

BIRTH AND DEATH REGISTRATION IN MASSACHUSETTS

III. THE SYSTEM ACHIEVES A FORM, 1849-1869*

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FOR the present paper, I have chosen to limit my discussion of the development of birth and death registration in Massachusetts to the period between 1849 and 1869. In the latter year, a State Board of Health, the first in any American state, was established. Although there were many noteworthy reforms in the operation of the registration system in the towns and cities during these twenty years, which justify a separate discussion of the period, it was notable chiefly for the struggle which took place over the administration of the system by the Secretary of State in Boston. On the one side, there were members of the General Court, who apparently were satisfied to have the system retain its traditional position as an arm of the office of the Secretary. Opposed to them were individuals and groups, primarily physicians, who wished to transfer the responsibility for registration to a government department made up of medical personnel. The inauguration of the Board in 1869 finally resolved this controversy, and the birth and death registration system acquired a form which it retained all through the remainder of the nineteenth century and which it has even today.

BIRTH REGISTRATION, 1849-1869

One of the major defects of vital registration in the towns and cities of Massachusetts in 1849 was the continued under-registration of births. Almost twenty per cent of the births which occurred in the State were overlooked. Underregistration was most pronounced in the medium-sized communities, those of 1,500 to 10,000 inhabitants. These were the settlements with relatively dense and mobile populations, which

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unfortunately lacked the resources to conduct a census of births. Very small towns did not change their composition rapidly and the clerks could gather a fairly complete record of their births through hearsay or by making an annual canvass of the residents. In general, the largest towns and the cities had the most complete birth registration. Their officials were likely to have the understanding, the financial resources and the facilities to conduct a regular census of births. Even so, many infants were overlooked in a city such as Boston because often immigrants who had given birth there already were on their way to another community in Massachusetts or to another part of America at the time the canvass was conducted.¹

The problems involved in securing complete and accurate birth information in urban populations were very inadequately understood by the State legislature which framed the existing laws, although this was not true of some of the early students of statistics and statistical systems, such as Lemuel Shattuck. Shattuck realized, at least as early as 1843, that probably the best way to assure full registration would be for physicians and midwives to report to the town clerks all the births which they attended. In view of the large proportion of births that occurred without any professional person in attendance, Shattuck knew that this technique would not be sufficient by itself. But neither was a census alone adequate, and Shattuck saw in the reports of physicians and midwives a procedure that would help to bridge the gaps in the system. His suggestion was ignored, however, even by the committee which he chaired and which reported the proposed bill of 1849.² The plan was ad-

¹ For a discussion of the accuracy of birth registration at this period, see the following sources. Gutman, Robert: *Birth and Death Registration in Massachusetts: II. The Inauguration of a Modern System, 1800-1849*. *Milbank Memorial Fund Quarterly*, October, 1958, xxxvi, No. 4, pp. 399-400. Also, Gutman, Robert: *The Birth Statistics of Massachusetts During the Nineteenth Century*. *Population Studies*, 1956, x, pp. 69-94. Then, Gutman, Robert: *THE ACCURACY OF VITAL STATISTICS IN MASSACHUSETTS, 1842-1901*. Ann Arbor: University of Michigan Microfilm Series, 1956, pp. 114-231.

² Shattuck's first statement of the plan appears in "Letter from Lemuel Shattuck, Esq." in *Massachusetts, Secretary of State: Second Annual Report to the* (Continued on page 299)

vanced again in 1855, by N. A. Appolonio, the City Registrar of Boston, who addressed a petition on the matter to the General Court. Here was the testimony of an expert witness! For six years, Boston had had a relatively efficient census, conducted each January and May by the staff of the *Boston Directory*; yet Appolonio knew that many births, especially the births of immigrants, were overlooked by the canvassers. The General Court appointed a special committee to consider the subject, but they reported unfavorably on his proposal.³

Several factors lay behind the widespread reluctance to require physicians and midwives to report births. Only a short time before, the State government had relinquished the responsibilities of licensing physicians, and some legislators felt that to involve medical practitioners in the registration system again might require a state-sponsored program for distinguishing between competent and less expert physicians and midwives. Physicians themselves objected to the proposal. The Massachusetts Medical Society worried that the government would not set up standards for reporters of births and that its lack of action might be interpreted as approving those practitioners whom the members of the Society regarded as

Legislature . . . Relating to the Registry and Return of Births, Marriage and Deaths. Boston, Dutton and Wentworth, 1843, pp. 64 ff. (In future references to this series of reports, they will be listed as Second Registration Report, Third Registration Report, and so on.)

For the report of the 1849 committee which Shattuck headed, see Massachusetts, LEGISLATIVE DOCUMENTS OF THE HOUSE OF REPRESENTATIVES OF THE GENERAL COURT OF THE COMMONWEALTH, 1849, No. 65, pp. 55-57. (In future references to this series of documents, they will be listed simply as HOUSE DOCUMENTS. The equivalent series for the Senate of the General Court will be listed simply as SENATE DOCUMENTS.)

³ Appolonio's petition and its legislative history are recorded in Massachusetts, *Journal of the House of Representatives of the General Court of the Commonwealth*, 1855, *passim*. (In subsequent references, this source, and the *Journal* of the Senate, will be listed as *House Journal* and *Senate Journal*, respectively.) The condition of the registration system of Boston is discussed in the successive reports of the City Registrar, beginning with the year 1849. These reports are catalogued under Boston: REPORT BY THE CITY REGISTRAR OF THE BIRTHS, MARRIAGES AND DEATHS IN THE CITY OF BOSTON FOR THE YEAR . . . and are included in the collection known as BOSTON CITY DOCUMENTS.

The existing law still provided that parents and householders should register the births of their kin or those which came to their attention, but few people knew of the provision and fewer complied with it. See *Boston Medical and Surgical Journal*, 1868, p. 226.

"quacks." Besides, doctors were reluctant to undertake obligations at the request of the government, particularly duties for the performance of which they would not be paid at all, or for which they would receive, at best, a very small fee. Town and city clerks did not like the idea either. Appolonio had suggested that the towns and cities pay physicians and midwives twenty-five cents for each birth reported. Clerks objected that they, the clerks were paid a smaller sum, only twenty cents, for performing the four tasks of collecting, recording, indexing and returning the record of birth.⁴

In spite of the failure of the State government to reform the law regulating birth registration, a larger proportion of births appear to have been registered in 1860 than in 1850.⁵ A glance through the financial reports of selected communities in Massachusetts indicates that this improvement probably resulted from the fact that more towns, especially towns of 1,500 to 10,000 inhabitants, were conducting censuses of births.⁶ As the population of these communities expanded, the clerks received sufficient income from their other duties so that they could afford to delegate the less remunerative tasks, such as birth recording, to special personnel hired for this purpose.

After the Civil War, the plan advocated first by Shattuck, and then by Appolonio, was adopted for a very brief period. In 1865, the General Court passed a law which did require physicians and midwives to report births and made it the duty of the towns and cities to pay them twenty-five cents for each

⁴ The reasons for the objection to the proposal are taken, partly by direction and partly by inference, from Massachusetts, Secretary of State, INSTRUCTIONS CONCERNING THE REGISTRATION OF BIRTHS, MARRIAGES AND DEATHS IN MASSACHUSETTS, DESIGNED FOR TOWN CLERKS AND PHYSICIANS. Boston, Wright and Potter, 1866; and from editorials and letters in the *Boston Medical and Surgical Journal* for the 1870's dealing with the objections of physicians to the granting of medical certificates of the causes of death; as well as from the history of the registration of physicians described in Fitz, M.D., Reginald H.: *The Rise and Fall of the Licensed Physician in Massachusetts, 1781-1860. Transactions of the American Association of Physicians*, 1894, ix, pp. 1-18.

