

Business

A SELECTED LIBRARY OF THE LITERATURE
OF BUSINESS FROM THE ACCOUNTING CODE
OF HAMMURABI TO THE 20TH-CENTURY
"ADMINISTRATOR'S PRAYER"

EDITED WITH COMMENTARIES AND NOTES
BY THREE MEMBERS OF THE FACULTY OF THE

HARVARD BUSINESS SCHOOL

EDWARD C. BURSK Editor of the Harvard Business Review

DONALD T. CLARK
Librarian of the Baker Library

RALPH W. HIDY
Isidor Straus Professor of Business History

VOLUME P



ALL RIGHTS RESERVED
INCLUDING THE RIGHT OF REPRODUCTION
IN WHOLE OR IN PART IN ANY FORM
COPYRIGHT © 1962 BY SIMON AND SCHUSTER, INC.
PUBLISHED BY SIMON AND SCHUSTER, INC.
ROCKEFELLER CENTER, 630 FIFTH AVENUE
NEW YORK 20, N. Y.

FIRST PRINTING

Every possible effort has been made to give proper credit for all the words and pictures in this book. If we have erred in any instance, we shall be glad to correct the error in future editions.

LIBRARY OF CONGRESS CATALOG CARD NUMBER: 62-14278
MANUFACTURED IN THE UNITED STATES OF AMERICA
BY THE RAND MCNALLY COMPANY, CHICAGO, ILL.

CONTENTS



VOLUME TWO

II. EVOLUTION OF BUSINESS (continued)

FINANCE

BANKING

The Oldest Recorded Bank Loan—2000 B.C.	677
from the Encyclopaedia Britannica Current Money with the Merchant—4,000 Years Ago	680
from the Bible	000
A Greek Poet Writes the Earliest Recorded Bank Advertisement Theocritus	681
Where the Dollar Sign Came From An anonymous writer and Florence Edler de Roover	682
How Banking Was Built James E. Thorold Rogers	685
What Do Bank and Bankrupt Mean? James Sullivan	692
The Oldest Check in England from the London Times	693
The Greatest Experiment—the Founding of the Bank of England Sir John Clapham	694
How Commission Merchants Became Merchant Bankers in Eighteenth-Century Holland C. H. Wilson	709
The Establishment of the First Bank of the United States H. Wayne Morgan and Bray Hammond	711
Jackson's Fight with the "Money Power" Bray Hammond	732
All Is Not Gold That Glitters from Hunt's Merchants' Magazine	744
Punch's Version of the Introduction of Bullion	745

[vi] THE WORLD OF BUSINESS	
How Should Bankers Use Their Leisure Hours?	745
from The Banker's Magazine	
Lombard Street in London—the Wall Street of the 1800s Walter Bagehot	749
My Financial Career	757
Stephen Leacock	750
Money Is Money Is Not Money Gertrude Stein	759
Putting Money on the Potato Standard Philip Wernette	761
Bankers Are Just Like Anybody Else, Except Richer Ogden Nash	765
Thaw on Threadneedle Street John Brooks	766
A Gathering of Banks and Bankers Pictorial	777
INVESTMENT	
How the Goldsmiths Became the Financiers of England The Royal Insurance Company, Ltd.	790
How to Beat the Stock Market—in the 1600s Joseph de la Vega	794
The South Sea Bubble Charles Mackay	807
Footnote to the South Sea Bubble Charles Lamb	826
How the Great Rothschild Family of Bankers Got Started John T. Flynn	834
News of the Battle of Waterloo Hits the Stock Exchange Thomas B. Costain	842
The Rise and Fall of Jay Cooke, Banker and Railroad Builder Henrietta M. Larson and N. S. B. Gras	851
The Two Rats—and a Wildcat G. E. Hanson	866
The Peculiarities of Wall Street Are Part of the National Fiber James Bryce	867
A Deal in Wheat Frank Norris	874
A Financier Tells How He Made His First Million Bernard Baruch	884
Profile of John Pierpont Morgan John Dos Passos	890
The Big Bull Market, and the Even Bigger Crash	895

