HON. THOMAS N. HART,

Mayor of the City of Boston :

DEAR SIR, — In compliance with the requirements of the Revised Ordinances, I herewith submit the annual report of the Weights and Measures Department.

The force of the Department consists of one Sealer, ten deputy sealers, one helper, and one janitor.

Appropriation for the fiscal year 1900-1901, \$23,424 81

CLASSIFICATION OF EXPENSES.

Salaries, janitor, and helper's pay	\$18,468 61
Horse board	1,897 00
Three new horses	500 00
Shoeing of horses	226 00
Repairs on wagons	618 60
Repairs on harnesses, and new supplies	295 07
Tools, hardware, etc.	268 49
Printing stock, books, and stationery	499 01
Telephone service	102 49
Ferry tolls and car tickets	52 00
Repairing standard and try scales	98 81
Diamond ink and pencils	45 65
<i>Carried forward</i>	<u>\$23,071 73</u>

<i>Brought forward</i>	\$23,071 73
Medical attendance on horses	113 50
Advertising	68 11
Brushes, oils, etc.	59 32
Insurance and clerical work	45 76
Furniture and office expenses	46 00
Incidentals	20 39
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Total expenditures from February 1, 1900, to February 1, 1901	\$23,424 81

Section 1 of Chapter 123 of the Acts of 1876 provides that the Sealer of Weights and Measures shall annually give public notice, by advertisement, or by posting notices in one or more public places, to all inhabitants or persons having a usual place of business therein, who use scales, weights, or measures, for the purpose of selling any goods, wares, merchandise, or other commodities, or for public weighing, to bring in their scales, weights, and measures, to be adjusted and sealed.

The same section also provides that "in those cities and towns where a salary is paid to the Sealer of Weights and Measures no fee shall be charged for such service."

In compliance with the provisions of the foregoing section, it is customary for the Sealer to notify annually, in May, all such persons as are referred to by the statutes, by publishing the required notice in the daily papers, to bring to this office their scales, weights and measures, to be tested and sealed.

Section 2 of Chapter 123 of the Acts of 1876, amended by Section 2 of Chapter 151 of the Acts of 1877, provides that at any time after said notice the said Sealer of Weights and Measures shall go to the houses, stores, and shops of persons mentioned in the foregoing section, who have neglected to comply with the notice given thereunder, and having entered the same, with the assent of the occupants, shall adjust and seal their scales, weights and measures, and shall be entitled to receive for said service the compensation set forth in Chapter 51, Section 14, of the General Statutes.

The customary notice having been published, after a reasonable time the deputy sealers were instructed to visit

the places where scales, weights and measures were in use; and having informed the owners thereof that it was optional with them whether their scales, etc., should be tested at this office or at their places of business, and in the former case no charge would be made for such services, proceeded thereafter, with their consent, to test and seal the same.

The schedule of fees for such work done outside the office is as follows:

FOR TESTING.

Platform scales (5,000 lbs. capacity and upwards)	. \$1 00
“ “ (less than 5,000 lbs. capacity)	. . 50
Dormant “ (“ “ “ “ “ “)	. . 50
Beam “ (capacity over 1,000 lbs.)	. . 50
Counter platform scale (large size)	. . 25
“ “ (small size)	. . 03
Butchers' scale, spring balance, counter-balance, or trip scale, each	. . . . . 03
Weights, each	. . . . . 03
Measures, wet or dry, each	. . . . . 03
Yardsticks, each	. . . . . 03

ADJUSTING.

For adjusting or repairing any scale, a fair and reasonable compensation.

For weights when either light or heavy, not to exceed ten cents each.

For yardsticks, not to exceed five cents each.

For measures, wet or dry, when either large or small, not to exceed ten cents each.

For adjusting or repairing any special weight or measure, not mentioned above, a fair and reasonable compensation.