⁵ Gutman, Robert: *The Birth Statistics of Massachusetts During the Nineteenth Century. loc. cit.*, p. 76.

⁶ The Massachusetts State Library in the State House in Boston has the best collection of financial reports of towns and cities in Massachusetts.

event returned. It is a sad commentary on the state of demographic and statistical science in Massachusetts at the time that the Medical Society and the American Statistical Association took no part in supporting the proposal. It was introduced on the recommendation of the city clerk of Lowell who, like the Registrar of Boston a decade before, believed that the semiannual canvass conducted in his city did not list all the births.⁷

The bill was repealed in 1866, not, however, because it failed to achieve its aim. On the contrary, a study of the reports of individual towns and cities reveals that physicians and midwives returned births in about one-third of the communities in Massachusetts. The law was repealed for the reasons which had interfered with the enactment of similar bills in earlier years, including the opposition of physicians and town and city clerks. In addition, Secretary of State Oliver Warner, the State official most directly concerned with the operation of the registration system, exhibited an ambivalent attitude toward the law. Warner did believe that it would lead to the more complete registration of births over the long-run, especially in the communities of 1,500 to 10,000 inhabitants, where the censuses of births were least effective. But he was disturbed by evidence, such as that given in the returns of Salem, that the law had led some clerks to abandon the census of births. Apparently these clerks believed that the reports of the physicians and midwives would cover all the births which occurred.⁸

By 1870, the underregistration of births had been reduced

⁷ The law is listed as Chapter 96 in Massachusetts; ACTS AND RESOLVES PASSED BY THE GENERAL COURT IN THE YEAR 1865. Boston, Wright and Potter, 1865. The petition is mentioned in Massachusetts, *House Journal*, 1865, p. 67. A copy of the petition is available along with the manuscript of the law in the files of the Massachusetts State Archives in the State House in Boston.

The complaint that births were missed by the annual census was common as late as 1868. See, Massachusetts, Twenty-Seventh Registration Report, p. 6.

⁸ The views of the Secretary of State and others are included in Massachusetts, Secretary of State: INSTRUCTIONS CONCERNING THE REGISTRATION OF BIRTHS, MARRIAGES AND DEATHS IN MASSACHUSETTS, DESIGNED FOR TOWN CLERKS AND PHYSICIANS. Boston, Wright and Potter, 1866, *passim*. The birth returns of Salem are listed in Massachusetts, Twentieth to Twenty-Seventh Registration Reports which include the returns for the years between 1861 and 1868.

to below ten per cent.⁹ To some extent, the improvement was the consequence of the more widespread and more efficient use of the censuses of births that began in the previous decade. The achievement of registration completeness during the 1860's also was aided by the increase in the fee paid to town clerks for recording births, an increase from twenty to thirty cents.¹⁰ The law requiring physicians and midwives to report births was a third contributing factor, short-lived as it was. According to the financial reports of the local communities, in a handful of towns in the State, especially small towns, these persons continued to return births even after the bill was repealed, and the town governments paid them for doing it.

DEATH REGISTRATION COMPLETENESS, 1849-1869

The obstacles which stood in the way of reforms in the birth registration law after 1849 did not operate with respect to the death registration system. Clerks in the towns and cities generally welcomed the measures designed to increase the completeness of death returns. Sextons and undertakers, who stood in somewhat the same relation to death registration as did physicians and midwives to the registration of births, did not balk nearly so much at the efforts to include them in the system. Perhaps of even greater importance was the fact that there was less public apathy toward the registration of deaths than there was with regard to births. Not even the professional organizations were much concerned with the trend of fertility; whereas a host of persons and groups, from the Secretary of State to the Massachusetts Medical Society, were intent on improving the completeness of death registration.

About fifteen per cent of the deaths which occurred in Massachusetts in 1850 were not included in the returns received by the office of the Secretary of State in that year. The under-registration was caused almost exclusively by incomplete recording in the individual towns and cities which filed a return.

⁹ Gutman, Robert: *The Birth Statistics of Massachusetts During the Nineteenth Century*, *loc. cit.*, p. 76.

¹⁰ Massachusetts, Twenty-Sixth Registration Report, p. cliii.

The situation thus contrasted with that before 1849, when the principal cause of underregistration was the failure of many town and city clerks to file any information at all with the Secretary.¹¹ There were only ten delinquent towns in 1850; and, by means of repeated admonitions addressed by the Secretary in correspondence to the local governments, all towns and cities came to file returns by 1858.¹²

The absence of full death registration on the local level had several sources. Private farm burials, supervised by the families of the deceased, were still common in this period throughout the rural counties of Massachusetts. The General Court had been advised to outlaw this type of burial in 1850 because of its often unfortunate sanitary consequences, but the legislature refrained from doing so for fear of offending the folk tradition that a farmer should be buried on the land he tilled.¹³ Many such burials were never recorded. Beginning with a law passed in 1855, however, all towns were required to have town burying grounds, supervised by local sextons.¹⁴ And during the Civil War, and in the years immediately following, private cemetery corporations were established in rapidly increasing numbers.¹⁵ So, even though private burial was not outlawed, many fewer such burials took place in the late 1850's and after,

¹¹ See Gutman, Robert: *Birth and Death Registration in Massachusetts: II. The Inauguration of A Modern System, 1840-1849. loc. cit., p. 393.*

¹² Massachusetts, Seventeenth Registration Report. The activities of the successive incumbents of the office of Secretary of State in behalf of improving the returns is described in the prefaces they wrote to the Registration Reports. All towns continued making returns after 1858 until 1869, when Charlton, a town of about 2,000 people in Worcester County, suddenly failed to return births for the year 1868. The Secretary of State thereupon requested the Attorney-General to prosecute the town government, the first instance of such an action since the inauguration of a modern registration system in 1842. See Massachusetts, Twenty-Seventh Registration Report, p. vi.

¹³ Massachusetts: Commissioners on the Sanitary Survey, *REPORT ON A GENERAL PLAN FOR THE PROMOTION OF PUBLIC AND PERSONAL HEALTH*. Boston, Dutton and Wentworth, 1850, p. 186. Also see, Habenstein, Robert and Lammers, William: *THE HISTORY OF AMERICAN FUNERAL DIRECTING*. Milwaukee, Buffin, 1955, pp. 422-428.

¹⁴ Massachusetts: *Supplements to the Revised Statutes of the Commonwealth of Massachusetts*. Boston: Dutton and Wentworth, 1854-1859, 2, pp. 174-176.

¹⁵ The dates of the formation of cemetery committees and the establishment of cemeteries in Massachusetts are usually given in the annual financial reports of the towns and cities.

and therefore probably a smaller number of deaths were overlooked for this reason.

Except in the cities, deaths often were not registered when the body was removed for burial from the town where the death occurred to another community.¹⁶ The clerk in the town where the death took place assumed that it would be recorded in the town to which the body was taken, and *vice versa*. The practice of removing bodies for burial evidently was quite common, as the records of Milton, a town in Middlesex County whose clerks kept careful registers, show (Table 1). The opposite possibility—that there would be duplicate returns because the death would be registered both where it occurred and where the body was buried—did not present a sizable threat to registration accuracy because the returns were checked for precisely this error when they reached the Secretary's office in Boston.¹⁷ Deaths by violence and accidental deaths were often missed, too. It was usual to hold a coroner's inquest in these cases, but the coroner was not obliged by law to make a report of the death to the Secretary of State. A proposal to require

¹⁶ Local ordinances regulating the removal of bodies are listed in the municipal registers and books of charters and ordinances published every few years by the cities and large towns in Massachusetts. The Massachusetts State Library, in the State House, Boston, has an excellent collection of these sources.