Co	ontents [vii
The Matchless Career of Ivar Kreuger—the Match K William H. Stoneman	ing 934
Wall Street Is Money and, Even More Important, Mer Martin Mayer	938
Nicely Nicely's Broker's Tip W. H. Fitzpatrick	953
INSURANCE	
The Real Purpose of Insurance Is to Avoid Uncertaint Henry K. Duke	ty 957
Government Insurance 4,000 Years Ago Hammurabi	959
How Early Insurance Originated to Meet Business New from Robert S. Lopez and Irving W. Raymond	eds 959
The Development of Insurance into a Great Industry Cornelius Walford	964
Lloyd's London Coffeehouse Grows into a Great Insur Office Henry M. Grey	rance 973
Biography of an Idea—Fire Insurance John Bainbridge	977
Benjamin Lincoln Buys a One-Year Life Contract in 1 from History of Insurance in Philadelphia for Two Centuria (1683-1882)	
The Pioneer in American Life-Insurance Marketing J. Owen Stalson	992
The Growth of Life Insurance in the United States Shepard B. Clough	1001
A Novel Enterprise—Insurance for Blighted Affections from Life	s 1013
The Fox Who Lost His Tail William Alexander	1014
The Vice of Gambling and the Virtue of Insurance George Bernard Shaw	1015
USURY	
The Bible Too Condemns Usury and Money-Changing from the Bible	1023
Vishnu Discriminates Between Borrowers from The Institutes of Vishnu	1024
Running in Debt Is Like Having Cholera Plutarch	1026
The Talmudic Laws Concerning Creditor and Debtor from The Code of Maimonides	1029

[viii] THE WORLD OF BUSINESS	1001
From A.D. 500 to 1200, and from 4% to 43½% from The Commercial and Financial Chronicle	1031
On Usury	1034
from the Magna Charta	1005
The Man of Affairs Turns on Usury Thomas Wilson	1035
The Merchant of Venice William Shakespeare	1037
On the Other Side of the Fence from Shakespeare Francis Bacon	1052
Scholastic Views on Usury Raymond de Roover	1055
A Pawnbroker Defends the Business of Pawnbroking An anonymous pawnbroker of 1744	1058
PRODUCTION	
MANUFACTURING	
Greek, Roman, and Egyptian Played—and Made—with Fire Benjamin Farrington	1069
Benjamin Franklin—The Trials of an Inventor-Manufacturer	
in 1744 Carl W. Drepperd	1070
Samuel Slater—Father of Our Factory System	1076
Arnold Welles	
Wealth Comes Only from Manufactures Alexander Hamilton	1087
Application to Alexander Hamilton for Employment in	
Erecting a Cotton Manufactory Thomas Marshall	1095
The Continuous Production Line in the Eighteenth Century Siegfried Giedion	1097
Eli Whitney—Nemesis of the South Arnold Whitridge	1105
The Secret of American Wine Making—in 1849 Sidney Weller	1115
Speculative Capitalists and the Birth of the American	
Petroleum Industry	1119
Paul H. Giddens Gyshog at Spindleton Frequitaese Assessment of the First Creek	
Gusher at Spindletop—Eyewitness Account of the First Great Texas Oil Well William A. Owens	1132
The Stanley Steamer Was 200 Miles per Hour Ahead of the	
Times	1144

John Carlova

Contents	[ix]
Henry Ford Builds the Model T	1156
Charles E. Sorensen with Samuel T. Williamson	
The Founder of Scientific Management Blueprints Modern Technology Seventy-five Years Ago Frederick W. Taylor	1161
Everything but the Squeal L. F. Swift	1179
Pioneer in Industrial Engineering—"Father" in Cheaper by the Dozen Frank B. Gilbreth, Jr., and Ernestine Gilbreth Carey	1180
A Businessman Takes a Flyer in Oil—to Finance His Steel Business Andrew Carnegie	1182
The Factory Director in the U.S.S.R. Raymond A. Bauer	1185
The Evolutionary Nature of Automation, or Is It Just Fancy Mechanization? James R. Bright	1199
Machines Are This Smart Edwin Diamond and Henry Simmons	1207
Brave New World—or Is It? Aldous Huxley	1214
TRANSPORTATION	
Stagecoaches, Conestoga Wagons, and the First Interstate Highway (1817) Seymour Dunbar	1224
The Clippers Were Beautiful, Fast, Too Expensive to Endure Long—and a Perfect Expression of a Great American Urge Alan Villiers	1235
The Disappointed Director—Important but Late from Punch	1245
The Railroads Open the West Edwin A. Pratt	1247
Giants Fight for the Northern Pacific Matthew Josephson	1260
How Pipe Lines Revolutionized the Transportation of Oil— Creative Destruction Paul H. Giddens	1271
A Literary Interpretation of Two Practical Mechanics John Dos Passos	1281
Sources of Illustrations	I
Index	V

