

Weighed in a Just Balance

Weights and Measures at Meekins Library Williamsburg, Massachusetts

Williamsburg's antique town balance has a prominent place in Meekins Library. What is a town balance, and why is it important? Why is this balance on display in the library? How old is the balance? What was its original purpose? What is the significance of its history? What meaning does this 19th-century Williamsburg town balance have for us who live in the 21st century?

Massachusetts supplied a similar balance to every county, city and town to implement an 1848 Act of the Great and Common Court of the Commonwealth. To complement the balance in its handsome wooden case, the Commonwealth also furnished a complete set of standard weights and measures for each county, city and town. Massachusetts government considered these balances, and the accompanying sets of weights and measures, to be critically important to the fair conduct of commerce.

A balance is a simple mechanical device used to compare weights in a very visible way. For example, the fair and just quantity of butter in "a pound of butter" can be verified by placing the butter on one of the pans of an equal-arm balance, with standard weights (adding up to exactly one pound) placed on the other pan. If the arms (balanced on a knife-edge and moving freely) are level, then any observer can know that the weight of butter is correct, and a seller and a buyer of the butter can be mutually confident that the transaction is fair.

Since antiquity, balances have been vital instruments for regulation of commerce. They have also been symbols of integrity and fairness. In the Bible, we can read:

You shall not have in your bag two kinds of weights, a large and a small. You shall not have in your house two kinds of measures, a large and a small. A full and just weight you shall have, a full and just measure you shall have; that your days may be prolonged in the land which the LORD your God gives you.

— DEUTERONOMY 25: 13–15. *Revised Standard Version*

A false balance is an abomination to the LORD, but a just weight is his delight. A just balance and scales are the LORD'S; all the weights in the bag are his work.

— PROVERBS 16: 1, 11. *Revised Standard Version*

Let me be weighed in a just balance, and let God know my integrity.

— JOB 31: 6. *Revised Standard Version*

Before he became President of the United States, John Quincy Adams spent considerable time and energy investigating various systems of weights and measures. He

was convinced that fairness and justice demand appropriate standards of weights and measures. In 1817, he wrote:

Weights and measures may be ranked among the necessities of life, to every individual of human society. They enter into the economical arrangements and daily concerns of every family. They are necessary to every occupation of human industry; to the distribution and security of every species of property; to every transaction of trade and commerce; to the labors of the husbandman; to the ingenuity of the artificer; to the studies of the philosopher; to the researches of the antiquarian; to the navigation of the mariner, and the marches of the soldier; to all the exchanges of peace, and all the operations of war. The knowledge of them, as in established use, is among the first elements of education, and is often learnt by those who learn nothing else, not even to read and write. This knowledge is rivetted in the memory by the habitual application of it to the employments of men throughout life. Every individual, or at least every family, has the weights and measures used in the vicinity, and recognized by the custom of the place.

—REPORT UPON WEIGHTS AND MEASURES by John Quincy Adams, Secretary of State of the United States, prepared in obedience to a resolution of the Senate of the third March, 1817 (Washington: Gales & Seaton, 1821), pp. 119–120.

The Balance in Human History

According to Lauri Niinistö, Egyptian archeological evidence indicates that equal-arm, two-pan balances were used as early as 5,000 B.C.E. Precision assaying of metals in the 1500s made routine use of equal-arm, two-pan analytical balances. Those assays were precise, accurate and reliable. Re-analysis in 1955 of some medieval samples of gold-silver-copper alloys confirmed 16th century assays within 0.01 to 0.76%. Sensitive analytical balances in the hands of Joseph Black (1728–1799), Joseph Priestley (1733–1804), Antoine Laurent Lavoisier (1743–1794), Claude Louis Berthollet (1748–1822), Louis Joseph Proust (1755–1826), John Dalton (1766–1844) and Jöns Jacob Berzelius (1779–1848) played pivotal roles in the chemical revolution of the 18th century.

