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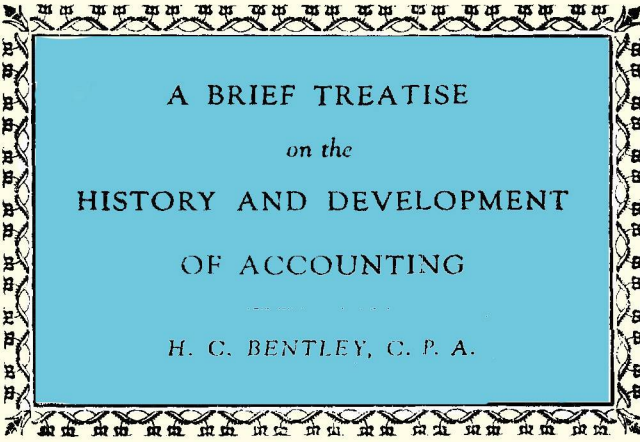
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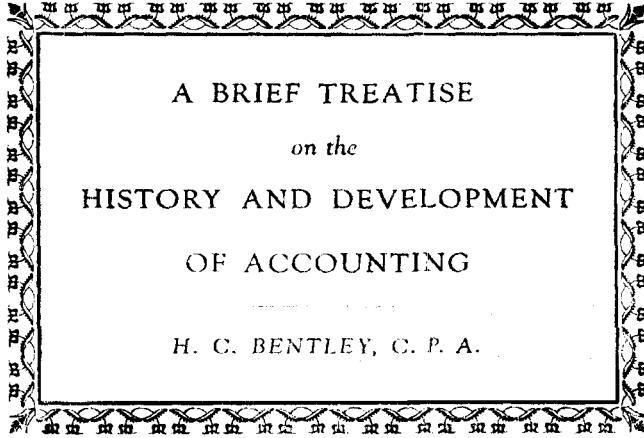
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A BRIEF TREATISE
on the
HISTORY AND DEVELOPMENT
OF ACCOUNTING

H. C. BENTLEY, C. P. A.

THE BENTLEY SCHOOL OF ACCOUNTING AND FINANCE
921 BOYLSTON STREET, BOSTON, MASSACHUSETTS



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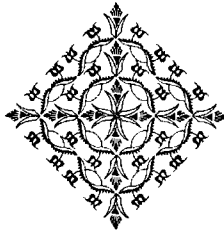
H. C. BENTLEY, C. P. A.

A BRIEF TREATISE ON
THE ORIGIN
AND DEVELOPMENT
OF ACCOUNTING



A Brief Treatise
on the
ORIGIN AND DEVELOPMENT OF
ACCOUNTING

BY H. C. BENTLEY, C. P. A.



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A BRIEF TREATISE ON
THE ORIGIN AND
DEVELOPMENT OF
ACCOUNTING



*Origin and Development of Single-entry
Bookkeeping*

VARIOUS writers on the history of accounting have attempted to determine the origin of single-entry bookkeeping. One states that it is "lost in the mists of antiquity," and another says that accounts were kept "long before the year 3000 B.C."

If single-entry bookkeeping in its crudest form may consist of any system of recording business transactions, whether made in pictorial writing (hieroglyphs) on the side of a mud hut, or recorded in cuneiform (wedge-form) writing on clay tablets, the *origin* of bookkeeping may properly be placed in a much earlier period than that which marked the transition from barbarism to civilization (4000 to 3000 B.C.). It is probable that the earliest records of transactions were those relating to the collection of tributes by chieftains and potentates. Doctor James Henry Breasted tells us, in his "Ancient Times, A History of the Early World," that six to seven thousand years ago the Nile-dwellers were obliged to pay to a local chieftain, who controlled the irrigation trenches of the district in which they lived, a share of the grain and flax which they gathered from their fields; otherwise, the supply of water for their crops would be stopped. These, he says, were the earliest taxes. To quote him:

"Such transactions led to scratching a rude picture of the basket grain-measure and a number of strokes on the mud wall of the peasant's hut, indicating the number of measures of grain he had paid to the chieftain for water rights. The use of these

purely pictorial signs forms the earliest stage in the process of learning to write."

With the development of agricultural life in the Middle Stone Age and its resulting community centers there arose a need for a leader to organize and manage community affairs. And the meeting of this need brought into existence the earliest form of government, managed by a chieftain.

It is not unreasonable to assume that under the earliest forms of government, tributes were levied upon the subjects, and that some kind of system for the recording of their payments was necessary. And from what Doctor Breasted tells us of the manner in which the need for recording the collections of taxes was met by means of pictorial writing, it would seem that bookkeeping in one form or another has walked hand in hand with government down through the ages, and that its origin may be linked with the earliest organization of men for government purposes. Until more definite evidence is produced than we now have concerning the origin of bookkeeping, we can only conjecture that a system for recording transactions must have been devised to meet the needs of government administration when those needs could no longer be met otherwise. Accordingly, to place the origin as early as 6000-5000 B.C. would not be unreasonable, considering the stage of development in Egyptian and Babylonian government and commerce in that period.

It would be of slight interest to trace the development of single-entry bookkeeping in detail. Starting with the crudest kind of memorandums of transactions, it must have paralleled advancements in administrative methods of governments and commerce. It was never a science, yet it was the only method of bookkeeping known until the fourteenth century. Even after a superior method had been devised, single-entry bookkeeping continued in quite general use until the middle of the nineteenth century. It is still used, but not to any extent in business.

Single-entry bookkeeping is any kind of bookkeeping other than by the double-entry method. Hence, it ranges in method, form, and technic from the crudest system of recording transactions to a set of books and accounts which all but meet the requirements of double-entry.

Origin and Development of Double-entry Bookkeeping

SUCH information as we have places the origin of double-entry bookkeeping in Italy about the middle of the fourteenth century or somewhat earlier.

“A double-entry ledger was in use in Genoa in 1340, and the books of the state financial officials of Genoa for 1340 were kept on a completely developed system of double-entry.” (“History of Accountants and Accountancy” by Woolf, page 106.)