Finance

"Money is none of the wheels of trade; it is the oil which renders the motion of the wheels more smoothe and easy."

-David Hume (1711-1776)

With finance we continue our picture of the evolution of business—a picture that does not pretend to be a full reflection of history, nor a mirror of how the businessman sees himself, but is more like a window through which the rest of the world looks in at businessmen in their places of business.

As noted in the introduction to the section on marketing, trade became business when those who made exchanges did so for the sake of material profit. So money, as a convenient way of expressing value, was an early invention—money, just as a tool, so to speak, of business.

But money soon became more than a facilitating mechanism. It became also a way of making profit. To make that profit a new form of business was required. First of all, those who had money could now increase their money by lending it to others for a fee; and this was more than merely "renting" money—it was appraising risk and making decisions as to where the return would match the risk. Secondly, borrowing money provided a way by which those who had entrepreneurial ideas but lacked the capital could obtain the money they needed and, if successful, make money for themselves above and beyond its cost.

And, by one of the neatest contrivances of all times, those who held money could, by pooling risks, insure the entrepreneurs also. For a fee, the merchant could cover the contingency of the loss of his ship and cargo, and pay that out of his prospective profit. This, perhaps as much as the original capital, was the element that made many enterprises possible.

So we start with Babylonian banking in 2000 B.C., and the money changers in the temple described in the Bible. It is interesting that the first banking was done by the church or under the auspices of the church. We visit Lombard Street in London in the 1800s and Wall Street in New York in the 1900s; the parallels of the two great money streets

are striking. And we follow the development of insurance as it grew in response to need.

Yet in this history of finance too, as in marketing, there long was sentiment—indeed, legislation and religious proscription—against one of the central and necessary concepts; in this case the target was lending money at interest. The joke is that bankers finally became the pillars of society—a little on the cold or stuffy side sometimes, a little laughable when not very awesome or even fearsome to those on the outside looking in (or coming in for loans)—but dignified and respectable; while the merchant remained not quite accepted. Even today there is still some discrepancy in what people feel about the functions of the two types of men.

Banking

"Would you know what Money is? Go borrow some."

- N. H., merchant (ca. 1714)

"The chief value of money lies in the fact that one lives in a world in which it is overestimated."

-H. L. Mencken (1880-1956)

The way banking has always risen up again, stronger than ever, from troubles and panics, is tribute enough to its importance and to its basic viability. Just as hard times in the economic world at large are magnified in their impact on the banking structure, so good times—and good management—within the banks has an accelerating effect on business progress outside.

Banking today, through investments, through loans, through directorships, and through informal counsel, has a tremendous direct influence on business. And it started long ago.

THE OLDEST RECORDED BANK LOAN—2000 B.C.



FROM THE

ENCYCLOPAEDIA BRITANNICA

["Banking in Antiquity," from "Banks, History Of," Encyclopaedia Britannica, Encyclopaedia Britannica Company, Inc., Chicago, 1941, vol. 3, pp. 67-68.]

A clay tablet from Babylon testifies to the fact that banking, as a formal, institutional body of transactions, is at least 4,000 years old; and that originally it was conducted in the temple of the prevailing cult or religion. The Babylonian priestess charged interest on her loans too. How different this is from the feeling which existed midway between those days and the present, that it was irreligious either to ask for or to pay interest (see the section on Usury later in this volume).

This account of "Banking in Antiquity" is by Professor Elmer Mantz of Columbia University.