Each assayer needed a set of internally consistent weights, calibrated with respect to each other. Determination of the relative amounts of gold, silver and copper in an alloy does not require a standard weight. Chemists concerned with establishing laws of conservation of mass, constant composition and multiple proportions needed sets of calibrated weights that were consistent within a series of their own experiments, but their results did not depend on reference to standards in other laboratories. Determination of the chemical composition of compounds, and the atomic weights of elements, involve measurement of mass *ratios*, not absolute masses, and chemists had little need for standardized weights.

By contrast, *standard* weights and measures are of critical importance in commerce. As John Quincy Adams described in detail in 1817, attempts to establish standards that are practical, acceptable and uniform have been entangled in confusion for centuries. With respect to standards, he wrote:

Of all the tangles of confusion to be unraveled by the regulation of weights and measures, these abuses of language in their nomenclature are perhaps the most inextricable. So that when law comes to establish its principles of permanency, uniformity, and universality, it has to contend not only with the diversities arising

from the nature of things and of man; but with those infinitely more numerous which proceed from existing usages, and delusive language; with partial standards, and misapplied names, which have crept in with the lapse of time, beginning with individuals or families, and spreading more or less extensively to villages and communities.

In this conflict between the domination of usage and of law, the last and greatest dangers to the principle of uniformity proceed from the laws themselves. The legislator having no distinct idea of the uniformity of which the subject is susceptible, not considering how far it should be extended, or where it finds its boundary in the nature of things and of man, enacts laws inadequate to their purpose, inconsistent with one another; sometimes stubbornly resisting, at others weakly yielding to inveterate usages or abuses; and finishes by increasing the diversities which it was his intention to abolish, and by loading his statute book only with the impotence of authority, and the uniformity of confusion.

— REPORT UPON WEIGHTS AND MEASURES, p. 13.

The Articles of Confederation of the United States of America (1778) provided that Congress shall “have the sole and exclusive right and power of ... fixing the standard of weights and measures throughout the United States.” The Constitution (1787) retained the power of Congress to “fix the standard of weights and measures.” Largely because any federal standards would involve changes, some drastic, in state standards, Congress took essentially no action for many years. Finally, on May 19, 1828, Congress passed an act to continue the Philadelphia mint. Section 2 of that act provided that

For the purpose of securing a due conformity in weight of the coins of the United States ... the brass troy pound weight procured by the minister of the United States at London, in the year one thousand eight hundred and twenty-seven, for the use of the mint, and now in the custody of the director there of, shall be the standard troy pound of the mint of the United States, conformably to which the coinage thereof shall be regulated.

According to Arthur Frazier, the 1827 troy pound weight was supplied by British instrument maker Robert B. Bate to British scientist Henry Kater at the request of the U. S. minister Albert Gallatin. The troy pound weight was supposed to be have a weight identical to the imperial troy pound, but Kater found that the copy was slightly too light. Kater made the required adjustment by unscrewing the cover and inserting three tiny pieces of wire. [Individual weights in the Williamsburg set can be adjusted by the same procedure.] The new troy pound standard was unpacked in Philadelphia on October 12, 1827, observed by President John Quincy Adams. The Act of 1828 remained in effect until 1911, when a “standard troy pound of the Bureau of Standards” was adopted as the official United States standard mass. Finally, in the 20th century, international standards of weights and measures were adopted and actually used.

Using a balance of high sensitivity, a complete set of weights can be calibrated to be consistent with a single standard weight in that set. If absolute values of weights are required, then a single standard weight can be purchased with a certificate of “traceability.” The National Institute of Standards and Technology in Gaithersburg, MD, will calibrate a weight based on comparisons traced through the following standards: the NIST stainless-steel working standards, the United States stainless-steel secondary standard, the United States platinum-iridium primary national standard, and the

International Bureau of Weights and Measures platinum-iridium international prototype kilogram. This international standard mass was deposited on June 22, 1799, in the Archives de la République in Sèvres, a suburb of Paris, where it remains. Today, the pound is defined in terms of the kilogram. To convert from avoirdupois pounds to kilograms, multiply by the factor 0.45359237.