“That system of Bookkeeping which has been called the Italian method, from the country of its invention, and double-entry, from the arrangement of its ledger, was known and practised long anterior to the fourteenth century. The celebrated Fuggers, whose commercial transactions extended all over Europe, kept their books by this method; and there is in a private library at Augsburg a ledger of Anthony Fuggers, bearing date 1419, which differs but little from those now in use.” (“Rudiments of Bookkeeping” by James Nixon, New York, 1854.)

“*Italian* bookkeeping is the mode of keeping accounts by way of Double Entry, and is so called because it was first used by the Lombards, a powerful people of Italy who, subsequent to the destruction of the Western Empire by the Moslems, became the chief Bankers and Traders of Europe.” (“Jackson’s Bookkeeping” by Marcus Trotter, Dublin, 1836.)

“Savory, in his *Dictionnaire Commerciale*, says that the Jews first practised Insurance; and the invention of Bills of Exchange is universally ascribed to this commercial people. Now, as they were the principal Merchants of Italy, when Italian Bookkeeping was first used, it may be fairly presumed that they had also some share in this invention.” (“Elements of Bookkeeping” by Patrick Kelly, LL.D.)

Future investigations may disclose that the Italians first learned of double-entry bookkeeping from the Moors.

The first published treatise on double-entry bookkeeping was written by Lucas Pacioli, a Franciscan monk of Tuscany, Italy. It appeared in 1494 under the title of “*Summa de Arithmetica, Geometria, Proportione et Proportionalita*” (a Summary of Arithmetic,

Geometry, and Proportion). The books prescribed were a *Memoiale* (Day Book), *Giornale* (Journal), and *Quaderno* (Ledger). Although Pacioli is known to be the first author of a published work on the subject, he did not originate the science.

"It should be mentioned that, although the treatise of Pacioli is always regarded as the first published work on the subject, a book written by Benedetto Cotrugli, entitled 'Della mercatura e del mercante perfetto,' which appeared in Venice in 1573, is believed to have existed in manuscript some 115 years before its publication. On the last page of the work (of which the Biblioteca Marciana at Venice possesses a copy) there is a statement that it was completed in 1458." ("A Short History of Accountants and Accountancy" by A. H. Woolf, page 111.)

The second writer of a published work on double-entry was a fellow countryman of Pacioli, named Giovanni Antonio Taglienti. His book came from the press in Venice in 1525, and is said to have been much superior to Pacioli's for teaching purposes.

German, Dutch, English, French, and Spanish merchants learned of the advantages of the new system and in the sixteenth century various writers translated Pacioli's treatise into their respective languages.

England's Early Writers on Double-entry Bookkeeping

THE first work on double-entry bookkeeping published in the English language was a translation in 1543 of Pacioli's book by Hugh Oldcastle, a teacher of arithmetic.

"In 1547 a work appeared in London with the title of 'A notable and very excellent work, expressyng and declaryng the maner and forme how to kepe a boke of accompts or reconynges, etc.' This has recently been proved to be an English translation of Jan Ympyn's (Dutch) translation of Pacioli's work in 1543." ("History of Accountants and Accountancy" by A. H. Woolf.)

In 1588 John Mellis, also a teacher of mathematics, appeared as an author of a book which he frankly stated to be a copy of Oldcastle's translation.

James Peele has the distinction of being the first English author

of a work on double-entry bookkeeping. Unlike his two predecessors, he contributed something more than a translation of Pacioli's work. His book, "The Maner and Fourme how to Kepe a Perfecte Reconyng after the order of the Most Worthie and Notable Accompte of Debitour and Creditour Set Foorthe in Certaine Tables," etc., was published in London in 1553.

During the period 1600-1699 there were eleven works on double-entry bookkeeping published in London of which the following were the authors:

William Webster	Thomas Browne
I. Carpenter	John Collins
Richard Dafforne	Stephen Monteaige
Thomas Wilsford	John Vernon
Abraham Liset	Robert Colinson

Edward Hatton

From 1700 to 1799 there were approximately thirty-six works on this subject published in England. The most generally approved English writers of this period, according to Doctor Patrick Kelly, to whom reference is made later, were:

Thomas Dilworth	James Dodson
John London	William Weston
Thomas Crosby	Benjamin Donn
J. Dunn	John Sedger
John Cooke	William Wood
James Weir	C. Hutton

"It is remarkable that, with a few exceptions, all the foregoing writers were schoolmasters or teachers," says Doctor Kelly.

Scotland's Early Writers on Double-entry Bookkeeping

THE first Scottish writer was Robert Colinson, whose book, "Idea Rationaria, or the Perfect Accomptant, Necessary for all Merchants and Trafficquers; containing the True Form of Book-keeping, According to the Italian Method," was published in Edinburgh in 1683. No other books on the subject were published in Scotland during the seventeenth century.

During the eighteenth century there were seven books published under the authorship of the following men:

Alexander Magghie	William Gordon
Alexander Malcolm	William Perry
John Mair	Robert Hamilton, LL.D.
C. Buchanan	

Of these, Mair, Gordon, and Hamilton ranked as outstanding writers of their time.

John Mair, celebrated schoolmaster of Perth, "must have been a remarkable figure in his day, for he wrote several books on arithmetic, besides a Latin syntax and a Latin dictionary." (A. H. Woolf in his "History of Accountants and Accountancy.") His first work, "Bookkeeping Methodiz'd," was published in 1736 and ran through many editions up to 1765. A revised edition under the title of "Bookkeeping Modernized" was completed in 1768, shortly before his death in February, 1769, and was published shortly thereafter. It is probable that his was the most widely read book on the subject during the period from 1736 to 1800.

James Morrison, also of Scotland, enjoyed a wide reputation as a writer in this field. His book, "A Complete Treatise on Practical Bookkeeping," was published in Edinburgh in 1803.

Ireland's Early Writers on Double-entry Bookkeeping

IT SEEMS that no works on bookkeeping were published in Ireland before 1700.