¹⁷ It was easy to check the reports for duplicate returns after 1849 because the law enacted in that year required that the returns list both the place of death and the place of interment. According to Amasa Walker, the Secretary of State, many deaths were eliminated for this reason during the preparation of the Eighth Registration Report. The proportion of such duplicate returns to the total returns of death must, however, have been very small. Walker lists it as only one of the reasons why returns were omitted from the abstracts in 1849, but he speaks of all of the reasons together as having caused the elimination of "many" returns, not a "large number" or a "great proportion." None of the contemporary documents dealing with registration between 1842 and 1849 mention duplicate returns as a weakness of the existing system. The Secretary of State does not refer to it, nor do the various reports prepared by committees of the General Court, nor does Shattuck, although it was his habit to offer a long list of the defects of the existing system. On the other hand, people were aware of duplicate returns as a possible menace. In his circular letters to the town clerks, the Secretary of State emphasized repeatedly that the returns of deaths, and for that matter, the returns of births and marriages, too, were supposed to list only vital events which took place within the boundaries of the clerk's own community. In view of the fact that the administrators of the system were aware of the danger and yet did not believe the danger had been realized, I am led to conclude that duplicate returns were rare before 1849. For Walker's comments, *see* Massachusetts: Eighth Registration Report, p. iv. An example of the warning of the Secretary will be found in Massachusetts, Third Registration Report, p. vii.

	TOTAL DEATHS	INTERRED IN MILTON	INTERRED ELSEWHERE	PERSONS DYING ELSEWHERE INTERRED IN MILTON
1859	52	38	14	
1860	51	39	12	
1861	49	28	21	
1862	47	30	17	18
1863	44	30	14	21
1864	60	37	23	19
1865	56	34	22	22
1866	40	14	26	6
1867	43	31	12	17
1868	45	20	25	15
1869	39	15	24	22
1870	36	18	18	9
1871	37	13	24	17
1872	47	16	31	18
1873	41	26	15	72
1874	61	30	31	21
1875	52	25	27	19
1876	38	17	21	29
1877	48	21	27	22
1878	33	17	16	27
1879	64	28	36	33
1880	44	23	21	28
1881	51	24	27	28
1882	64	35	29	22
1883	60	29	31	12
1884	62	35	27	26
1885	60	39	21	30
1886	52	24	28	39
1887	63	38	25	28
1888	74	48	26	45
1889	60	27	33	32
1890	69	43	26	49
1891	72	35	37	24
1892	71	40	31	31

SOURCE: Milton, Massachusetts: TOWN REPORTS, 1859/60-1892.

Table 1. Interments of persons dying in Milton, Massachusetts, and deaths occurring elsewhere interred in Milton.

such a report from him was introduced before the General Court in 1855, but failed to carry.¹⁸

Probably the most important source of death underregistra-

¹⁸ On the duties of coroners at this date, *see* Massachusetts: REVISED STATUTES OF THE COMMONWEALTH OF MASSACHUSETTS. Boston, Dutton and Wentworth, 1836, p. 36 and pp. 768-770. For the proposed bill which did not pass, *see* Massachusetts; SENATE DOCUMENTS, 1855, No. 80.

tion after 1849 also had been the cause of difficulties in the preceding decade: the lack of cooperation on the part of sextons and the increasing number of individuals who adopted the undertaking profession. A study of the financial reports of towns and cities for the 1850's indicates that sextons and undertakers reported deaths in only one-half of the communities in the State at this time. This meant that throughout the period discussed in this paper clerks had to resort to the method of recording deaths which had become traditional after 1842, namely, to inquire into deaths at the same time that they made the annual or semi-annual canvass of births. Clerks also sought out sextons and undertakers and examined the death records kept by medical practitioners.¹⁹ In spite of the poor performance of sextons and undertakers, it is worth noting that their cooperation was superior during the 1850's to what it had been between 1844 and 1849.²⁰ Their increasing participation was partly the consequence of the licensing of undertakers and the appointment of superintendents of burial grounds in many towns and cities which had taken advantage of the powers granted them by the Board of Health Act of 1849. All the cities which existed in Massachusetts in 1850 had licensed undertakers, and the earliest ordinances passed by the towns which acquired a municipal form of government after 1849, such as Lynn and Taunton, provided for the appointment of undertakers.²¹

There were, in other words, four defects in the system for securing complete death registration after 1849. Private burials were tolerated, the removal of bodies was not regulated except

¹⁹ See Gutman, Robert: *Birth and Death Registration in Massachusetts: II. The Inauguration of A Modern System, 1800-1849*, *loc. cit.*, p. 384.

²⁰ *Ibid.*, pp. 382-383 and 393-394.

²¹ Massachusetts: *ACTS AND RESOLVES . . . 1849*. Boston, Dutton and Wentworth, 1849, chap. 211. Lynn achieved municipal status in April 1850 and licensed undertakers in June of the same year. Lynn, Massachusetts: *MUNICIPAL REGISTER OF THE CITY OF LYNN . . . Lynn, H. J. Butterfield, 1850*. Taunton became a city in 1864. In April of 1867 the Aldermen approved an ordinance to appoint a superintendent of burial grounds. Taunton, Massachusetts: *THE CITY CHARTER, LAWS AND ORDINANCES, RULES AND ORDERS OF THE . . . CITY OF TAUNTON*. Taunton, C. A. Hock and Son, 1870, pp. 98-100.

in the cities, coroners did not have to report violent deaths, and it was still easy for sextons and undertakers to circumvent the requirement to report deaths. In the twenty year period which separated 1849 and the formation of the State Board of Health, little was done to cope with the first three of these problems. The record of the General Court and the Secretary of State was somewhat better with respect to the question of returns by sextons and undertakers. The impetus for change, however, did not come from the office of the Secretary but rather from the Massachusetts Medical Society and the American Statistical Association. This was similar to what happened during the earliest years of the modern registration system. The successive incumbents of the Secretary's office were not unaware of the weaknesses of the system; rather they were already so overburdened with the day-by-day job of supervising registration along with their other duties that they had little time or opportunity to press for revision of the registration law.²² Furthermore—and this point cannot be repeated often enough—although an occasional Secretary of State appreciated the medical and statistical import of vital records, most incumbents still regarded them primarily as legal documents, useful in settling estates or in deciding the claims of paupers. Viewed from this perspective, the operation of the system was quite adequate, except, of course, for those births or deaths which were not recorded at all. And it ought to be remembered, too, that even though the Secretaries may not have initiated the bills for reform of the law, they often lent their support to the proposals, at least to those proposals not designed to totally eliminate their control of registration.