Weights and Measures in Massachusetts

Cited in *The General Laws and Liberties of the Massachusetts Colony* is a Massachusetts Act of 1647 (see Appendix A) that sought to make certain standards of capacity, length and weight uniform throughout the Colony. Dry measures of bushel and peck were specified but not defined. In 1647 and today, the size of a legal bushel depends on what commodity is being measured; today the size of a bushel in the United States varies from state to state. The Act of 1647 specified standards for two different systems of liquid measure: fractions of the ale gallon and fractions of the wine gallon. For linear measurements, the eln and the yard are listed. The “eln” is the Anglo-Saxon spelling of “ell”, a linear measure used chiefly for cloth; *Webster’s New Collegiate Dictionary* (1956) gives the value of the English ell as 45 inches. The standard brass weights (with 16 ounces to the pound) were avoirdupois weights for ordinary commodities, rather than troy weights (for precious metals) or apothecaries’ weights, both of which have twelve ounces to the pound and different definitions of “pound.”

Under the provisions of the Act of 1647, the selectmen and the constables of each town were to choose a Sealer of Weights and Measures. The treasurer of the Colony, in some manner not specified by the Act, needed to procure the weights and other standards; the likely sources in England were the Exchequer at Westminster and the Guildhall in the City of London. In 1680, the Massachusetts Colony obtained new scales, weights and measures from London. In the Colony, there was hope that these newly purchased weights and measures could be treated as standards, reliably traceable to the English standards.

Notwithstanding legislation promulgated in Boston, not all towns complied with demands that they obtain a balance and the standard weights and measures. Two hundred years later (see Appendix B), the General Court enacted a statute strikingly similar to the Act of 1647. The Act of 1847 contained the words “The treasurer of each county, and the treasurer of each town, shall keep, *at the expense of such county, city, or town*, respectively, a complete set of the said weights, measures, and balances, except the troy weight.” Clearly, the expense of purchasing a town’s balance, weights and measures was to be born by the town, and this substantial expense would have to be brought to town meeting before being authorized. There is indirect legislative evidence that many towns refused to appropriate the funds, inasmuch as the General Court felt obliged to amend the law a year later, with the revision: “There shall be furnished, to the treasurer of each county, and the treasurer of each city and town, in this Commonwealth, *at the expense of the Commonwealth*, a complete set of the standard weights, measures, and balances” With this commitment of state funding, the Boston firm of Howard & Davis seized the opportunity to contract for the manufacture and supply of at least some of these balances, weights and measures for the towns. Another impetus for action by Howard & Davis was the delivery of the first set of Massachusetts standard weights, based on the 1827 troy pound, to Cambridge in 1846 from the United States Office of Weights and Measures.

Howard & Davis

Howard & Davis, located at 34 Water Street in Boston, constructed the double-pan, fifty-pound-capacity beam balance for the Town of Williamsburg to conform to 1847 and 1848 Acts and Resolves of the Great and General Court of the Commonwealth of Massachusetts. According to that legislation, each town in the commonwealth was required to keep a balance and specified standard weights and measures, and was required to appoint a Sealer of Weights and Measures.

Edward Howard (1813–1904) was born in Hingham. His earliest work was in the foundry trade, casting iron plough blades. Before he was 18 years old, he began a seven-year apprenticeship with the master clock-maker Aaron Willard, Jr., in Roxbury. In Willard's shop, Howard became friends with a fellow apprentice, David P. Davis. Throughout the 1830's, under Willard's instruction, the two young men mastered the skills required for making the finest Massachusetts clocks of their day. By 1840, Howard had opened a foundry in Hingham, and was operating a factory that produced both clocks and balances.

In 1847, Edward Howard and David Davis formed a business partnership. They called their firm simply Howard & Davis. The partnership continued under that name until 1858. Howard & Davis manufactured clocks and balances. E. A. Marsh wrote that Howard & Davis had a contract in 1848 with the Commonwealth of Massachusetts for supplying standard weights and measures. They also built fire engines; an advertisement for a Howard & Davis fire engine is pasted on the interior of the Williamsburg balance case. The dates of the Massachusetts legislation and this history of the Howard & Davis firm suggest that the Williamsburg balance was constructed during the decade between 1848 and 1858.