The first Irish author of such a work was John Vernon. His book, "The Compleat Counting-house; or the Young Lad taken from the Writing-school and instructed in the Mysteries of a Merchant," was published in Dublin in 1719. The title does not disclose whether it was a treatise on single or double-entry.

The other authors whose works appeared during the eighteenth century were:

William Kelly	Samuel Edwards
Daniel Dowling (by "F. H.")	William Jackson
Daniel Dowling, a renowned teacher of arithmetic and book-	

keeping in Dublin, and author of "Mercantile Arithmetic," did not live to see a copy of the book published in Dublin in 1766 under the title of "A Complete System of Italian Book-keeping According to the Modern Method" by Daniel Dowling. This book was written by "F. H.," as explained in the preface of "Bookkeeping in the True Italian Form of Debtor and Creditor by Way of Double Entry" by William Jackson, as follows:

"Previous to these Treatises called the complete system of Italian Book-keeping, or the complete system of Practical Book-keeping from Dowling's precepts, the first pieces worthy of the name that appeared in Print here, were Webster's Essay on Book-keeping, and Mair's Book-keeping methodized. And indeed Webster's theory and instructions were well received, but his examples were neither sufficiently comprehensive, nor his foreign and company accounts so well adapted to the course of trade as the importance of the subject required; Mair, indeed, reduced his rules into a regular, easy system, and merited great applause, tho' at the same time his examples, neither in foreign nor company accounts were handled in so mercantile and perspicuous a manner, in his Journal and Leger, as might be expected from so eminent an author on other subjects, and his set of books was deemed to be very short or deficient.

"These defects gave the ingenious author of Mercantile Arithmetic (Daniel Dowling) a fair opportunity of displaying his abilities, in teaching the excellent art in the city of Dublin; and undoubtedly had he lived to revise and publish his own curious system of instructions upon the art of Book-keeping, he would have imparted his knowledge to the world with the greatest advantage and elegance; but it seems that after his decease nothing could be found on the subject but imperfect copies taken by school-boys from his first manuscripts; some of which falling into the hands of 'F. H.' a young man of considerable experience in the Counting-house, who, thinking it a pity that such excellent precepts should be lost, collected as much of the scattered remains as he possibly could, and set himself to work, in order to rescue from obscurity, and introduce to public view that curious piece, entitled, A complete system of practical Book-keeping, extracted from and comprehended in, that highly

applauded method commonly called 'DOWLING'S'; which edition having met with a generous encouragement by subscription, and the remainder now sold off, I have revised the work at the request of certain Booksellers who propose to republish it.

"But finding it abound with puerile expressions, far beneath the pen of the said original author, I have presumed to make such alterations as appeared necessary, to render the expression of the entries conformable to the language of the most eminent accountants now in the practice of business; and in many places have made such amendments and changes, as may render it worthy of a new title, with as much propriety as there was first in changing, Italian Book-keeping, for, Practical Book-keeping (or vice versa) both being in a manner one and the same, only with the alteration of names, and a considerable addition on exchanges, and some useful tables collected by the Editor, and transferred from the practical Book-keeping to this treatise, which now appears under the title of BOOK-KEEPING in the TRUE ITALIAN FORM of Debtor and Creditor, by way of Double Entry, exemplified from the precepts of the late D. Dowling, ingenious author of Mercantile Arithmetic, revised, Corrected and improved by WILLIAM JACKSON." Dublin, Ireland, 1792.

Thus the work of Daniel Dowling as a teacher of bookkeeping survived through the book written by "F. H.," who credited him with being the author, and also through William Jackson, who stated on the title page of his excellent book that it was "exemplified from the precepts of the late D. Dowling."

Jackson's work was really the joint product of Dowling and Jackson. Dowling was the genius who furnished the background for Jackson's writing. Jackson deserved much credit for revamping and improving the material contained in "A Complete System of Italian Bookkeeping According to the Modern Method," which was published after Dowling's death, but it would not diminish the credit due him if the authorship were recorded as Dowling-Jackson.

The Pirating of Deceased Authors' Works

A number of the best known works on double-entry published in England, Scotland, and Ireland during the eighteenth century were pirated by booksellers of Great Britain and the United States

after the death of the authors, and some booksellers of the United States pirated the works of *living* authors of Great Britain.

"Bookkeeping Methodiz'd" by John Mair appeared in 1794 as "Bookkeeping Epitomized" by J. Shaw (Leeds).

"An Introduction to Merchandise" etc. by Robert Hamilton, LL.D., appeared in 1820 as "Hamilton's Introduction to Merchandise, remodeled and adapted to the improved methods of the present time" by Elias Johnston (Edinburgh).

"Treatise on Arithmetic and Bookkeeping" by C. Hutton appeared in 1837 as "Hutton's Complete Course of Bookkeeping; a new edition with improvements" by James Trotter (Edinburgh).

"Bookkeeping in the True Italian Form of Debtor and Creditor by Way of Double Entry, or Practical Bookkeeping Exemplified from the Precepts of the Late Ingenious D. Dowling" by William Jackson, appeared in a number of pirated editions in Ireland, England, and the United States. The Dowling-Jackson book was probably the most pirated of all works on double-entry bookkeeping. To illustrate a few cases:

1. "Jackson's Complete System of Bookkeeping, in five sets of books" by W. Auchinlech (Belfast, 1826).
2. "Jackson's Bookkeeping" by Marcus Trotter (Dublin, 1836).
3. "Jackson's Bookkeeping" published by booksellers in Philadelphia and New York from 1801 to 1823, and possibly later.

It is probable that William Jackson never received a cent from the sale of his books in the United States, and equally probable that his heirs did not receive anything from the sales made after his death by booksellers of both Great Britain and the United States.

"The Young Bookkeeper's Assistant" by Thomas Dilworth (London, 1724) appeared in the United States in 1821 under the title of "Dilworth's Bookkeeper's Assistant" by R. Wiggins (New York, 1821).

"The Science of Double-entry Bookkeeping Simplified" by C. C. Marsh (Baltimore, 1831) appeared in London in 1850 under the title of "The Science of Double-entry Bookkeeping Simplified" by Daniel Sheriff of Larne, Ireland.