The Medical Society and the Statistical Association stimulated reform by addressing petitions and memoranda to the General Court calling the attention of the legislature to the poor performance of sextons and undertakers and recommending amendments to the statutes. For instance, in 1855, the Medical Society asked that the legislature *require* towns to

²² Massachusetts: SENATE DOCUMENTS, 1855, No. 80, p. 2.

license undertakers, instead of merely giving them the right to do so; and that the licensed undertakers be dismissed from office if they did not return deaths. The Committee on Towns considered the suggestion, and reported a bill in favor of it, but the bill was voted down by the Senate.²³ The same recommendation was made in another petition addressed to the General Court by the Medical Society in 1856, but it failed to pass, too.²⁴ As an alternative method for controlling undertakers, the 1855 petition suggested that town clerks be given the power to initiate proceedings against sextons and undertakers who failed to perform their duty under the existing law, and that the proceeds of any penalty be divided between the town and the clerk himself. This plan, too, was not enacted.²⁵ It was incorporated in the petition the Medical Society sent in 1856, and in petitions addressed to the General Court by the Society and the Statistical Association in 1859, but again bills growing out of these petitions failed to pass.²⁶ Finally, in 1859, a measure designed to cope with the problem of delinquent sextons and undertakers did receive the approval of the General Court. It required that the person supervising an interment register the death *before* burial, and that he obtain a certificate attesting to this fact from the town clerk.²⁷ The idea for such a law had been suggested several times in the 1840's by Shattuck and others. In fact, Boston had adopted the rule in 1822, when it became a city, and other communities did likewise when they became cities during subsequent decades.²⁸ The plan had never

²³ Massachusetts: SENATE DOCUMENTS, 1855, No. 80. Also *Senate Journal*, 1855, pp. 169, 482 and 504.

²⁴ Massachusetts: SENATE DOCUMENTS, 1856, No. 96. Also *Senate Journal*, 1856, *passim*.

²⁵ Massachusetts: SENATE DOCUMENTS, 1855, No. 80. Also *Senate Journal*, 1855, *passim*.

²⁶ Massachusetts, SENATE DOCUMENTS, 1859, No. 111. The legislative history of the bills arising from these petitions is described in the *Senate and House Journals* for 1859.

²⁷ The full text of the law is given in Massachusetts, Eighteenth Registration Report, pp. cxlii-cxliv.

²⁸ See the municipal registers and the books of charters and ordinances of the various cities as well as Boston, Registry Department, *BILLS OF MORTALITY*, 1840-1849, CITY OF BOSTON. Printed for the Registry Department, 1893, pp. xv-xvi.

before received serious consideration in the legislature probably because it was viewed as restricting the right of private burial. And indeed, the full text of the law was more moderate than the description I have given of it would indicate, because it stated that the undertaker was to register the death before burial only *when practicable*.²⁹

One other measure was written into law in 1860 which was intended to cope with the situation confronting the clerks because of the lack of cooperation of undertakers. In many towns, as I have noted above, it was the practice of clerks to fill the gaps of their death records at the same time as they conducted the canvass of births. Many clerks complained, through their representatives in the General Court, and by letter to the Secretary of State, that they were thus put at a disadvantage compared to clerks in towns in which the undertakers reported deaths. According to the existing law, these clerks argued, they could not demand a larger fee from the town governments for recording *and collecting* deaths than clerks who had only to record them. To compensate clerks who already were contributing this additional effort, as well as to stimulate others who should have been doing so, the legislature, at the suggestion of the Secretary of State, raised the fee for recording deaths to twenty cents for the first twenty entries and ten cents for each entry thereafter.³⁰ Six years later, the logic of the provision was extended. A law enacted in 1866 specified that in cases where undertakers and sextons did not make returns as required by law, and clerks were forced to obtain and record the information, the fee was raised to twenty cents for *each* death returned.³¹

None of the new laws or amendments to existing laws seem to have had any direct influence on the completeness of death

²⁹ This qualification to the law was probably motivated, too, by a reluctance to restrict private burials. See the following sources which give a hint of the issues involved in the debate over the precise text of the law: Massachusetts: *House Journal*, 1859, II, *passim*; and *Senate Journal*, 1859, II, *passim*. Also see Massachusetts: HOUSE DOCUMENTS, 1859, Extra Session, Nos. 284 and 301.

³⁰ Massachusetts: Eighteenth Registration Report, appendix.

³¹ Massachusetts: Twenty-Fourth Registration Report, appendix.

registration, at least no influence that was significant enough to reveal itself clearly in the returns made during the years immediately following their enactment. At the same time, it would appear that the completeness of death registration improved continuously between 1849 and 1869, so that by the latter year no more than three or four per cent of the deaths which occurred in Massachusetts failed to be registered.³² This degree of underregistration represented a considerable decline from the level of almost fifteen per cent which prevailed in 1849. The improvement may have been the gradual and cumulative result of the laws passed in the 1850's and 1860's, or it may just as likely have represented the consolidation of the reforms introduced into the death registration system by the law of 1849. In any case, it would seem that the necessity for complete death registration was widely accepted in Massachusetts by the time the State Board of Health was established in 1869 and that the system for recording the full number of deaths was remarkably efficient. When the question of the accuracy and fullness of the cause of death data is considered, or the quality of the Reports dealing with the returns is evaluated, then, as we shall see, successful achievement did not come about nearly so easily nor so quickly.

CAUSES OF DEATH AND THE REGISTRATION REPORTS, 1849-1860

In the period between 1842 and 1849, the major concern of the architects and critics of the Massachusetts birth and death registration system had been to secure complete recording in the towns and cities of the State. To some extent, as the events I have just finished describing show, this concern continued after 1849, but it no longer dominated the discussion regarding registration. When the members of the Massachusetts Medical Society or the American Statistical Association came together, they spent only a brief time arguing about how undertakers could be made to return deaths to town clerks or

³² Gutman, Robert: *THE ACCURACY OF VITAL STATISTICS IN MASSACHUSETTS*, . . . , pp. 180-181, 231 and *passim*.

whether deaths should be registered prior to burial. Instead, they devoted most of their efforts to discussing what could be done to improve both the returns of the causes of death and the Registration Reports which summarized them.³³ When the registration system was set up originally, it was hoped that these problems might solve themselves as local governments became aware of the importance of vital statistics. But with the passage of the 1849 law, it became clear that fairly complete registration of births and deaths in the towns and cities did not necessarily imply accuracy and efficiency in the other features of the system. Indeed, the very progress of the system toward registration completeness heightened the awareness of the continued deficiencies in the raw cause of death data and the Registration Reports.

Six per cent of the deaths returned in 1849 were returned with no cause of death stated. (In Table 2 these deaths are listed under the heading "unknown.") In addition, many deaths were ascribed to such diseases as teething (a frequently assigned cause of death in the case of children), consumption (a favorite category into which one could place any death which was preceded by a gradual wasting away), or old age (sometimes given as the cause of death of children!). At the same time, relatively few deaths were said to have been caused by heart disease, cancer or stillbirth (Table 2). It can be argued, and with good reasons, that heart ailments and cancer were less common during the middle of the nineteenth century than four or five decades later; yet it is unlikely that the death rates from these diseases were as low as the returns indicated. And so far as stillbirths are concerned, undoubtedly the deaths from this cause were proportionately larger around 1850 than

³³ See the following sources: Burrage, Walter L.: A HISTORY OF THE MASSACHUSETTS MEDICAL SOCIETY, Boston: privately printed, 1923, pp. 137 ff; MEDICAL COMMUNICATIONS OF THE MASSACHUSETTS MEDICAL SOCIETY WITH AN APPENDIX CONTAINING THE PROCEEDINGS OF THE SOCIETY, Boston, printed for the Society, 1839-1849, *passim*. The statement regarding the meetings of the Statistical Association is conjectural, based on the contents of the petitions it addressed to the General Court. The manuscript minutes of the Association meetings for the years 1852 to 1872 could not be found at the present offices of the Association in Washington, D.C., although the minutes for earlier and later years were available.

