

## American Accounting Education, Textbooks and Public Practice Prior to 1900

€ Some later observers, impressed perhaps by rapid progress of the art after 1900, showed disdain for nineteenth-century methods. Five principal factors, however, produced a steady evolution and made accounting an element of importance in the nincteenth-century American business world.

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An observer writing shortly after the beginning of the twentieth century took a dim view of American accounting up to that time, saying, "The profession of Accountant has hitherto been little known and little understood in America." An examination of the

<sup>1</sup> Richard Brown, C.A., ed., A History of Accounting and Accountants (Edinburgh, 1905), p. 278.

pertinent literature, however, does not completely support this statement.

American bookkeeping during the colonial period, of course, was similar to the bookkeeping then practiced in England. It was learned from private instructors or by apprenticeship.2 Such textbooks as were used came from Britain.3 It appears likely that most colonial planters and businessmen of any consequence kept at least some simple accounts of their various transactions. For example, General George Washington maintained detailed accounts of his own and his wife's expenses during the Revolution.4 Due to the English mercantile system, which caused America to be viewed as a source of raw materials and an outlet for British manufactured goods, however, business organization was such that many of the books recording colonial trade transactions were kept in England, and many of those kept in the colonies were handled by men sent out from English home offices. Also, leading American colonial merchants frequently were part-time smugglers who operated more outside than inside the law, and thus were not inclined to leave permanent records where they might be found by the King's officers. Despite these circumstances, however, it is worthy of note that the public schools organized in Boston in 1682 included bookkeeping among the subjects to be taught.5

In 1754 William Weston, a Londoner who described himself as being "Some years a practitioner in Real Business, and now Master of the French School, in Queen-Street, near the Seven Dials," wrote a book for young Englishmen who were going to America to become plantation managers or factors.6 This book contains about 260 pages, approximately equally divided between explanations and illustrations of various books of account. Weston recommended use of Waste Book, Journal, and Ledger, with a Sales Book and an Invoice Book if needed. The Waste Book first lists all possessions, then debts, and then transactions as they occur. The first Journal entry is a debit to Stock and a credit to Sundry Accounts for the inventory, and the second is a debit to Sundry Accounts and a credit to Stock for the debts. Debits and credits were kept on facing Ledger pages, and the fraction system was used in the Journal to indicate to which page of the Ledger an

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<sup>2</sup> Wilmer L. Green, LL.B., History and Survey of Accountancy (Brooklyn, 1930), p. 181.

<sup>\*</sup> Ibid., p. 132.

<sup>4</sup> Ibid., pp. 131-132.

Ibid., p. 181.
 William Weston, The Complete Merchants Clerk: Or, British and American Counting-House (London, 1734).

entry was posted. Books were to be balanced once per year, and were to be proved by adding all the debit entries and all the credit entries in the Ledger. Weston apparently did not believe in unnecessary accounts. For example, instead of opening an Interest Account, he suggested crediting Profit and Loss immediately upon the receipt of interest.

One of the first important colonial public accounting engagements of which a record remains occurred in 1748, when Benjamin Franklin employed James Parker to act for him in settling his Philadelphia printing business.7 Parker was not an accountant, however, and it was some 100 years later before America had full-time Public Accountants. There was one such full-time practitioner in Boston by 1847,8 and one in Los Angeles by 1852.9 There may have been others, although Public Accountants before the mid-nineteenth century usually were teachers, lawyers, merchants, or persons of similar trades.10 The first American public accounting partnership to use a regular firm name apparently was organized in Cincinnati in 1876.11

The first American accounting textbook appears to have been written by William Mitchell, of Philadelphia, in 1796. Mitchell's title page, which is reproduced in Green's history, says in part: 12

A New and Complete System of Book-keeping, by an Improved Method of Double Entry; Adapted to Retail, Domestic and Foreign Trade; Exhibiting a Variety of Transactions which Usually Occur in Business . . . to Which is Added a Table of the Duties Payable on Goods, Wares, and Merchandise, Imported into the United States of America. The Whole in Dollars and Cents.