In 1849, Edward Howard and David Davis, together with Aaron Lufkin Dennison (1812–1895) and Samuel Curtis (a Boston venture capitalist), organized the American Horologe Company for the manufacture of watches. Dennison is said to have been the first person to apply the system of interchangeable parts, which he had observed in operation at the United States Armory in Springfield, to the manufacture of watches. American Horologe Company was separate and distinct from that of Howard & Davis. Their factories were located on opposite sides of Water Street in Boston.

Weights and Measures in Williamsburg

The Act of 1848 (see Appendix C) required the treasurer of each town to provide, at the expense of the town "some suitable place ... for the safe and suitable keeping and preservation of said weights, measures, and balances." The Town Hall, built in 1841 in the center of Williamsburg village (and since 1971 the Williamsburg Historical Society Museum), would have been a "suitable place." Wherever the weights, measures and balance were housed, they survived the Great Mill River Flood of 1874. Eventually, the balance in its substantial case was moved to the Meekins Library building (dedicated in 1897) where it remains.

The current legislation (Chapter 98, Section 5 of the Massachusetts General Laws) provides that "Towns shall keep the following standard weights, measures and balances: A set of avoirdupois weights consisting of fifty, twenty-five, twenty, ten, five, four, two

and one pounds, and eight, four, two, one, one half, one quarter, one eighth and one sixteenth ounces; a set of dry measures consisting of one half-bushel, one eight-quart, one four-quart, one two-quart, one one-quart, one pint and one half-pint; a set of liquid measures consisting of one gallon, one half-gallon, one quart, one pint, one half-pint and one gill; one balance; one yard measure.” It appears that this is the set of weights and measures that was originally supplied with the balance. The fifty-pound weight is missing.

The 50, 25, 10, 5, 4, 2 and 1 sequence permits a combination of weights to be assembled on a balance pan to yield every integral number of pounds up to the capacity of the balance. This sequence is almost the same as was used for United States coins when the two-cent piece (minted 1864 to 1873) and the three-cent piece (minted 1851 to 1873) were in circulation; it is a sequence that does not require any duplicate weights. The 8, 4, 2, 1, $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$ and $\frac{1}{16}$ sequence for ounces is different, based entirely on multiples of two. This sequence permits a combination of weights to be assembled on a balance pan to yield integral numbers of ounces, up to one pound. These smaller weights were called “fractionals.”

Section 6 of the Act of 1848 provides that “In every town the sealer shall, at the expense of the town, provide therein accessible places for the safe and suitable keeping and preservation of the standards furnished by the commonwealth, which shall be used only as standards. The sealer shall have the care and oversight thereof; shall see that they are kept in good order and repair; and if any are lost, destroyed or irreparably damaged, shall, at the expense of the town, replace them by similar standards.”

It is likely that the town treasurer was in charge of implementing the requirements of the weights and measures laws in Williamsburg. Annual printed town reports give the following Sealers of Weights and Measures.

- Thomas F. Lenihan 1926. Lenihan concurrently held the offices of Selectman, Overseer of Poor, member of the Board of Health, and Sealer of Weights and Measures.
- George H. Bisbee 1931–1939
- Frederick LaValley July 20, 1940–May 19, 1941
- Leslie H. Taylor May 19, 1941–1949

Town Meeting appropriations were made to the “Sealer of Weights and Measures” until at least 1966.

Symbol of justice and integrity in society, a practical regulatory tool of commerce, and a fundamental instrument of quantitative science and engineering — the EQUAL-ARM BALANCE is a visual and mechanical representation of humanity’s age-old search for objective fairness and demonstrable truth. The Williamsburg balance at Meekins Library is an elegant cultural artifact. It is also a powerful visual reminder of the important place of accepted standards and easily understood procedures for achieving law and order, for facilitating everyday transactions, for organizing manufacturing and for investigating nature. When its two arms—balanced on a knife-edge and able to move freely under the influence of gravity—are level, any observer is convinced that the two pans suspended

from these arms carry equal loads. The impressive artisanship of the mechanism is representative of the industrial revolution that was in full flower in New England when the Williamsburg balance was constructed. That artisanship is also consistent with the precision clock-making and watch-making training and tradition of the men who designed and manufactured the balance. The practical and symbolic significance of the balance and its associated weights and measures is reflected in the fine cabinetwork of the wooden case in which they are housed.