REPORT	YEARS	CHOLERA INFANTUM	DEBILITY	INFANTILE DISEASES	TEETHING	0
First	1841-2					
Second	1842-3					
Third	1843-4	1.1	0.3	8.0	0.4	
Fourth	1844-5	1.3	0.2	5.2	0.4	
Fifth	1845-6	2.8	0.1	13.0	0.3	
Sixth	1846-7	2.1	0.3	6.5	0.6	
Seventh	1847-8	1.5	0.3	1.6	0.6	
Eighth	1849	1.9	0.3	3.2	0.8	
Ninth	1850	1.6	0.4	4.7	0.9	
Tenth	1851	2.0	0.8	4.1	1.0	
Eleventh	1852	2.0	0.5	5.9	1.1	
Twelfth	1853	2.5	0.4	4.6	1.1	
Thirteenth	1854	2.6	0.5	6.5	1.5	
Fourteenth	1855	3.0	0.4	6.3	1.4	
Fifteenth	1856	2.0	2.7	6.6	1.4	
Sixteenth	1857	—	—	—	—	
Seventeenth	1858	2.9	0.3	6.5	1.3	
Eighteenth	1859	3.4	0.1	6.4	1.1	
Nineteenth	1860	—	—	—	—	
Twentieth	1861	—	—	—	—	
Twenty-First	1862	3.6	0.5	6.2	1.4	
Twenty-Second	1863	3.5	0.4	5.7	1.0	
Twenty-Third	1864	3.9	0.3	5.1	0.9	
Twenty-Fourth	1865	4.1	0.5	5.7	1.3	
Twenty-Fifth	1866	4.2	0.5	6.7	1.0	
Twenty-Sixth	1867	4.0	0.4	7.6	1.3	
Twenty-Seventh	1868	5.3	1.4 ^a	1.9 ^a	1.0	
Twenty-Eighth	1869	5.1	1.2	1.7	1.1	
Twenty-Ninth	1870	6.5	1.2	1.9	1.2	
Thirtieth	1871	5.4	1.2	1.9	1.2	

Table 2. Percentage of deaths assigned to specified causes—Massachusetts, excluding Boston, 1843/4-1871 inclusive.

afterward. Perhaps the most disappointing aspect of the cause of death data to knowledgeable persons of the period was that these deficiencies in the returns did not seem to have been alleviated by the 1849 law.

So far as the Registration Reports are concerned, their users complained that they did not present a continuous series of tables which permitted easy comparison of fertility and mortality from one year to the next.³⁴ In one Report, towns which

³⁴ See Massachusetts, SENATE DOCUMENTS, 1852, No. 141. Also see HOUSE DOCUMENTS, 1853, No. 50; SENATE DOCUMENTS, 1855, No. 80; SENATE DOCUMENTS, 1858, No. 46; and SENATE DOCUMENTS, 1859, No. 111.

HEART DISEASE	PNEUMONIA	CONSUMPTION	CANCER	PERITONITIS	STILLBORN
1.3	4.1	19.8	1.1	—	0.6
1.4	4.0	24.0	1.1	0.13	0.8
1.6	2.6	23.1	1.2	0.05	1.2
1.9	4.6	22.2	1.1	0.06	1.4
2.0	3.8	21.2	1.0	0.01	1.3
1.7	4.0	19.3	0.7	0.04	1.2
2.3	5.0	22.7	1.0	0.04	1.6
2.2	4.8	21.9	1.0	0.03	1.8
2.4	4.4	23.5	1.0	0.02	2.4
2.3	4.4	24.0	1.0	0.08	2.1
2.2	3.9	22.7	1.0	0.04	1.8
2.5	4.4	24.0	1.5	0.04	2.9
2.7	4.7	23.6	1.2	0.01	2.7
—	5.1	—	—	—	—
2.8	5.7	22.3	1.4	0.07	2.9
2.8	5.7	23.0	1.5	0.08	2.5
—	—	—	—	—	—
—	—	—	—	—	—
3.2	5.2	19.6	1.4	0.1	3.4
2.9	6.2	16.7	1.1	0.2	2.3
2.6	6.3	16.4	1.1	0.1	2.1
3.1	5.7	16.8	1.4	0.1	2.2
3.6	6.9	19.4	1.7	0.2	3.3
3.9	6.3	19.5	1.4	0.2	3.8
3.9	6.4	17.7	1.5	0.1	2.8
3.6	6.5	18.2	1.8	0.1	3.0
3.6	6.5	18.9	1.9	0.2	2.4
3.6	6.9	18.9	1.9	0.2	2.4

SOURCE: Third to Thirtieth Registration Reports inclusive.

* The rise in the proportion of deaths ascribed to "Debility" and to "Unknown" as well as the decline in the percentage ascribed to "Infantile Diseases" are a result of a new classification introduced into the Registration Reports beginning in 1868. Before this year, the term "Infantile Diseases" included not only the deaths returned as "Premature" or "Infantile" but also those under two years of age from "Debility" and "Unknown" causes. Beginning in 1868, however, deaths, at whatever age, ascribed to "Debility" or "Unknown" are listed as they were returned. After 1868, the category "Unknown" also included deaths previously classified under "tumor," "hemorrhage," and "inflammation." Massachusetts, Twenty-Seventh Registration Report, p. cv.

made returns were listed separately from those which did not, but in a later Report, both groups were represented in a single table. Retrospective tables, comparing the returns of different years, were included in some Reports before 1849, but not in the Eighth Report. The latter omission was particularly distressing, since the Eighth Report was the first to be published under the 1849 law, and it would have been extremely con-

venient to compare at a single glance the results of the new law with those from the previous laws. Persons less familiar with statistical method—and this category, of course, included most of the readers of the Reports—were greatly annoyed with the failure of the Reports to provide more in the way of interpretive guides. Which towns had the most complete returns? To what extent were the cause of death data reliable? Were precipitous changes in the total number of deaths in the State from year to year evidence of improved registration or did they signify spreading epidemics? Many of these questions, which can be answered now looking back on a series of returns for successive years, could often have been answered at the time by the editors of the Reports, but they were not. Readers complained, too, about the general lack of discursive text. The report for 1849 included thirty-six pages of commentary by Dr. Josiah Curtis, a founder of the American Medical Association and United States delegate to the first International Statistical Congress, but the report for 1850 reverted to an older form and included a commentary only four pages in length written by some clerk in the Secretary's office.³⁵

Readers educated in statistics were disturbed by the reliance which the reports placed on certain indices of vital events whose spurious character already had been recognized by competent statisticians in the early nineteenth century. Probably the outstanding example of this defect was the repeated use made of the *average age of decedents* as a measure of the healthfulness of different counties in Massachusetts or of the State as a whole in comparison with other areas of the United States and Europe.³⁶ Another disturbing feature of the tabular portions was that they failed to list the age of decedents by towns. This made it difficult to study the relative healthfulness of different communities, a weakness of the reports which was

³⁵ For a discussion of Curtis' career, see Shryock, R. H.: The Origin and significance of the American Public Health Movement. *Annals of Medical History*, n.s. I (1926), p. 647. Also see Curtis, Josiah: On Registration in the United States of America, and Levi, Leone: Resume of the Statistical Congress at Brussels, *Journal of the Statistical Society of London*, 1854, xvii, pp. 43-44 and 1-14 respectively.