Probably the second American accounting textbook was written in 1804 by Thomas Turner, a Maine teacher.13 This little book contains 148 pages, and shows a set of books for an individual proprietorship and for a partnership, with brief explanations. It also includes a section on decimals and one on interest calculations, as well as a method for transferring dollars into pounds. The primary books described are the Waste Book, Journal, Ledger, and Cash Book. Subsidiary books are described for invoices, sales on account, and accounts current. Small bills are to be paid from cash in the till and posted once per month. Monthly balancing is recom-

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<sup>&</sup>lt;sup>7</sup> American Institute of Accountants, Fiftieth Annicerany Celebration (New York, 1937), p. 104. Hereinafter this publication will be referred to as A.I.A.

\*Brown, History of Accounting, p. 271.

\*Description of Accounting, p. 271.

\*India. p. 106.

\*India. p. 108.

\*Green, History of Accountancy, p. 138.

\*Thomas Tunner, An Epitome of Book-Keeping By Double Entry (Portland, 1804).

mended, with new books being opened by reversing entries. Turner outlines methods for teaching from his book, and says that any senior school boy can within a few months "obtain a foundation in the principles, and a perfect knowledge of method, in opening, conducting, adjusting and closing books."

Bookkeeping and arithmetic were closely connected in early American education. Charles Hutton wrote a book on arithmetic and bookkeeping, in England, which was published in 1809 in an American edition. On the fact that of 236 pages, 32 pages are devoted to single entry and 63 to double entry bookkeeping. Hutton justifies the inclusion of the single entry method by saying. The Italian method alone is not sufficient; for it is a constant complaint among the merchants, and others, who use this method, that their boys, having learned only the Italian method, when they first come to business, are almost as ignorant in the management of their books, as if they had never learned any method at all."

Hutton recommends a Waste Book, Journal, and Ledger for double entry bookkeeping. The Ledger is to be ruled down the center of the page with the titles of accounts in the center, and accounts are to be arranged alphabetically. His instructions for the monthly closing are: Total both sides of all accounts, and balance the difference by an entry to the Profit and Loss Account if it is in the nature of a gain or loss, or to the Balance Account if it is a stock account; then close the Profit and Loss Account into the Stock Account and the Stock Account into the Balance Account. The new month's Waste Book is to be made up from the Ledger Balances. Hutton says of his system, "This method is so easy, that it may also be taught in a few weeks time to young ladies as well as to young gentlemen."

Another American textbook was written in 1818 by B. Sheys, who describes himself as an accountant. 16 Out of a total of 340 pages, Sheys devotes about 60 pages to explanations and theory and the remainder to examples of various books of account. The three main books described are the Waste Book, Journal, and Ledger, with about a dozen subsidiary books to be used if needed. Sheys distinguishes between three kinds of accounts, as follows: Real, consisting of property; Personal, consisting of persons with whom one deals; and Fictitious, which are "invented accounts" such as Profit and Loss, Interest, etc. He discusses compound entries and petty cash. Although it is correct to post directly from subsidiary books, he says, it is better to go through the Journal to prevent errors. Commenting

<sup>14</sup> Charles Hutton, LL.D., F. R., A Complete Treatise on Practical Arithmetic and Book-Keeping, Both by Single and Double Entry (New York, 1809).
<sup>18</sup> B. Sheys, The American Book-Keeper (Now York, 1818).

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on the teaching of bookkeeping, Sheys says "this invaluable branch of education is almost totally neglected." A further comment by Sheys has a familiar ring to modern ears. He says, "if the instructors of youth were to receive a proper compensation for their trouble, very few scholars would leave school unqualified for business."

Á well-organized and well-written bookkeeping text was written in 1837 by B. F. Foster. Although Foster has been accused of copying his accounting theory from the English author Cronhelm, II this does not alter the fact that his book stands well above previous American treatises on the subject. Foster's book contains about 200 pages, divided approximately as follows: 6 pages defining commercial expressions; 8 pages explaining equation of payments; 6 pages of bookkeeping history, which mention Chinese, Greek, and Roman accounting, as well as the works of Pacioli, Gottlieb, Oldeastle, Stevin, and about 10 English authors of the eighteenth and early nineteenth centuries; about 50 pages of explanation and theory; and 125 pages devoted to examples of various kinds of books.