Patrick Kelly, LL.D., Master of Finsbury-Square Academy, London, an eminent mathematician and astronomer, and author of "Elements of Bookkeeping" (London, 1801), was another British

author whose work on bookkeeping was published in the United States. Doctor Kelly's book passed through several editions and was considered one of the outstanding works on the subject.

*British works most used in the United States from
1800 to 1850*

THE textbooks by English, Scottish, and Irish authors which had the most widespread acceptance in the United States down to the middle of the nineteenth century were:

"Bookkeeping Methodized; or a Methodical Treatise of Merchant-Accompts, according to the Italian Form" by John Mair (Edinburgh, 1736).

"The Universal Accountant and Complete Merchant" by William Gordon (Edinburgh, 1765).

"Bookkeeping Modernized, or Merchant-Accounts by Double Entry according to the Italian Form" by John Mair (completed in 1768, published in 1769).

"Jones' English System of Bookkeeping" by Edward Thomas Jones (Bristol, England, 1796, and New York, 1796).

"The Elements of Bookkeeping" by Patrick Kelly, LL.D., published in London in 1801. Reprint of second edition published in Philadelphia in 1803.

"Bookkeeping in the True Italian Form of Debtor and Creditor by Way of Double Entry" by William Jackson. (Dublin, 1792, Philadelphia, 1801, and New York, 1804).

"A Complete Treatise on Practical Bookkeeping" by John Morrison (Edinburgh, 1803).

It is interesting that four of these seven, and three of the earliest, were Scottish authors.

*America's Early Writers on Double-entry
Bookkeeping*

THE early writers of this country obtained their knowledge of double-entry bookkeeping, either directly or indirectly, from the works of English, Scottish, and Irish authors. Therefore, it was but natural that their writings should parallel more or less closely those from which they had acquired their learning on the subject. The early writers of Great Britain got their basic principles from Pacioli,

and their writings were but adaptations of the principles he enunciated. Our early writers were equally proficient in adapting the teachings of others to American needs. They were always striving to improve and be different, and if they did not always accomplish the former they seldom failed to achieve the latter.

In general, neither our early nor our later writers were as scholarly as the early writers of England, Scotland, and Ireland.

The first four American writers on double-entry bookkeeping were:

1. *William Mitchell* (Bookkeeper).
 "A New and Complete System of Bookkeeping; being an Improved Method of Double Entry." (Philadelphia, 1796.)*
2. *Rev. Richard Turner, LL.D.*
 "A New Introduction to Bookkeeping after the Italian Method of Debtor and Creditor." (Salem, Massachusetts, 1801.)*
3. *Thomas Turner* (Professor and Teacher of Bookkeeping).
 "An Epitome of Bookkeeping by Double Entry." (Portland, Maine, 1804.)*
4. *James Bennett* (Teacher of Bookkeeping and Mathematical Science).
 "The American System of Practical Bookkeeping by Double Entry." (New York, 1814.)**

"The American System of Practical Bookkeeping by Double Entry, Designed for Use of Schools" (New York, 1818). The 30th edition of this book was published in New York in 1848, and a reprint of the 30th edition was published in 1852.***

Prior to 1775 the small demand in this country for works on bookkeeping was met through the importation of books from Great Britain. From 1775 to 1783 the purchase of British products was considered bad form, and for some years thereafter the market for English publications was extremely "bearish." It was natural that some of our booksellers felt no compunction about publishing unauthorized editions of British authors' books for some years after the Revolution, and until the United States could produce a

*A copy of this book is owned by the Boston Public Library.

**As listed in a Bibliography of Works on Bookkeeping published in the United States to and including 1853, on pages 166-167 of "Rudiments of Bookkeeping" by James Nixon (New York, 1854). This is believed to be the original edition of Bennett's first work on bookkeeping.

***Copies owned by the Boston Public Library are the editions of 1826 (9th), 1853 (15th), 1836 (17th), and 1852 (30th).

number of local writers. They selected books written chiefly by Scotch and Irish authors.

After the period of readjustment following the American Revolution our rapidly expanding commerce created a corresponding demand for bookkeepers and office clerks. Textbooks on bookkeeping and teachers of bookkeeping were greatly needed, and the call was answered by writers and teachers during the nineteenth century. There were but few of either during the first quarter; the numbers increased decidedly during the second; and the latter half of the century brought an unprecedented dissemination of bookkeeping knowledge.

The literature of accounting in the nineteenth century was almost entirely restricted to what is now called *elementary* bookkeeping. The chief demand was for textbooks which "presented the rudiments of bookkeeping on a scale suited to the faculties and comprehension of youth."

On the whole, our writers of 1800 to 1850 were more experienced and scholarly than those of the following fifty years, and their books were superior in scope and treatment.

The most noteworthy writers from 1800 to 1850 were:

William Mitchell	Christopher Columbus Marsh
Thomas Turner	B. Wood Foster
James A. Bennett	N. Harris
Charles Gerisher	Thomas Jones
I. Irvine Hitchcock	J. C. Colt

From 1850 to 1900 few noteworthy works on bookkeeping were written. It was during this period that progressive business college proprietors heralded far and wide their slogans: "Actual practice from the start," "learn to do by doing," "let the searchlight of practice illuminate the dark places of theory," "individual instruction," "start any time," and "positions guaranteed." It was also during this time that proprietors of the "national" and "chain-school" business colleges published their own bookkeeping works. Several publishers placed on the market textbooks and ingenious practice outfits designed to provide actual practice in the art of bookkeeping. The "actual practice" feature was overdone. An excellent selling point, it made the work of learning bookkeeping fundamentals fascinating and playful; but the pupils wasted a

major part of their time on non-essentials, and received insufficient training in the functions of accounts, the preparation of financial statements, and the solving of practical bookkeeping problems. The material used in business colleges for teaching bookkeeping had to be so simple and self-explanatory that children sixteen years of age or younger could proceed satisfactorily with very little teaching. Since pupils could enter at any time and receive individual instruction it follows that a teacher could not give each pupil in a class nearly as much time as could be given to a class of the same number if all the members were together in their work and could, therefore, be instructed by means of lectures, demonstrations, and discussions. The "individual instruction" idea promulgated by business colleges has never found favor in our universities or professional schools, and if it had any merit these institutions of learning would have adopted the method years ago.