PASTORAL NATIONS such as the Hebrews, while they maintained moneylenders, had no system of banks that would be considered adequate from the modern point of view. But as early as 2000 B.C., the Babylonians had developed such a system.

It was not the result of private initiative, at that time, but an incidental service performed by the organized and wealthy institution of the cult. The temples of Babylon, like those of Egypt, were also the banks. "Two shekels of silver," runs a Babylonian document, "have been borrowed by Mas-Schamach, the son of Adadrimeni, from the sun-priestess Amat-Schamach, daughter of Warad-Enlil. He will pay the Sun-God's interest. At the time of the harvest he will pay back the sum and the interest upon it." It is evident enough that the priestess Amat-Schamach was merely the accredited agent of the institution. No doubt the clay tablet with the inscription corresponds to what we call negotiable commercial paper. Another document of the same period was certainly such. It runs: "Warad-Ilisch, the son of Taribum, has received from the sun-priestess Iltani, daughter of Ibbatum, one shekel of silver by the Sun-God's balance. This sum is to be used to buy sesame. At the time of the sesame-harvest he will repay in sesame, at the current price, to the bearer of this document."

At a much later period, about 575 B.C., private initiative had taken the lead in Babylonian banking. At that time we hear of an institution that has been compared to the Rothschilds of nineteenth-century Europe—the Igibi bank of Babylon. Its last great head died at a time not far distant from the date just given. The records of this bank show that it acted as buying agent for clients; loaned on crops, attaching them in advance to insure reimbursement; loaned on signatures and on objects deposited; and received deposits on which it paid interest.

In Greece in the fourth century B.C., i.e., at the time of the great commercial prosperity that brought on the Persian wars, banking was well established. As in Babylon, there was no prohibition of interest taking, so that banking was free to develop as circumstances might permit. There was, no doubt, some concentration of functions in certain large institutions, but the different operations of banking were performed by various kinds of bankers. Thus, the trapezitai—the name is still used by Greek bankers—were those who received deposits on interest to administer as current accounts such as checking; the kermatistai were the equivalent of the medieval goldsmiths, their function being the testing of coins and the changing of them; the daneistai were the moneylenders. A well verified function of the banks of Greece was to prepare letters of credit on correspondents with a view of obviating the actual transport of specie in payment of accounts.

The private bankers, however, had no monopoly on most of these transactions, and indeed it is probable that, as in Babylon, private banks followed the temple banks by a long interval. The temple system seems to have included most of the typical banking operations, except, perhaps, those of changing and of assay. There is small doubt, in any case, that such great temples as those of Ephesus and of Delphi were the most powerful of the Greek banking institutions before the time when the progress of irreligion had destroyed the public sense of security in making temple deposits or in allowing priests to act as financial agents.

Yet the Greek private bankers never monopolized the business, for the public, or state, bank was everywhere to be found, as at Abdera, Sinope and Cyzicus, and the surviving records show that, except in times of national emergency, the private bankers had but little chance to get profit from the financial transactions of the state.

The Greek system influenced Rome to the extent that certain Roman temples engaged in financial transactions for individuals. The College of the Flamens is known to have been entrusted with carrying out a will wherein was inserted a clause that turned over to it the ownership of the estate in question unless the heir should comply with a certain stipulation. The document is of particular interest because it shows a sense of absolute confidence in the integrity of

the Flamens. But Roman legislation was inclusive on all such subjects, the Flamens. But Roman legislation was inclusive on all such subjects, and fraud in banking was a matter of the greatest difficulty. In 210 B.c. we find the earliest definite regulations as to Roman private bankers—an ordinance which assigned the places in the Forum where the tabernae argentariae, or banking offices, might be located. The Romans did not follow the Greeks in the organization of state banks. But their minute regulations as to the conduct of private banking were calculated to create the utmost confidence in it; it touched all of the various divisions of the business, which were typically assumed by different individuals, as in Greece.