Foster conducted the New York Commercial Academy, which taught bookkeeping, commercial arithmetic, penmanship, and letter writing. In his opinion, most of the schools of the day placed too much emphasis on the copying of entries and did not give enough attention to explanation.

The basic theory of double entry, according to Foster, is "that the whole is equal to the sum of its parts. . . . Hence, there must. . . be a constant equality between the Stock Account and all the other accounts." He classifies accounts into Stock, Money, Merchandise, and Personal categories, and says, "The division of accounts into Personal, Real, and Fictitious, is one of the most ludicrous that ever enlivened the gravity of the scientific page."

Foster does not use the Waste Book. His primary books are the Journal and the Ledger, with subsidiary books for Cash, Bills, Invoices, Shipments, and Account Sales, with a Day Book for everything not included in one of these. He recommends putting all accounts of the same type in the same part of the Ledger, and says that when books are balanced the values of goods on hand should be shown at present prices instead of at cost. Also, on balancing books, he states that "A merchant, before estimating his profits, ought to charge interest on each investment."

A distinctly modern note is evident in the various publications of

B. F. Foster, A Concise Treatise on Commercial Book-Keeping (2d ed.; Boston, 1837).
 A. C. Littleton, Ph.D., C.P.A. Accounting Evolution to 1900 (New York, 1933), pp. 107, 181.

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Thomas Jones, a mid-nineteenth-century New York teacher. This is especially true in his 1850 textbook.18 This 200-page book, although poorly organized, analyzes a large number of individual transactions and accounts. Jones classified accounts as Primary and Secondary. Among Primary accounts he includes Cash, Bills Receivable, Bills Payable, and Personal Accounts. With the addition of the merchandise inventory, these accounts provide a complete picture of resources and liabilities. Secondary accounts include Stock, Merchandise, Charges, Interest, Bank Stock, and Profit and Loss. This group, with the exception of Stock, shows gains or losses.

Jones also distinguishes between earned profits, as customarily shown to include book debts, and realized profits, which already are in hand in the form of cash or its equivalent. He recommends a reserve, which he calls Contingent Fund, to absorb bad debt losses. Next year's debt losses on this year's business are to be charged to this Contingent Fund, rather than to Profit and Loss. An estimate of the proper size of this reserve should be made at the end of each year, he says. In the opinion of Professor Littleton, Jones was one of the first American accounting writers who "strived to replace rules by logic."19

The latter half of the nineteenth century is noteworthy for the absence of good books on accounting. The rapid growth of railroads and other types of large corporations was inaugurating the age of modern accounting, but this development is better reflected in court decisions and the proceedings of railroad regulatory bodies than in textbooks. There was considerable opposition to the teaching of commercial subjects in secondary schools. Consequently, private business schools developed rapidly between 1840 and 1890.20 Most accounting textbooks written during these years were authored by instructors at these private schools, and most of them are little more than drill manuals which attempt to teach by rules and repetition.

One of the better texts written during this period was by P. Duff. 21 First published in 1867, it went through 20 editions by 1871. The author, who had been head of Duff's Mercantile College for 27 years, illustrated a journal with several ruled columns for different accounts. Most of the 400-page book is devoted to examples of five sets of books as used by merchants, manufacturers, private banks, and railroads. There is very little theory, very brief explanations, and an

he Thomas Jones, Book-Reeping and Accountanting, Membraning and Flatence (No. 1884).

B Littledon, Accounting Foodulation to 1900, p. 178.

Green, History of Accountancy, pp. 183-184.

H. Dulf, Dulf's Book-Keeping, by Single and Double Entry (20th ed.; New York, 1871). 1871).

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<sup>18</sup> Thomas Jones, Book-Keeping and Accountanship, Elementary and Practical (New

abundance of questions, answers, and rules. Although depreciation reserves are not mentioned for railroad accounting, a Surplus Capital Account is shown for use in creating a reserve fund to enable dividends to be paid even when business is unfavorable.