³⁶ Massachusetts, SENATE DOCUMENTS, 1855, No. 80.

noted by the State officials in charge of mental and reform institutions. These officials wished to establish a new hospital and girls' school; they turned to the reports hoping to find some sign of a salubrious environment in which to locate the school, only to discover that the relevant information was lacking in the tables.³⁷ The absence of these data also prohibited the construction of a reliable life table. Deaths by age for the State as a whole were inadequate for this purpose because it was well known that registration was not equally complete in all communities. Before a life table could be constructed—so, at least, went the argument at the time—it was essential that towns with less accurate or less complete registration be eliminated from the computation. Without tables showing deaths by age for each town, it was impossible to recognize which communities these were.³⁸

In trying to cope with the weaknesses of cause of death data and the Registration Reports, the Medical Society and the Statistical Association assigned the major share of blame to the office of the Secretary of State. There were many reasons for this emphasis. In the first place, they felt that reform on the local level was hopeless, because it involved traditions and practices beyond the reach of their influence. The second reason was the obverse of this belief. The Secretary of State was a clearly defined individual, responsive to the wishes of the General Court. If the legislature could be persuaded of the need for changes in his administration of registration, he would have to comply. In the third place, both groups saw, or thought they saw, in the possible reform of the Secretary's conduct of the system, an opening wedge through which to achieve another goal they held jointly, namely, the formation of a State Board of Health. The fourth, and perhaps most important reason, was that the Secretary's administration of the system

³⁷ *Ibid.*, p. 2.

³⁸ Elliott, E. B.: On the Law of Human Mortality That Appears to Obtain in Massachusetts with Tables of Practical Value Deduced Therefrom. PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE. Cambridge, Joseph Lovering, 1858, xi, p. 52.

was inefficient, when judged in terms of its contribution to medical and statistical studies. The successive incumbents of the office had made little effort to improve the accuracy of registration once all the towns and cities in the State had begun to file returns of births and deaths. They did not, for instance, try to acquaint the clerks and registrars with a proper classification of the causes of death. Various Secretaries allowed ordinary clerical employees to decide what information should be tabulated for the Annual Reports.

The first evidence of a radical effort to deal with the situation appeared in 1850. During the previous legislative year, around the time the registration law of 1849 was being considered, the General Court appointed a commission, with Shattuck as chairman, to survey the sanitary condition of the State. This was the group which published the famous report, some of whose recommendations bearing on burial practices have been noted earlier. When the report was issued in 1850, it included a bill suggesting the appointment by the Governor of a State Board of Health. The Board, in turn, was to be charged with the duty of selecting a Secretary to superintend and execute its responsibilities including all the duties formerly "imposed upon the Secretary of State relating to the registry and return of births, marriages and deaths."³⁹ The members of the General Court as a whole did not consider the report seriously and the bill was allowed to die.⁴⁰ The idea of a State Board of Health was too new, at least for Americans. Disease was a great mystery, the possibility of preventing disease through social control was not appreciated by laymen, and physicians were held in low repute. No other State had yet

³⁹ Massachusetts: Commissioners on the Sanitary Survey, *REPORT OF A GENERAL PLAN FOR THE PROMOTION OF PUBLIC AND PERSONAL HEALTH*. Boston, Dutton and Wentworth, 1850, p. 309.

⁴⁰ There is more than the usual amount of material published dealing with this bill since the report to which it was appended marked an important advance in the public health movement in the United States. In addition to the report itself, three sources are valuable for understanding the background of the bill. Burrage, *op. cit.*, pp. 139-140; Whipple, George C.: *STATE SANITATION*. Cambridge, Harvard University Press, 1917, I and II, *passim*; and MacDonald, Eleanor J.: *A History of the Massachusetts Department of Public Health*. *The Commonwealth*, 1936, 23, pp. 83 ff.

established a board of health, and Great Britain, the acknowledged leader in such social reforms, had set up a board of health for the first time only two years previously.⁴¹ These facts did not, however, inhibit organized dissatisfaction with the Secretary of State's administration of the registration system. In 1853, the General Court received a petition from Dr. James Jackson on behalf of the Medical Society. The petition requested that the legislature consider "the expediency of establishing a General Board of Health, or failing that, the office of registrar-general."⁴² The latter office would resemble the department which had been created within the British government in 1837, the director of which was charged with the duties of collecting vital statistics and supervising the decennial census.⁴³ A joint special committee of the General Court, with a physician, Dr. Winslow Lewis, as its chairman, was appointed to consider the petition and presented a wholly favorable report with an accompanying bill. With the exception of one significant innovation, this bill, as distinguished from the petition, was in most other respects like the bill proposed in 1850. The exception was a provision which would have required the registrar-general to submit his registration report to a committee of the Massachusetts Medical Society for their consideration before he sent it to the printer. Although this provision had not been recommended by Dr. Jackson's petition, it had been suggested in some of the medical journals as a way of coping with the poor quality of the Registration Reports. Indeed, the law inaugurating the Rhode Island registration system, which was passed in 1853, incorporated a similar provision.⁴⁴ Certain more liberal members of the Whig

⁴¹ See Shryock, Richard H.: *THE DEVELOPMENT OF MODERN MEDICINE*. New York: Alfred Knopf, 1947, Chaps. IX, X and XII, *passim*; and Lewis, R. A.: *EDWIN CHADWICK AND THE PUBLIC HEALTH MOVEMENT, 1832-1854*. London, Longmans, 1952, *passim*.

⁴² Massachusetts, HOUSE DOCUMENTS, 1853, No. 50. The legislative history of the bill and petition appear in *House Journal* and *Senate Journal* for the year 1853.

⁴³ See Massachusetts, First Registration Report, pp. 38-46.

⁴⁴ Rhode Island, Secretary of State: *FIRST ANNUAL REPORT RELATIVE TO THE REGISTRY AND RETURN OF BIRTHS, MARRIAGES AND DEATHS IN THE STATE, 1852-1853*, p. iv.

party, which controlled both the Governorship and the membership of the General Court in these years, were instrumental in having the bill considered, but they could not command a majority in either the House or the Senate, and the bill did not pass.⁴⁵

In this bill, in spite of its having failed, we can perhaps see more clearly than in the recommendation of the Sanitary Commission, the underlying logic of the attempt to eliminate or limit the Secretary's control of registration. If the poor quality of both the returns of the causes of death and the Registration Reports were the fault of the Secretary, the core of the problem, so it was argued, was the staff of ordinary clerks in his department who compiled the returns and also wrote the Reports. Therefore, it was said, the solution lay in transferring control of registration to a physician, or to a person who at least had some experience with medical matters or who was under the supervision of medical personnel—whether or not the State Board of Health was established. This reasoning was revealed even more fully in 1855. In March of that year, N. A. Appolonio, the Registrar of Boston, sent to the General Court his request that physicians and midwives be required to report births. The petition was referred to a joint special committee on the subject, chaired by Dr. Winslow Lewis again. It was typical of the work of the legislature of this year, ruled as it was by the "Know Nothing" party and including an unusually large number of doctors, teachers, and clergymen, that the committee should have ignored Appolonio's request and concentrated instead on more fundamental issues. It proposed a bill which would have reorganized the registration system in the form of a new department devoted exclusively to registration *within* the Secretary of State's department. But the committee was unable to secure the full support of the General Court and this bill, like its predecessors, failed to pass.⁴⁶ Simi-

⁴⁵ Ware, Edith E.: *POLITICAL OPINION IN MASSACHUSETTS DURING CIVIL WAR AND RECONSTRUCTION*. Columbia University Studies in History, Economics and Public Law, LXXIV, No. 2. New York, Columbia University Press, 1917, p. 16.