OPERATIONS OF THE DEPARTMENT FROM FEBRUARY 1, 1900, TO FEBRUARY 1, 1901.

Number of scales 5,000 to 150 tons tested	. . . . . 617
“ dormants less than 5,000 lbs. tested	. . . . . 352
“ beef-track scales tested	. . . . . 22
“ portable platforms tested	. . . . . 2,335
“ counter “ “	. . . . . 670
“ spring balances “	. . . . . 2,230
“ trip scales “	. . . . . 2,452
“ counter-balances “	. . . . . 1,165
“ beams or balances “	. . . . . 109
Total number of scales tested	. . . . . <u>9,952</u>

Number of scales tested and found correct	8,459
Number of scales tested and adjusted before seal- ing	626
Number of scales tested and tagged for repairs	512
Number of scales that were repaired as ordered	336
Number of scales that were condemned	19
Total number of scales tested	<u>9,952</u>
Number of weights tested and found correct	29,472
Number of weights tested, found light and ad- justed	2,972
Number of weights tested, found heavy and ad- justed	1,066
Number of weights tested and condemned	57
Total number of weights tested	<u>33,567</u>
Number of dry measures tested and found cor- rect	5,912
Number of dry measures tested and adjusted	141
“ “ “ “ “ condemned	108
Total number of dry measures tested	<u>6,161</u>
Number of wet measures, including glass milk jars and cans, tested and found correct	413,663
Number of wet measures, including milk cans, tested and adjusted	343
Number of wet measures, including milk cans and jars, tested and condemned	7,011
Total number of wet measures, including milk cans, tested	<u>421,017</u>
Number of yardsticks tested and found correct	581
“ “ “ “ “ adjusted	6
“ “ “ “ “ condemned	126
Total number of yardsticks tested	<u>713</u>
Number of charcoal baskets tested and found correct	32
Number of charcoal baskets tested and con- demned	3
Total number of charcoal baskets tested	<u>35</u>

Number of coal baskets tested and found correct,	259
Number of coal baskets tested and condemned,	5
Total number of coal baskets tested	<u>264</u>

In the system of testing and sealing of scales, weights and measures at the places of business where such scales, etc., are used, has given general satisfaction. Many, however, on the score of economy, having such work to be done, send their scales, measures, etc., to have them tested at this office, thus lessening the revenue of the Department; it being the system of the office that work done therein be free of charge.

The amount of work done in the office from February 1, 1900, to February 1, 1901, was as follows:

Scales of all descriptions tested	1,904
Weights tested	6,426
Dry measures tested	1,702
Wet measures, including milk cans, tested	416,558
Yardsticks tested	314
Charcoal baskets tested	16
Coal baskets tested	213
Total pieces tested in office	<u>427,133</u>
Number of portable platforms tested	309
“ counter platforms tested	78
“ spring balances tested	548
“ trip scales tested	762
“ counter balances tested	168
“ beams or balances tested	39
Total number of scales tested	<u>1,904</u>
Number of scales tested and found correct	1,429
Number of scales tested and adjusted before sealing	82
Number of scales tested and tagged for repairs	138
Number of scales that were repaired as ordered	248
Number of scales that were condemned	7
Total number of scales tested	<u>1,904</u>

Number of weights tested and found correct	4,543
Number of weights tested and found light and adjusted	1,159
Number of weights tested and found heavy and adjusted	702
Number of weights tested and condemned	22
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Total number of weights tested	<u>6,426</u>

Number of dry measures tested and found correct,	1,680
“ “ “ “ “ adjusted	9
“ “ “ “ “ condemned	13
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Number of dry measures tested	<u>1,702</u>

Number of wet measures, including milk cans, tested and found correct	309,431
Number of wet measures, including milk cans, tested and adjusted	201
Number of wet measures, including milk cans, tested and condemned	5,926
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Total number of wet measures, including milk cans, tested	<u>315,558</u>
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RECAPITULATION.