With the ever-increasing growth of our industrial activities there came a need for books dealing with advanced phases of recordative accounting, and with other branches,—such as auditing, system-building, and cost accounting. The first works studied in this country on advanced bookkeeping, auditing, bookkeeping for specialized lines, and cost accounting were those of English writers, of which the following were the most commonly read:

- Lawrence R. Dicksee, M.Com., F.C.A.
- George Lisle, C.A., F.F.A.
- F. W. Pixley, F.C.A.
- Ernest Evan Spicer, F.C.A.
- Ernest C. Pegler, F.C.A.
- Roger N. Carter, M.Com., F.C.A.
- S. S. Dawson, M.Com., F.C.A.

This country has yet to produce a writer comparable with Lawrence R. Dicksee in scope, volume, and quality of his writings. American pioneers in the field of public accounting owe Mr. Dicksee more than they owe any other writer on accounting except Pacioli.

Our Early Writers on Accounting

It is only during the past twenty-five years that commendable books on advanced accounting subjects have been written by Americans. They have contributed much to the great strides made

in the fields of commercial and public accounting. Prominent among the writers who will go down in history as pioneer authors of American works on accounting are:

Captain Henry Metcalfe, U.S.A.	Henry M. Hatfield
H. L. Arnold	William Morse Cole
A. Hamilton Church	Paul-Joseph Esquerré
Clinton E. Woods	Sir Arthur Lowes Dickinson
Colonel Robert H. Montgomery	J. Lee Nicholson
Charles E. Sprague	Frank E. Webner
S. H. Bunnell	Clarence Munro Day

The first book on auditing used to any extent in this country was written by Lawrence R. Dicksee, M.Com., F.C.A., an eminent English writer on accounting. In 1905 Col. Robert H. Montgomery, C.P.A., prepared an Americanized edition of "Auditing" by Dicksee. In 1912 The Ronald Press Company published Montgomery's own work on Auditing, and since then he has written extensively on this subject and also on Income Taxes. He is the first American practitioner to write authoritatively and broadly on these subjects.

The first important book on cost accounting by an American author was "The Cost of Manufactures and the Administration of Workshops, Public and Private" by Captain Henry Metcalfe, Ordnance Department, U.S.A. (New York, 1885.) Other early writers on the fundamentals of cost accounting were:

A. Hamilton Church	J. Lee Nicholson
H. L. Arnold	S. H. Bunnell
Clinton E. Woods	Frank E. Webner

Present-day American Works on Accounting

THE textbooks and practice units designed for use in teaching the fundamentals of bookkeeping principles and practice, and which are used most commonly in high schools and business colleges, are published by the American Book Co., Southwestern Publishing Co., and The H. M. Rowe Co. The contents of these publications are better organized for teaching purposes than many of the more advanced works in which the authors have attempted to cover the entire field of accounting. In such cases they have written effectively on some phases of the work and inadequately on others.

THE ORIGIN AND DEVELOPMENT OF ACCOUNTING

In the opinion of the writer, the best works of reference on accounting principles are:

"Principles of Accounting" by H. A. Finney (in two volumes).
Published by Prentice-Hall, Inc., 70 Fifth Ave., New York,
N. Y.

"Accounting Theory and Practice" (Vols. 1 and 2) by Roy B.
Kester. Published by The Ronald Press Co., 15 East 26th
St., New York, N. Y.

The writer's choice of books on Auditing is:

"Auditing" by William H. Bell. Published by Prentice-Hall, Inc.

"Auditing Theory and Practice" by Robert H. Montgomery.
Published by The Ronald Press Co.

"Accountants' Reports" by William H. Bell. Published by The
Ronald Press Co.

"Accountants' Working Papers" by Bell & Palmer. Published
by The Ronald Press Co.

The following books on cost accounting are recommended for
study in the order listed:

"Cost Accounting Theory and Practice" by J. L. Dohr.
Published by The Ronald Press Co.

"Manufacturing Costs and Accounts" by A. Hamilton Church.
Published by McGraw-Hill Book Co., 370 Seventh Ave., New
York, N. Y.

"Industrial Accounting" by Thomas H. Sanders. Published
by McGraw-Hill Book Co.

"How to Analyze Costs" by Maze & Glover. Published by
The Ronald Press Co.

"The Presentation of Costs for Executives." Published by the
National Association of Cost Accountants, 26 West 44th St.,
New York, N. Y.

The writer does not know of a work on system building worthy
of recommendation.

The Early Teaching of Single-entry Bookkeeping in America

It is not known when bookkeeping was first taught in this country,
but it is reasonable to assume that private instruction was given
before courses were offered by educational institutions.

THE ORIGIN AND DEVELOPMENT OF ACCOUNTING

The progressive steps in the development of bookkeeping instruction in America may be summarized in the following order:

1. Private teaching by practitioners.
2. Public common schools, writing schools and Latin grammar schools (from about 1670).
3. Private academies (from about 1750).
4. Public high schools (from about 1821).
5. Commercial academies and business colleges (from about 1818).
6. Universities (from 1881).

The following quotation is from page 43 of the Annual Report of the Superintendent of Boston Public Schools, October 15, 1928. The article from which the quotation is taken is headed:

“Commercial Education in Retrospect” by Louis J. Fish, Educational Statistician.

“There was a little trace of commercial education in the American colonies, although at that time it did not play an important part in the school system. With the rising importance of trade in the eighteenth century ‘writing schools,’ so called, came into prominence. Young men of good families who showed more aptitude for money making than for learning Latin were sent to the writing schools to learn ‘good hands and accounts.’ These writing schools taught an elaborate system of penmanship, arithmetic in forms somewhat fantastic, and the science of bookkeeping complicated and made intricate by the multitude of varying monetary and metrical systems.