⁴⁶ See Massachusetts: *HOUSE DOCUMENTS*, 1855, No. 264; and Massachusetts, (Continued on page 319)

lar legislation relating to registration was considered in 1858, when Dr. James Metcalf, a prominent member of the Medical Society who was also a State Senator, introduced petitions from the Society and the American Statistical Association calling for the appointment of a state registrar. The failure of this bill, the realignment of political parties because of the formation of the new Republican party, and the growing obsession over the slavery issue—all these factors did not deter the advocates of a new department, for in 1859, the same two organizations again presented their petitions, but once more the bills growing out of the petitions were not enacted.⁴⁷

None of the four bills introduced before the General Court between 1853 and 1859 linked the reform of registration with the establishment of a State Board of Health. The critics of registration were sufficiently politic to recognize that to do so would guarantee the defeat of their proposals. For several reasons, however, the bills failed in spite of this strategy. In the first place, the proposals seemed to ignore the fact that most people, including the Secretaries of State themselves, still regarded vital records as primarily legal documents, to be treated like other legal documents. This meant that they should be collected, edited and published by the Secretary, whose job it was to assemble the official documents and records sent to Boston by the towns and cities.⁴⁸ In the second place, to put medical personnel in charge of registration would have implied that the State was giving physicians authority over town clerks. Viewed in this way, the proposals of the Medical Society and Statistical Association were clearly unacceptable. In the third

House Journal, 1855, *passim*. The composition of the General Court in 1855 and its political orientation are discussed in Haynes, George H.: *A Know-Nothing Legislature*. ANNUAL REPORT OF THE AMERICAN HISTORICAL ASSOCIATION FOR THE YEAR 1896. Washington, Government Printing Office, 1897, pp. 175-187.

⁴⁷ See Massachusetts: SENATE DOCUMENTS, 1858, No. 46 and SENATE DOCUMENTS, 1859, No. 111. For a discussion of the politics of the General Court in this year, see Ware, *op. cit.*, pp. 19-21. In accounting for the profusion of petitions and bills, it is perhaps important to understand that a new General Court was elected each year during this period.

⁴⁸ The duties of the Secretary are indexed under the heading "Secretary of the Commonwealth" in Massachusetts: THE GENERAL STATUTES OF THE COMMONWEALTH OF MASSACHUSETTS . . . PASSED DECEMBER 28, 1859. Boston, Wright and Potter, 1860.

place, the proposals failed because the fiscal problems of the State were severe enough in the 1850's that new departments or other additions to the work of the executive branch of the government could not be afforded. The emphasis of legislative reform, in fact, was all in the opposite direction, toward the reduction of State expenditures. Indeed, for a period of two years, around the time of the Great Panic of 1857, when the General Court commissioned a special audit of the office of the Secretary of State, it looked as if the registration system might be abandoned altogether, or at the least, have some of its operations curtailed.⁴⁹

THE PUBLIC HEALTH MOVEMENT, 1860-1869

For a few years, the clamor for a separate department of vital statistics or for a board of Health which would include the supervision of vital statistics, was stilled. There were two reasons for this hiatus. As a result of the prodding of the professional societies, the Secretaries of State for the period 1856-1859, Francis de Witt and Oliver Warner, took a more active part in making the vital records useful to physicians and statisticians. For instance, in 1857, Warner distributed a booklet of instructions to the town clerks designed to familiarize them with the standard classification of the causes of death adopted by the new professional organization of physicians, the American Medical Association.⁵⁰ The Secretary also wrote to the

⁴⁹ The panic of 1857 is discussed in Bullock, C. J.: *HISTORICAL SKETCH OF THE FINANCES AND FINANCIAL POLICY OF MASSACHUSETTS FROM 1780 TO 1905*. New York, Macmillan, 1907, pp. 51-53. For a note on some of the effects of the panic see Curtis, John G.: *Industry and Transportation (1820-1889)*, in Albert B. Hart, (ed.): *COMMONWEALTH HISTORY OF MASSACHUSETTS*. New York, The States History Co., 1930, iv, p. 431.

The inquiry into the affairs of the Secretary's office as these related to registration are described in the following sources: *Massachusetts: SENATE DOCUMENTS*, 1857, No. 206; *Massachusetts, SENATE DOCUMENTS*, 1858, Nos. 6 and 10; and *Massachusetts, HOUSE DOCUMENTS*, 1858, No. 39.

⁵⁰ *Massachusetts, Secretary of State: INSTRUCTIONS RELATING TO THE REGISTRY AND RETURN OF BIRTHS, MARRIAGES AND DEATHS IN MASSACHUSETTS*. Boston, William White, 1857. The American Medical Association was organized in 1848, following National Medical Conventions held in 1846 and 1847. The classification of diseases grew out of the deliberations of a committee appointed at the Convention of 1846. Of the five members of the committee, two came from Massachusetts: Lemuel Shattuck and Dr. Edward Jarvis. *Proceedings of the National Medical Conventions held in New York, May, 1846 and Philadelphia, May, 1847*, pp. 20-21.

clerks recommending that they make their entries relating to the causes of death as full and detailed as possible, leaving it to the staff in the State House to classify the information in terms of the nosology of diseases.⁵¹ These measures had some of their intended effect. The deaths assigned to the category "unknown" declined, whereas other causes based on approved medical terminology, such as pneumonia, rose in proportion (Table 2). Taking cognizance of the criticisms leveled against the Registration Reports, the Secretary hired Dr. Edward Strong in 1855 to oversee the tabulation of the returns. Dr. Strong was an eminent Boston physician and a member of the Medical Society;⁵² and his training quickly showed itself when, for the first time, the Report for 1855 classified deaths by age and sex for each town and city in Massachusetts.⁵³ During this period, the Secretary also committed his office to the practice of having a competent physician discuss the tables included in the Reports.

The other cause of the temporary lapse in the movement to reorganize the system was a law passed by the General Court in 1859 which was designed to improve the records of the causes of deaths kept by undertakers and clerks. The law required physicians to provide town and city clerks with a certificate of the cause of death, *if the clerk requested them to do so within fifteen days of the death*. It was adopted as part of the revision and recodification of the General Statutes of Massachusetts.⁵⁴ In spite of the general pessimism in the Medical Society and the Statistical Association over the possibility of influencing registration practices on the local level, their members believed the law should have an opportunity to prove itself. Furthermore, the content of the debate over the law made the

⁵¹ Massachusetts: Fourteenth Registration Report, p. vii.

⁵² *Ibid.*, p. vii.

⁵³ It is to this event that we can attribute the construction of the first reliable American life table, that developed by E. B. Elliott for 1855. See, Elliott, E. B.: *op. cit.*, p. 53.

⁵⁴ See Massachusetts: REPORT OF THE COMMISSIONERS ON THE REVISION OF THE STATUTES. Boston, Wright and Potter, 1858, pp. 196-198; and Massachusetts: AMENDMENTS TO THE COMMISSIONERS' REPORT OF THE REVISED STATUTES. Boston, Wright and Potter, 1859, pp. v, xviii and 34.

critics realize that the General Court, while receptive to minor amendments of the sort represented by the legislation of 1859, was not inclined to incorporate in the Revised Statutes major administrative changes in the system.⁵⁵

In 1861, the agitation in behalf of a board of health and vital statistics started up again with the dispatch of a petition to the General Court on behalf of three groups: the Massachusetts Medical Society, the American Statistical Association and the Boston Sanitary Association.⁵⁶ Several events helped to revive activity. The experiment with physicians' certificates seemed to be a failure. The new law had gone into effect in 1860, yet the proportion of deaths for which the cause of death was not stated did not diminish in that year. Nor was there much evidence that those nosological terms which competent practitioners frowned upon using, such as teething or debility, had become less common in the returns as a consequence of the law (Table 2). The Civil War had begun and this event renewed the physicians' fears of epidemics and other sanitary nuisances, and at the same time raised their hopes that the General Court would at last recognize the need for registration reform.⁵⁷ The public health movement was gaining a new degree of acceptance through the formation in different parts of the State of organizations designed to educate laymen and to arouse in them a concern for sanitary problems. Any resident of Boston, for instance, could become a member of the Boston Sanitary Association upon the payment of one dollar annual dues. Meetings were held every second week in the auditorium of the State House at which prominent physicians, sanitarians, and government officials gave talks on health.⁵⁸ Apparently

⁵⁵ The original proposal on which the bill was based is given in Massachusetts: HOUSE DOCUMENTS, 1859, Extra Session, No. 284. The legislative history of the bill can be found in Massachusetts: *House Journal*, 1859, Part II, *passim*.