Total number of scales tested from February 1, 1900, to February 1, 1901	9,952
Total number of weights tested from February 1, 1900, to February 1, 1901	33,567
Total number of dry measures tested from February 1, 1900, to February 1, 1901	6,161
Total number of wet measures, including milk cans, and jars tested from February 1, 1900, to February 1, 1901	421,017
Total number of yardsticks tested from February 1, 1900, to February 1, 1901	713
Total number of charcoal baskets tested from February 1, 1900, to February 1, 1901	35
Total number of coal baskets tested from February 1, 1900, to February 1, 1901	264
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Total number of tests made of all descriptions,	<u>471,709</u>

EARNINGS OF DEPARTMENT.

Total amount of earnings from February 1, 1900, to February 1, 1901	\$4,196 40
The amount uncollected due Department	348 22
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Balance paid to City Collector	\$3,848 18
Unpaid bills of previous financial year paid to City Collector	276 68
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Total amount collected, which has been paid to the City Collector to be credited to the Department of Weights and Measures from February 1, 1900, to February 1, 1901	<u>\$4,124 86</u>

The decrease in the earnings of this Department is due solely to the increased demand for the inspection of milk and cream jars. The number of jars tested has increased from 111,206 for the year 1898, to 421,017 for the year 1900, 7,011 being condemned as small.

For three months the entire force of the office was engaged continuously in this particular work. If a fee were collected for testing and sealing these jars, on the same basis as that charged for work done outside the office, the revenue derived from sealing the same would amount to \$12,000.

INVENTORY OF PROPERTY IN THE SEALER'S OFFICE BELONGING TO THE CITY OF BOSTON, FEBRUARY 1, 1901.

Standard Avoirdupois Balances.

1 balance and cabinet furnished by the Commonwealth to Suffolk County, in the custody of the Boston Sealer; capacity, 100 lbs.

1 balance and cabinet furnished City of Boston by the Commonwealth; capacity, 100 lbs.

1 balance, sensitive to $\frac{1}{4}$ grain; capacity, 16 lbs.

1 dormant scale, capacity, 2,700 lbs.

1 platform balance, capacity, 300 lbs., sensitive to $\frac{1}{4}$ oz.

1 balance for testing 50-lb. weights, sensitive to 1 grain.

Standard Troy Balances.

1 bank gold balance, sensitive to $\frac{1}{4}$ grain, capacity, \$10,000.

1 jewellers' balance, sensitive to $\frac{1}{16}$ grain; capacity, 12 lbs.

1 apothecaries' balance, sensitive to $\frac{1}{10}$ grain; capacity, 8 lbs.

1 apothecaries' prescription balance, sensitive to $\frac{1}{1000}$ grain; capacity, 3 oz.

Standard Metric Balances.

1 Becker balance, capacity 2 kilograms in each pan, with beam divided into 120 parts, each part corresponds with $\frac{1}{1000}$ of a grain and sensitive to $\frac{1}{10}$ of milligram with scale loaded to full capacity.

1 short-beam analytical Becker balance, with aluminum beam, bows and pans; agate bearings, with adjustable shelf for supporting beaker with water, when taking specific gravities sensitive to $\frac{1}{20}$ of a milligram; capacity, 400 grammes.

Standard Avoirdupois Weights.

1 set of steel weights, 5, 10, 20, 25 and 50 lbs.; 5 weights.

1 set brass weights, from 1 drachm to 4 lbs.; 12 weights.

(The above-named weights belong to Suffolk County.)

1 set of steel weights, 5, 10, 20, 25 and 50 lbs.; 5 weights.

1 set brass weights, from 1 drachm to 4 lbs.; 12 weights.

1 set Tobin bronze weights, from 20 lbs. to $\frac{1}{128}$ of 1 oz.; 19 weights.

Standard Troy Weights,

1 box of gold weights, from \$1,000 to \$5,000; 17 weights.