Appendices

Appendix A. Act of 1647

The General Laws and Liberties of the Massachusetts Colony, pp. 155–156. An act of 1647.

To the end *Measures and Weights may be one and the same throughout this Jurisdiction*;

It is Ordered by the Authority of this Court; That the Country Treasurer shall provide upon the Countries charge, Weights and Measures of all sorts, for continual Standards, to be Sealed with the Countries Seal, viz. *one Bushel, one half Bushel, one Peck, one half Peck, one Ale quart, one Wine pint, and half pint, one Eln, one Yard*, as also a set of Brass Weights to four pound, which shall be after *sixteen Ounces to the Pound* with fit *Scales*, and *steal Beams* to weigh and try withal.

And the Constable of every Town within this Jurisdiction, shall within three Moneths after publication hereof, provide upon the Town charge, all such Weights, at least of Lead, and also sufficient Measures as are above expressed, tried and Sized by the Country Standards, and Sealed by the said Treasurer, or his Deputy in his presence, (which shall be kept and used only for Standards for their several Towns) who is hereby Authorized to do the same, for which he shall receive from the Constable of each Town *two pence* for every *Weight and Measure* so proved, sized and sealed. And the said Constable of every Town, shall commit those *Weights and Measures* unto the custody of the Selectmen of their Towns for the time being, who with the said Constable are hereby enjoined to chuse one able man to be Sealer of such *Weights and Measures* for their own Town from time to time, and till another be chosen, which man so chosen, they shall present to the next County Court, there to be sworn to the faithful discharge of his duty, who shall have power to send forth his Warrants by the Constable, to all the Inhabitants of their Town to bring in all such *Measures and Weights* as they make any use of, in the second Moneth from year to year, at such time and place as he shall appoint, and make a return to the Sealer in Writing of all persons so summoned; that then and there all such Weights and Measures may be proved and sealed with the Town Seal, (such as in the Order for Town Cattle) provided by the Constable at each Towns charge; who shall have for every Weight and Measure so Sealed *one penny* from the Owners thereof at the first Sealing. And all such Measures and Weights as cannot to brought to their just Standard, he shall deface or destroy, and after the first sealing shall have nothing so long as they continue just with the Standard.

And the Constable of every Town within this Jurisdiction, shall within three Moneths after publication hereof, provide upon the Town charge, all such Weights, at least of Lead, and also sufficient Measures as are above expressed, tried and Sized by the Country Standards, and Sealed by the said Treasurer, or his Deputy in his presence, (which shall be kept and used only for Standards for their several Towns) who is hereby Authorized to do the same, for which he shall receive from the Constable of each Town *two pence* for every *Weight and Measure* so proved, sized and sealed. And the said Constable of every Town, shall commit those *Weights and Measures* unto the custody of the Selectmen of their Towns for the time being, who with the said

Constable are hereby enjoined to chuse one able man to be Sealer of such *Weights* and *Measures* for their own Town from time to time, and till another be chosen, which man so chosen, they shall present to the next County Court, there to be sworn to the faithful discharge of his duty, who shall have power to send forth his Warrants by the Constable, to all the Inhabitants of their Town to bring in all such *Measures* and *Weights* as they make any use of, in the second Moneth from year to year, at such time and place as he shall appoint, and make a return to the Sealer in Writing of all persons so summoned; that then and there all such *Weights* and *Measures* may be proved and sealed with the Town Seal, (such as in the Order for Town Cattle) provided by the Constable at each Towns charge; who shall have for every Weight and Measure so Sealed *one penny* from the Owners thereof at the first Sealing. And all such *Measures* and *Weights* as cannot to brought to their just Standard, he shall deface or destroy, and after the first sealing shall have nothing so long as they continue just with the Standard.