“Writing and ciphering schools had been a part of the Boston public schools since 1682. In 1740, however, writing schools under private auspices were established in Boston.

“At that time commercial life was a simple matter, and commercial education was thought not to be a function of the schools, being considered too humble a form of activity for the exercise of great talents or even for any special preparation. At first the boys left school early and were trained by their employers. More boys were attracted than offices could train. This led to the development of the private commercial schools during the nineteenth century.”

The Latin Grammar School of Boston was established in 1635.

The name was later changed to the Public Latin School. (Statement made over telephone by the Secretary of the Boston Public Latin School, November 8, 1929.)

"In 1743, Benjamin Franklin sketched the plan of the first American academy, which was opened in Philadelphia in 1749.

"As to their studies (said Franklin) it would be well if they could be taught everything that is ornamental. But art is long and their time is short. It is, therefore, proposed that they learn those things that are likely to be most useful and most ornamental.—" (From Franklin's discourses on Education.)

"All were to be taught penmanship, drawing, arithmetic (*with accounts*) and the first principles of geometry and astronomy. Commerce, industry, and mechanics would be entertaining and useful studies for all." ("Secondary Education" by Douglass.) Among the pioneers in the field of private schools and academies were the well-known Phillips Academies, one of Andover, Mass. (1778) and the other of Exeter, N. H. (1781).

"The first high school in the United States was established in Boston, in 1821. For three years it was known as the 'English Classical School,' but in 1824 the school appears in the records as the 'English High School.'

"Though Portland, Maine, established a high school in 1821, Worcester, Massachusetts, in 1824, and New Bedford, Haverhill, and Salem, Massachusetts, in 1827, copying the Boston idea, the real beginning of the American high school as a distinct institution dates from the Massachusetts Law of 1827, enacted through the influence of James G. Carter. This law formed the basis of all subsequent legislation in Massachusetts, and deeply influenced development in other States. The law is significant in that it required a high school in every town having 500 families or over, in which should be taught United States history, *book-keeping*, algebra, geometry, and surveying, while in every town having 4000 inhabitants or over, instruction in Greek, Latin, history, rhetoric, and logic must be added. A heavy penalty was attached for failure to comply with the law. In 1835 the law was amended so as to permit any smaller town to form a high school as well. This Boston and Massachusetts legislation clearly initiated the public high-school movement in the United States.

It was there that the new type of higher schools was founded, there that its curriculum was outlined, there that its standards were established, and there that it developed earliest and best." ("The History of Education" by Cubberley, pp. 699-700.)

"The first high school in New York was established in New York City in 1825 under the name of the High School for Boys." ("The Making of our Middle Schools" by E. E. Brown.)

The first high school of Pennsylvania in which bookkeeping was taught was the Central High School of Philadelphia, in 1849. (From a statement signed by Edward Merchant, Secretary and Business Manager of the Board of Education of Philadelphia.)

The Early Teaching of Double-entry Bookkeeping in America

THOMAS TURNER, a professor and teacher of bookkeeping in Portland, Maine, states in the preface of his book, "An Epitome of Bookkeeping by Double Entry," (1804):

"Although it has been generally a received opinion, that senior school boys and youth are not competent to imbibe the principles of book-keeping by double entry, or at least so far as to render accomplishment easy to themselves, when maturer age and actual engagements in life call forth and demand their attention to well regulated accounts, and a true knowledge of their affairs; yet this opinion has no other foundation in fact, than what has resulted from the inadequacy of the means hitherto employed, and the want of a system delineated on a scale suited to the power of their faculties, with the explanation of theory and practice rendered easy to their comprehension; and comprising unerring rules for the monthly statement, as well as those for opening, conducting, adjusting and closing of books, without clogging their ideas with inutile matters, or their reason with unnecessary exertions in the practice.

"Experience has proved to the author, that youth may be initiated in the principles, and made perfect in the rules, by a little practice, when arrived at the last stage of schooling; and when they are capable of associating and connecting their ideas, and of drawing conclusions from premises laid down and delineated in a manner suited to their faculties and comprehension."

If Thomas Turner were a professor and teacher of bookkeeping, in Portland, Maine, at the time he wrote his book (published in 1804), and if, as he states in his preface, "experience has proved to the author that youth may be initiated in the principles (of double-entry bookkeeping)" he must have taught the subject to "senior school boys and youth" prior to the year in which his book was published.

I. Irvine Hitchcock included in his book, "A New Method of Teaching Bookkeeping" (Philadelphia, 1822) a number of recommendations of which the following is a specimen:

"The following Resolution was adopted by the Philadelphia Academy of Teachers, December 8, 1823.

"Resolved, That the 'A New Method of Teaching Bookkeeping' by Mr. Hitchcock is well calculated to familiarize the pupil with the theory of the science, and with the practical occurrences of the Counting-house, and consequently to facilitate the teaching of that important branch of mercantile education. It is, therefore, warmly recommended to teachers and accountants."

Other recommendations of Hitchcock's book were signed by the following:

"J. V. N. Yates, Acting Superintendent of Common Schools of the State of New York, 1823."

"George Dennison, teacher, Select School for Boys, Philadelphia, Penna., 1823."

"Joseph Hoxie, teacher, New York, 1823."

"Aaron M. Merchant, one of the proprietors of the Union Hall Academy, New York."

"J. C. Hart, Principal of Mechanics School, New York."

"William Russell, formerly Principal of the New Township Academy, Boston, Mass., August 4, 1825."

When the teaching of double-entry bookkeeping in the common schools and private schools of New York, Philadelphia, and Boston had taken on such proportions in 1823-1824 as indicated by the recommendations of Hitchcock's book, it is reasonable to infer that the subject was taught in some of these schools a number of years before the recommendations were written. But just when it was first taught in a private or a public school of America is not known.

The development in the teaching of bookkeeping and other commercial subjects in our high schools is fairly indicated by the fact that "fifty-two per cent of the pupils in the public high schools of Boston are pursuing so-called commercial courses." Whether or not this percentage is typical of the conditions throughout the country the writer is not in a position to say.