1 box of gold weights, from 10 dwts. to 3,000 dwts.; 11 weights.

1 box of gold weights, from 10 dwts. to 1,000 dwts.; 9 weights.

1 box of gold weights, from 10 dwts. to 500 dwts.; 9 weights.

1 box of gold weights, from $\frac{1}{2}$ dwt. to 500 dwts.; 19 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 1,000 grains; 23 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 240 grains; 19 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 10 grains; 10 weights.

1 box of gold weights, from $\frac{1}{100}$ grain to 10 grains; 9 weights.

1 set of cup weights, from $\frac{1}{4}$ oz. to 128 oz.; 11 weights.

1 set of cup weights, from $\frac{1}{4}$ oz. to 19 oz.; 8 weights.

1 set of diamond weights, from $\frac{1}{64}$ of carat to 300 carats; 17 weights.

Metric Weights.

1 box of weights, from 10 milligrams to 1 kilogram; 21 weights.

- 1 box of weights, from 1 milligram to 100 grammes ; 25 weights.
 1 box of weights, from 50 kilograms to 200 kilograms ; 6 weights.
 1 box containing 1 kilogram.

Apothecary Weights.

- 1 box of weights, from $\frac{1}{2}$ scruple to 1 oz. ; 7 weights.
 1 set of weights, from $\frac{1}{2}$ scruple to 2 drachms ; 6 weights.

Standard Measures of Length.

- 1 metric meter.
 1 U. S. standard yard measure.

Standard Dry Measures.

- 1 set of iron measures, from 1 qt. to $\frac{1}{2}$ bushel. (5 measures.) Suffolk County standards.
 1 set of iron measures, from 1 qt. to $\frac{1}{2}$ bushel. (5 measures.)
 1 set of iron measures, from 1 qt. to $\frac{1}{2}$ bushel. (5 measures.) City of Boston standards.

Standard Liquid Measures.

- 1 set of iron measures, from 1 gill to 1 gall. (6 measures.) Suffolk County standards.
 1 set of iron measures, from 1 gill to 1 gall. (6 measures.)
 1 set of iron measures, from 1 gill to 1 gall. (6 measures.) City of Boston standards.

*Duplicates of the Standard Weights and Measures.**Working Sets.*

- 7 sealers' try scales.
 2 even balances.
 8 boxes of brass weights, from $\frac{1}{16}$ oz. to 4 lbs. (79 weights.)
 1 set of steel weights, from 5 to 50 lbs. (5 weights.)
 6 sets of brass hook weights, from 1 lb. to 16 lbs. (36 weights.)
 140 U. S. standard 50-lb. weights.
 1 box brass troy weights. (6 weights.)
 1 set of apothecaries' weights, from 1 grain to 6 drachms. (21 weights.)

- 8 sets copper liquid measures, from 1 gill to 1 gall. (48
measures.)
- 2 three-gallon copper measures.
- 1 two-gallon copper measure.
- 28 copper dry measures, from 1 gill to 1 qt.
- 1 set of copper dry measures, from 1 qt. to $\frac{1}{2}$ bushel. (5
measures.)
- 1 copper measure with nozzle, $\frac{1}{2}$ bushel.
- 4 brass yardstick measures.
- 1 charcoal-basket measure.
- 1 upright drill.
- 7 bench drills.
- 1 two-yardstick.
- 4 diamond pencils for marking milk jars.

Horses, Wagons, Tools, etc.

- 6 horses.
- 7 wagons.
- 1 pung.
- 6 sets of harnesses.
- Complete outfit for horses, wagons, etc., miscellaneous
tools.

Office Furniture.

Safe, wardrobe-closet, umbrella-stand, chairs, 2 desks, work-
benches, 2 clocks, counters, racks, stationery, water-cooler, 1
letter-press and stand.

Respectfully submitted,

CHARLES B. WOOLLEY,

Sealer of Weights and Measures.