⁵⁶ See Massachusetts: SENATE DOCUMENTS, 1861, No. 127. Also see Boston Sanitary Association, MEMORIAL OF THE B.S.A. TO THE LEGISLATURE OF MASSACHUSETTS, ASKING FOR THE ESTABLISHMENT OF A BOARD OF HEALTH AND VITAL STATISTICS. Boston, State Printing Office, 1861.

⁵⁷ Shryock, Richard H.: *op. cit.*, p. 235.

⁵⁸ Boston Sanitary Association, CONSTITUTION, OFFICERS AND CIRCULAR. Boston, 1861.

prior to the formation of these organizations, only professional persons were admitted to membership in public health groups.

The petitions of the three groups were considered by a special committee of the General Court. The report of the committee evidenced more serious concern for the subject of vital registration than any legislative committee's deliberations since the Sanitary Commission of 1850 prepared its survey. The report pointed out that because of the great pressure of business in the Secretary's office, "the work [of registration] is not performed or even superintended by the Secretary or by the higher officers in that department. . . ."⁵⁹ "It is delegated," the report went on, "to subordinate agents and clerks who are not endowed, and cannot act, with the authority and intelligence that are needful for the perfect execution of this work."⁶⁰ Pointing to the Registration Reports, the committee noted that they were "prepared under no permanent and uniform plan; the tabulation of the facts, the deductions that have been drawn from them, are not the same through the years. In ten successive reports only about one quarter, seventeen out of sixty-five, of the statements of facts or combination of facts appear in all."⁶¹ The favorable report of the committee was not able to overcome legislative resistance arising out of the heavy expenditures induced by the War, and the bill did not pass.

Several district medical societies in different parts of Massachusetts petitioned the General Court in 1862.⁶² This was a further sign of growing interest in registration matters, as was the fact that for the first time in the history of vital registration in the State, the sentiments of the petitioners received the explicit and public support of the Governor of the State. The incumbent between 1861 and 1865 was the Republican John A. Andrew, noted for his philanthropic interests and, like many members of his party at the time, persuaded of the need for the

⁵⁹ Massachusetts: SENATE DOCUMENTS, 1861, No. 127, p. 2.

⁶⁰ *Ibid.*, p. 2.

⁶¹ *Ibid.*, p. 2.

⁶² See Massachusetts: SENATE DOCUMENTS, 1862, No. 82.

expansion of the State's social service agencies.⁶³ In his opening address to the legislature in 1863, Governor Andrew raised the memorandum sent during the previous year by the Boston Sanitary Association. "It deserves," he declared, "the perusal of every legislator of the Commonwealth for its practical and comprehensive wisdom; and I earnestly hope its views may be thoroughly examined, and its objects approved by the General Court."⁶⁴ The joint special committee appointed by the General Court to consider the petition made a favorable report but again because of the fiscal argument, the bill was not carried. The movement to establish a board of health remained dormant during the remainder of the War. Then in 1866, another attempt was made by the public health organizations and another committee of the legislature was appointed to consider the subject. There is some confusion in the record as to whether the committee made an unfavorable report or whether it instead reported a bill which the General Court then rejected. In any case, it is known the bill did not pass.⁶⁵

The most important condition explaining the success of the bill which established the State Board of Health in 1869 was the support given to it by the Democratic Party in the General Court.⁶⁶ Many Republicans had for a long time believed in the idea, although their party did not include the proposal in their official programs. The Democrats did, and this fact combined with the support of individual Republicans, assured its passage. Other conditions made their contribution, too, including the great prosperity of the post-Civil War period, which diminished the force of any argument that the burden of

⁶³ Pearson, Henry G.: *THE LIFE OF JOHN A. ANDREW*. Boston, Houghton Mifflin, 1905, I, p. 129. For a discussion of the origins of the Republican party and its political orientation, see Binkley, Wilfred E.: *AMERICAN POLITICAL PARTIES: THEIR NATURAL HISTORY*. New York, Alfred Knopf, 1954, chap. IX, *passim*.

⁶⁴ See Massachusetts: *ACTS AND RESOLVES*, . . . 1862. Boston, Wright and Potter, 1862, p. 272.

⁶⁵ See Bowditch, Vincent Y.: *LIFE AND CORRESPONDENCE OF HENRY INGERSOLL BOWDITCH*. Boston, Houghton Mifflin, 1902, II, p. 218. Also see Whipple, *op. cit.*, I, p. 192.

⁶⁶ The text of the law is printed in Massachusetts, *FIRST ANNUAL REPORT OF THE STATE BOARD OF HEALTH*. Boston, Wright and Potter, 1870, pp. 7-8. The details of the legislative history of the bill can be found in Massachusetts, *Senate Journal*, 1869 and Massachusetts, *House Journal*, 1869.

financing the Board would be too expensive for the State to bear; the fact that the bill establishing the Board incorporated a provision requiring it to investigate the effect of alcoholic beverages on health; and an expanding public awareness that disease could be prevented. According to legend, it is the latter condition which accounted for Democratic support. It was said that the wife of the leader of the Democrats, Mrs. Thomas Plunkett, had read a famous article by Dr. Henry Bowditch in which he claimed to have demonstrated the causal connection between a moist, miasmatic environment and the prevalence of consumption. The article, so the story goes, convinced her of the utility of establishing a board to study the environmental sources of disease, and she persuaded her husband to work for its formation.⁶⁷

None of these factors which account for the establishment of the Board had any effect in influencing the General Court to reform the administration of registration; for when the bill setting up the Board was finally passed, it turned out that the registration system was still in control of the department of the Secretary of State. Evidently the reasons the General Court gave in the 1850's and 1860's for not reforming the system still seemed adequate to the legislators, although some of them recognized that the argument based on the expenses such a reform would entail was no longer valid. But in compensation for the loss of this justification, the General Court found another reason for not giving the Board control over registration: The Board of Health, by virtue of the fact that it was a board, possessed only advisory and quasi-judicial powers. To have the Board acquire the power to administer the registration system, it would have had to be given the status of a *department* of government, much like the department of the Secretary of State. This would have meant that the Board would have required a permanent staff, a greater number of employees, and bigger quarters. The General Court was not

⁶⁷ The political factors which contributed to the passage of the law in 1869 are discussed in three sources: Bowditch, *op. cit.*, II, pp. 218-219; Whipple, *op. cit.*, I, p. 192; and MacDonald, *op. cit.*, p. 83.

willing to underwrite an organization of this magnitude for an activity so new as governmental participation in the field of health.

Although the registration system remained administratively independent of the Board of Health, the Board did become the most important single influence on its future development. The members of the Board were granted the authority to make sanitary surveys, including investigations of the causes of morbidity and mortality. Making use of these powers, the Board proceeded to uncover many defects in the operation of registration which had not been recognized previously. Their investigations also helped to give publicity to the often atrocious health conditions in the State, and thus stimulated the layman's awareness of the need for accurate vital statistics. And the fact that the members of the Board constituted the only medical and statistical personnel within the executive branch of the government, led inevitably to the situation in which they, rather than the Secretary of State, were consulted whenever the reform of the registration system became a matter of public concern after 1869.