And that none may neglect their Duty herein;

It is further Ordered by the Authority aforesaid: That if any Constable, Selectmen, or Sealer, do not execute this Order as to every of them appertains, they shall forfeit to the Common Treasury *forty shillings* for every such neglect, the space of one Moneth, and also that every person neglecting to bring in their *Weights* and *Measures* at the time and place appointed, they shall pay *three shillings four pence* for every such default, one half part whereof shall be to the Sealer, and the other half to the Common Treasury, which the Sealer shall have power to leave by distress from time to time.

Appendix B. Act of 1847

An ACT concerning *Weights, Measures, and Balances.* Chap 242.

BE it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. The several avoirdupois and troy weights and balances, procured from the government of the United States for this Commonwealth, by the commissioners appointed for that purpose, in the year one thousand eight hundred and thirty-five, and also all weights, measures, and balances that have since been received from the said government, for the purpose of being used as standards, shall hereafter be used as the sole authorized public standard of weights and measures of this Commonwealth, and shall be in the care and custody of the Treasurer of the Commonwealth.

SECTION 2. The said balances, weights, and measures, shall be preserved by the Treasurer, and used as public standards, and are as follows, namely: one half bushel, one wine gallon, one wine quart, one wine pint, one wine half-pint, one yard measure; also, a set of avoirdupois weights, consisting of fifty, twenty-five, twenty, ten, five, four, three, two, one pounds, and from eight ounces down to one dram; also, one set of troy weights, from five thousand pennyweights down to half a grain, and from one pound down to the ten thousandth part of an ounce: and three sets of balances.

SECTION 3. The seals, used by the various sealers of weights and measures, shall hereafter be as follows to wit:

by the Treasurer of the Commonwealth, and his Deputy, the letters C. M.; by the county treasurers, the initial and final letters of their respective counties, followed by the letters Co.; by town and city sealers, the name of their respective towns and cities, or such intelligible abbreviation thereof as the selectmen of the towns, or the mayor and aldermen of cities, may prescribe.

SECTION 4. Each sealer of weights and measures, including the State deputy and county treasurer, shall receive a fee of three cents for every weight, measure, scale, beam, or balance, by him sealed, except platform-balances; and a reasonable compensation for all repairs, alterations, and adjustments thereof, which maybe necessary for him to make.

SECTION 5. Every sealer of weights and measures shall, in the month of May, annually, give public notice, as provided in the sixteenth section of the thirtieth chapter of the Revised Statutes, for every inhabitant of his town or city, who uses weights and measures for the purpose of buying or selling, and for public weighers who have the same, to bring in their measures, weights, balances, scales, and beams, to be examined, adjusted, and sealed, and he shall forthwith adjust and seal all weights and measures brought to him for that purpose. And every person who shall presume to sell by any other weights, measures, scales, beams, or balances, than those which have been sealed as before provided, or as provided in the following section, shall forfeit and pay a sum not exceeding twenty dollars for every such offence; one half to enure to the use of the town or city, the other half to the complainant.

SECTION 6. The sealers of every town and city shall go, once in every year, to every hay-scale or platform-balance, which cannot be readily removed, and try, adjust, and seal the same, for which he shall be entitled to a fee of one dollar and fifty cents for every such scale or platform-balance, weighing five thousand pounds and upwards; and for every scale or platform-balance, weighing less than five thousand pounds, he shall be entitled to a fee of fifty cents; and all repairs and alterations, which it shall be necessary for him to make, shall be the subject of an additional charge. Any person using such scale or platform-balance, in buying or selling, that has not been so tried, adjusted, and sealed, at least once in every year, shall be subject to the same forfeiture as provided in the fifth section of this act, to be appropriated in the manner therein provided. And no sealer of weights and measures, except for the purposes of this section, shall carry his standard of weights, measures, and scales, from one place to another, for the purpose of adjusting others within the town or city.

SECTION 7. Every county treasurer shall, once at least in every ten years, at the expense of the county, have the county standards tried, adjusted, and sealed by the Treasurer of the Commonwealth or his deputy; and every town and city sealer shall, once at least in five years, at the expense of the town or city, have the town or city standards tried, adjusted, and sealed by the treasurer of the county in which the sealer resides, or by the Treasurer of the Commonwealth or his deputy. And every treasurer or sealer, who shall refuse or neglect to have their standards sealed as herein provided, shall forfeit, to the use of the Commonwealth, a sum not exceeding fifty dollars.