Pioneer Proprietors of Business Colleges

THE pioneer period of business colleges was 1818-1860, and among the earliest proprietors were James A. Bennett, Dolbear, Bartlett, Foster, Sawyer, Jones, Comer, and Duff, all of whom began business prior to 1842. The first *chain-school* movement in this field of education was inaugurated by H. B. Bryant, H. D. Stratton, and James W. Lusk, who established the first of the chain of Bryant & Stratton Schools in 1853.

One writer on the history of accounting is of the opinion that Benjamin Franklin Foster established a business college in Boston as early as 1827, and is "*convinced that to Mr. Foster belongs the honor of originating the business school.*"

The writer of this treatise has examined the Boston Directory for the years 1823-1839, and finds that Benjamin F. Foster's name appeared in the following issues:

- 1834
- "Benjamin F. Foster, Instructor, h. 30 School"
- 1835
- "Benjamin F. Foster, Accountant, 116 Wash. h. 126 Cambridge"
- 1836
- Same as in 1835
- 1837
- Same as in 1835

There is a large question as to whether Foster lived or did business in Boston prior to 1834, for his name undoubtedly would have appeared in issues of the Boston Directory prior to that year. It is reasonable to assume that the name of a man engaged in a business in Boston for six or seven years prior to 1834 would not be omitted from the issues of 1827-33. Moreover, if Foster had a school in Boston in 1834 it must have been conducted in his house at 30 School Street, because he had no business address at that time.

Foster's school was advertised in his "System of Penmanship," published in 1835.

Therefore, it is probable that he conducted "Foster's Commercial School" at 116 Washington Street, Boston, during the years 1835-1837. His name does not appear in the Boston Directory after 1837. He next appeared in New York where he started the "Commercial Academy" at 183 Broadway. This venture must have had a very short life because he and Thomas Jones conducted the New York Commercial School for a time prior to 1840, as stated in the following quotation taken from the preface of his "Theory and Practice of Bookkeeping" (1840).

"It is but justice to add, that the plan of teaching this art by *analysis* and *synthesis*, as developed in the following pages, originated with Mr. Thomas Jones, a gentleman of distinguished ability in his profession, and who, for several years, was associated with the author in conducting the New York Commercial School."

Foster was author of various works on penmanship and book-keeping, as follows:

"Prize Essay on the Best Method of Teaching Penmanship" (1833).

"Development of Carstairs' System of Bookkeeping" (prior to 1836).

"Foster's System of Penmanship," etc. (Boston, 1835).

On the title page he appears as a teacher of writing and book-keeping. If he had owned a school at that time he probably would have mentioned it in his book.

"A Concise Treatise on Commercial Bookkeeping" (Boston, 1836).

In the preface of this book Foster gives credit to John Morrison, an eminent Scottish writer whose book, "A Complete Treatise on Bookkeeping," was published in Edinburgh in 1803, as follows:

"The treatise of John Morrison, which undoubtedly possesses great merit, is the basis of the present publication."

"Education Reform" (New York, 1837).

"Prospectus of the Commercial Academy, 183 Broadway, New York City" (1837).

"The Clerk's Guide" (Boston, 1840).

"The Counting-House Assistant."

"The Theory and Practice of Bookkeeping" (Boston and London, 1840).

"Hints to Young Tradesmen."

"The Art of Rapid Writing."

"Explanatory Copy Books."

"The Penman's Guide."

"Double-entry Elucidated," etc. (London, 1845).

"Origin and Progress of Bookkeeping" (London, 1852).

"Writing and Writing Masters" (New York, 1854).

Foster's first work on bookkeeping was "a development of Carstairs' System" (Carstairs was an English writer).

His second work on bookkeeping was "based on John Morrison's book" (Morrison was a Scottish writer, as previously stated).

His third work on bookkeeping embodied ideas which "originated with Thomas Jones," whose book "The Principles and Practice of Bookkeeping, embracing an entirely new method of imparting the science," was published in New York in 1841.

As admitted by Foster, his writings on bookkeeping were plagiaristic. But in this respect he was not unlike a number of the writers of the nineteenth century.

Foster made conflicting statements in his publications. In one of them he states that he has been engaged in teaching accounts, arithmetic, and penmanship for eight years, while in another he avers that his seven years of experience as a bookkeeper fits him to teach bookkeeping.

Much more space has been given here to Foster and his works than they merit, but it has been given only to show that he is not entitled to the credit of "originating the first business college."

In so far as the writer has been able to determine, the man who should be credited with being the first teacher of double-entry bookkeeping on a large scale was

James Arlington Bennett

THE New York City directories have the name of James A. Bennett for the following years:

1818-1820,	accountant,	48	Fulton Street
1821-1822,	"	12th	Avenue
1823,	not given		
1824-1829,	teacher in bookkeeping,	97	John Street
1830-1831,	" " "	39	Arcade
1833-1835,	" " "	73	John Street

James Arlington Bennett was a dramatic figure in the days when double-entry bookkeeping was making its earliest strides in America.

He was one of our early writers, his first book, "The American System of Practical Bookkeeping," appearing in 1814. That it met with a popular response is evidenced by the number of editions through which it passed, and also by the recommendations of prominent men,—including merchants, bank presidents, the Mayor of Albany, the Comptroller of the State of New York, and the Lieutenant Governor of New York.

In 1818 he brought out a revised edition for the use of schools. The title page of the 1824 edition shows him as

James Bennett, A. & M., Professor to the Accountants' Society of New York, late a Professor to the Accountants' Society of Pennsylvania, late President of the Accountants' Society of New York, and Member of the Medico-Chirurgical Society of the University of the State of New York.

Mr. Bennett conducted public lectures on bookkeeping at 48 Fulton Street, New York City, in 1818. In 1824 he established a school at 97 John Street, New York City, for the teaching of bookkeeping and mathematical science.

The following quotations are taken from his book:

"Nautical and mathematical instruments are supplied and students will have access to a choice library. An excellent mounted telescope for observing Satellites of Jupiter, and for other astronomical purposes."