In 1882, an Institute of Accountants and Bookkeepers was organized in New York.22 This organization, which was primarily an educational and scientific body, however, apparently did little to advance professional accounting.

Six or seven New York accountants, in 1886, decided to form a society similar to the British Institute of Chartered Accountants. They incorporated in New York in 1887 as the American Association of Public Accountants, and adopted bylaws and elected officers in 1888.23 At its first annual meeting, this Association had 25 Fellows and 7 Associates.24 This little body eventually grew into the American Institute of Accountants, which was incorporated under Federal Charter in 1916.25

The American Association took an active interest in making public accounting respectable. At the time of its formation, the employment of a public accountant usually was an indication of suspected fraud or financial weakness, and outside audits often were made in the secreey of night.26 Organized pressure got the first Certified Public Accountancy law passed in New York in 1896. Similar laws were passed by Pennsylvania in 1899, Maryland in 1900, and California in 1901.27 Other states followed rapidly. Also, in 1894 the Association formulated rules for presenting balance sheet items "in order of quickest realization," and restricted advertising by its members.28

A competent historian of accountancy has pointed out that "America . . . was the first country which recognized the necessity for giving Accountancy an established place in the University curriculum."29 General Robert E. Lee planned a business school for Washington and Lee University, but nothing was done toward establishing it after the General's death in 1870.30 The University of Pennsylvania, in 1881, established a school of business which now is the Wharton School.31 In 1893, a School of Accounts was sponsored by the American Association, under the jurisdiction of New York University, but

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Green, History of Accountancy, p. 74.
 Ibid., p. 75.
 Brown, History of Accounting, p. 271.
 Green, History of Accountancy, p. 75.
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<sup>\*\*</sup> A.I.A., p. 80. \*\* Brown, History of Accounting, pp. 272-273.

<sup>25</sup> A.I.A., p. 6.
26 Arthur H. Woolf, M. A., A Short History of Accountants and Accountancy (London,

<sup>1912),</sup> p. 188.

\*\*\* Green, History of Accountancy, p. 185.

\*\* A.I.A., p. 111.

it failed due to neglect by the university and businessmen.<sup>32</sup> Five years later, the universities of Chicago and California started departments of business, and in 1900 they were followed by the universities of New York, Dartmouth, Vermont, and Wisconsin.<sup>33</sup>

The Interstate Commerce Commission, and similar state regulatory commissions, by persuasion, regulation, and the prescribing of uniform railroad accounts, did a great deal toward stabilizing accounting practices and procedures during the latter part of the nineteenth century.<sup>34</sup>

As indicated by the dates shown below, most of the common business machines, which have had such an important impact upon the development of accounting records and practices, were first used during the latter quarter of the nineteenth century.<sup>38</sup> Remington-Rand marketed the first usable typewriter in 1874. The Burroughs adding machine was invented in 1884 and patented in 1888. The National Cash Register Company produced the first workable cash register in 1884. The comptometer was patented in 1886, the tabulating machine in 1889, and the addressograph was first manufactured in 1890. Thus, by the end of the century, the ages-old methods of handwritten records were being superseded by mechanical methods which provided much more information for a much less expenditure of effort.

In conclusion, then, it appears from this review of the literature, that American accounting, as distinguished from English accounting and its European ancestors, was an element of some importance in the nineteenth-century business world. Evolution in accounting education and practice proceeded more or less steadily throughout the period. Among the significant factors influencing this evolution during the latter part of the century, which led directly into modern accounting, one must list the organization of railroads and other large-scale corporate enterprises, the establishment of public regulatory commissions, the work of professional accounting associations, the adding of accountancy to university curricula, and the development of a wide variety of office machines.

<sup>22</sup> Ibid., p. 5. <sup>23</sup> Ibid., p. 111.

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<sup>83</sup> Ibid., p. 111. <sup>81</sup> Ibid., p. 140. <sup>82</sup> Ibid., pp. 463-466.

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