SECTION 8. The treasurer of each county, and the treasurer of each town, shall keep, at the expense of such county, city, or town, respectively, a complete set of the said weights, measures, and balances, except the troy weight. Said weights and measures shall be made of copper, cast brass, or cast iron; the weights of four pounds, and all under that weight, to be made of brass; the larger weights may be made of iron; and all to be turned and finished. The liquid and dry measures shall be made of durable thickness, and, if made of brass or iron, shall be turned inside, and on the top edge or rim. The balances shall be made of brass, steel, or iron, and, in all cases, the edges and bearings shall be of hardened steel or agate. The dry measures to be made, in form and dimensions, to conform to the aforesaid standard; all to be proved, sealed, and marked, by said standard as aforesaid.

SECTION 9. All acts and parts of acts, inconsistent with the provisions of this act, are hereby repealed. [*Approved by the Governor, April 23, 1847.*]

Appendix C. Act of 1848

Ch 332. An ACT in addition to “An Act concerning Weights, Measures, and Balances.”

BE it enacted by the Senate and House of Representatives, in General Court assembled, and by the authority of the same, as follows:

SECTION 1. There shall be furnished, to the treasurer of each county, and the treasurer of each city and town, in this Commonwealth, at the expense of the Commonwealth, a complete set of the standard weights, measures, and balances, such as the treasurer of each county and the treasurer of each town is required to keep, at the expense of such county, city, or town, respectively, by the provisions of the eighth section of an act passed on the twenty-third day of April, in the year one thousand eight hundred and forty-seven, and to which this act is in addition.

SECTION 2. The treasurer of each county, and the treasurer of each city and town, shall provide, at the expense of such county, city, and town, respectively, some suitable place, in their said counties, cities, or towns, for the safe and suitable keeping and preservation of said weights, measures, and balances; and all expenses attending the boxing, putting up, transporting, and depositing in their destined locations, said weights, measures, and balances, shall be defrayed by the counties, cities, and towns, respectively.

SECTION 3. The treasurer of each county, and the treasurer of each city and town, shall have the care and oversight of said weights, measures, and balances, and shall see that the same are kept in good order and repair; and, in case they are lost, destroyed, or irreparably damaged, shall replace the same by similar weights, measures, and balances; and all expenses incurred under the provisions of this section shall be defrayed by the counties, cities, and towns, respectively.

SECTION 4. If the treasurer of any county, city, or town, shall neglect to provide a suitable place to keep the said weights, measures, and balances, or shall neglect to keep them in good order and repair, or shall suffer them to be lost, damaged, or destroyed, through his neglect, contrary to the true meaning and intent of this act, he shall forfeit the sum of two hundred dollars, to be recovered by indictment to the use of the Commonwealth.

SECTION 5. Every town and city treasurer shall, once at least in ten years, at the expense of the town or city, have the town or city standards of weights, measures and balances, tried, adjusted and sealed, by the treasurer of the county in which the city or town is situated, or by the treasurer of the Commonwealth, or his deputy; and every town or city treasurer, who shall neglect to have the standards under his charge, sealed as herein provided, shall forfeit to the use of the Commonwealth a sum not exceeding fifty dollars.

SECTION 6. So much of the eighth section of an act, entitled “An Act concerning weights measures and balances,” and to which this act is in addition, as provides that certain weights, measures, and balances, named in that act shall be provided and kept at the expense of the counties, cities, or towns, is hereby repealed, and all acts and parts of acts inconsistent with the provisions of this act are hereby repealed. [*Approved by the Governor, May 10, 1848.*]

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Williamsburg, Massachusetts
March 2009

¶ It is anticipated that a corrected and revised version of this pamphlet will be prepared in Summer 2009. Corrections and additional information should be submitted to George Fleck, P.O. Box 301, Williamsburg, MA 01096-0301 [email: gfleck@smith.edu]. Particularly needed is evidence of the date when the balance was acquired, evidence of the location of the balance before it was transferred to Meekins Library, and more information (with names and dates) about the persons who served Williamsburg as Sealers of Weights and Measures.