"The Annual Commencement of Bennett's Public Lectures on Bookkeeping is on the first Monday in October, and a new class commences on the first Monday of each of the succeeding months, including April; as the lectures close annually on the 1st of May."

“Terms for an unlimited attendance, with the practice, \$15 to be paid in advance. For private instruction, which is given at all times, \$25 including books for practice. The private instruction is given in the day time throughout the year.”

His lecture courses were widely attended. He lectured in Philadelphia and there were 159 subscribers; in Albany there were 142 subscribers; and in New York over 300 gentlemen signed resolutions recommending the lecture courses which they took under Mr. James Bennett, Accountant, Lecturer, and Teacher.

Bennett makes the following statements:

“Persons of all ages between fourteen and fifty years will be found in the above list.”

“A thorough knowledge of this art may be acquired from the Subscriber’s instruction in from 4 to 6 weeks, one lecture each day. A Certificate of ability, under seal, will be granted to each qualified person.”

“The author has instructed in the Science and Art of Book-keeping, a far greater number of grown persons than any other person in any other country or age of the world; he has instructed persons from *thirteen* different nations of the earth.”

From the evidence available, it is the opinion of the writer that James Arlington Bennett should be credited with having established the first accounting school in the United States.

Collegiate Schools of Business

“THE earliest known definite proposal for the establishment of a collegiate school of business in the United States is contained in a report in 1869 by President Robert E. Lee to the trustees of the institution that later became known as Washington and Lee University. This proposal was not carried out, probably because General Lee died in 1870.

“The honor of actually establishing the first American collegiate school of business goes to the University of Pennsylvania, which was enabled through Mr. Joseph Wharton’s gift of \$100,000 to establish in 1881 the Wharton School of Finance and Economy, the name being changed later to the Wharton School

of Commerce and Finance. Seventeen years went by before another such school was founded. Then in 1898, the University of Chicago set up its College of Commerce and Politics (later known as the School of Commerce and Administration), and the University of California its College of Commerce. Two years later there were established at Dartmouth College the Amos Tuck School of Administration and Finance; at the University of Vermont, a Department of Economics and Commerce; at the University of Wisconsin, a School of Commerce; and at New York University, a School of Commerce, Accounts, and Finance.

"The new century thus began with collegiate education for business announced at 7 institutions. The next decade saw some 10 more institutions added to the list; the next five years, some 23; and during the next nine years such a veritable craze for business education swept over the country that some 143 more were added; so that at the opening of the year 1925, 183 (probably more) American colleges and universities had 'departments' or 'schools' or 'courses' or 'divisions,' or some other formally organized unit of instruction in 'business' or 'commerce' or 'business administration,' or other appropriate title." ("The American Collegiate School of Business" by L. C. Marshall.)

The School of Commerce, Accounts, and Finance of New York University was the first American collegiate school of business to offer evening courses in preparation for the practice of accountancy.

The Graduate School of Business Administration of Harvard University was founded in 1908, the pioneer in its field as a strictly graduate school. The Leland Stanford University established a graduate school of business in 1925.

Accountants' Organizations

THE first society of accountants was organized in Venice in 1581 and was known as the Collegio dei Raxonati (College of Accountants). A similar organization was founded at Milan in 1739.

George Watson of Edinburgh is credited with being the first professional accountant of Scotland. He was born in 1645.

As early as the middle of the seventeenth century, the profession

of accountancy was recognized in Scotland as ranking in dignity and importance with the profession of law.

Charles Snell is said to be the first English-speaking accountant engaged to investigate the affairs of a public undertaking,—the famous South Sea Bubble (South Sea Company), which was organized in 1710. Snell's undated report was rendered in 1720 or 1721.

The first British society of accountants was organized in Scotland in 1853, and in the year following it was incorporated by Royal Charter under the name of the Society of Accountants in Edinburgh.

The Institute of Accountants was organized in London in 1870, and in 1880 it was granted the right to confer the degrees of F.C.A. (Fellow of the Institute of Chartered Accountants) and A.C.A. (Associate of the Institute of Chartered Accountants).

Local organizations of accountants were formed in New York and Pennsylvania, and possibly in other states, prior to 1824.

The first national association of public accountants in the United States was organized in 1887 under the title of the American Association of Public Accountants. It was superseded by the American Institute of Accountants of the United States, organized under a federal charter in 1916. All members of the former association were automatically admitted as charter members of the Institute. The offices of the Institute of Accountants and the Journal of Accountancy, the official organ of the Institute, are at 135 Cedar Street, New York. The total membership in the Institute on October 16, 1929, was 2193.

The American Society of Certified Public Accountants was organized in 1921. Its official organ is The Certified Public Accountant. The offices of this Association are at 1202 National Press Building, Washington, D.C. The total membership of the society on September 1, 1929, was 2517.

In 1919, the National Association of Cost Accountants was organized. Its offices are at 21 West 44th Street, New York. It has a membership in excess of 6000.

The state of New York, in 1896, was the first to enact C.P.A. laws. Others followed until every state in the Union had enacted laws for the registration of certified public accountants.

Factors which have contributed most in the advancement of accounting in the United States

THE first treatise on double-entry bookkeeping by Pacioli.

Works of Scottish, English, and Irish writers.

Works of American writers.

American business colleges, for their pioneer work in disseminating a knowledge of double-entry bookkeeping throughout the country during the latter half of the nineteenth century.

High schools, for providing courses in bookkeeping and other commercial subjects.

Inventors and manufacturers of mechanical devices and office appliances.

Universities, for establishing schools of business.

Public accountants of Great Britain who came to this country when the profession was in its infancy.

Public accountants and commercial accountants of this country who have contributed so greatly to the advancement of accounting practice.

Societies of accountants, for promoting legislation which has aided much in bringing about wider recognition of the accountancy profession, and for otherwise contributing to its development.

Our federal government, for laws which have resulted in creating a widespread demand for improved accounting methods and systems, such as the laws relating to Income Taxes, the Federal Reserve Banking System, the Federal Trades Commission, etc.

And last, but highly important, our progressive business men.