Hellenistic Egypt, unlike Rome, imported the Greek banking system bodily. On the one hand we find a private bank in Alexandria operating at night, when vessels could best come to anchor in that port, and displaying, as a sign, a little poem especially ordered from a famous bucolic poet [see page 681 in this volume]. On the other hand, the state banks were as widely distributed as they were in hand, the state banks were as widely distributed as they were in Greece; their organization, each with a director, a subdirector, and a responsible manager, whether at Memphis, Thebes, or Arsinoë, is well known. Everywhere, it appears, the state and private banks managed to exist together. In one little village, that of Dionysias, near Lake Moeris, there were two private banks in A.D. 151. . . . With the end of the civilization of antiquity banking degenerated, for a period of some centuries, into a system of financial makeshifts. There were various reasons for this, the most important, no doubt, being administrative decentralization and the weekening of govern

There were various reasons for this, the most important, no doubt, being administrative decentralization and the weakening of governmental authority, with its inevitable counterpart of commercial insecurity. The very widely distributed means of banking brings out the prevalence of this insecurity in a striking manner: as in Babylon, in Egypt and in Greece the sanctuaries were the banks. But if the phenomenon appears a similar one in those ancient countries and in medieval Europe it shows, upon analysis, fundamental differences. The ancient state was strong, whereas the medieval one was weak; and although the Christian churches and monasteries represented the medieval state religion, still, the church in each country was no stronger than the state in question. Therefore there could be no such absolute guarantees for depositors in church treasuries as had been common to those who used the temples as banks in antiquity.

But there was a certain guarantee—that furnished by the practical unanimity of opinion as to the inviolability of sacred buildings—and this was accepted as the best available one. The result was that people entrusted the officials of churches and monasteries with their money, either as a deposit to be withdrawn or as a cash payment for a stipulated annual income, whether perpetual or for a term. As for receipts calling for periodic payments by a church treasury, they came to be the most widely distributed of European commercial paper, and

ranged through all denominations; they were negotiable, and as such were often divided into infinitesimal sums for the purpose of marketing them with poor investors. The order of the Templars (ca. 1118–1320) became the outstanding representative of ecclesiastical banking and its records show that its operations included almost every type of the modern bank's activities, including those of the trust company.

CURRENT MONEY WITH THE MERCHANT—4,000 YEARS AGO



FROM THE BIBLE

[First Bible excerpt: Genesis 23:1-2, 13-16; second Bible excerpt: Job 27:12-19 (Hebrew Bible).]

What is the origin of money? Presumably it developed as a necessary medium for conducting trade. Where? Perhaps many places spontaneously, because the need was everywhere that trade went. When? Deep in antiquity; no one knows exactly at what point the need led to action. But somewhere, sometime, came the idea of value expressed in precious substances like gold and jewels.

Here we present two passages from the Bible (Hebrew version)—one from Genesis, about 4,000 years ago; the other from the Book of Job, certainly earlier than the fifth century B.C., when it was written down. Both evidence currency and a commercial community. As De Bow's *The Commercial Review*, of February 1846, puts it:

"The children whom God has raised up to Abraham—the Hebrews, of all ages and countries from that time to this—have proved themselves, beyond all compare, the most extraordinary nation of traders and traffickers that the annals of mankind have yet recorded."

I

AND THE LIFE of Sarah was a hundred and seven and twenty years; these were the years of the life of Sarah. And Sarah died in Kiriatharba—the same is Hebron—in the land of Canaan; and Abraham came to mourn for Sarah, and to weep for her. . . . And he spoke unto Ephron in the hearing of the people of the land, saying: "But if thou wilt, I pray thee, hear me: I will give the price of the field; take it of me, and I will bury my dead there." And Ephron answered Abraham, saying unto him: "My lord, hearken unto me: a piece of land

worth four hundred shekels of silver, what is that betwixt me and thee? bury therefore thy dead." And Abraham hearkened unto Ephron; and Abraham weighed to Ephron the silver, which he had named in the hearing of the children of Heth, four hundred shekels of silver, current money with the merchant.

II

But wisdom, where shall it be found? And where is the place of understanding? Man knoweth not the price thereof: Neither is it found in the land of the living. The deep saith: "It is not in me." And the sea saith: "It is not with me." It cannot be gotten for gold. Neither shall silver be weighed for the price thereof. It cannot be valued with the gold of Ophir. With the precious onyx, or the sapphire. Gold and glass cannot equal it: Neither shall the exchange thereof be vessels of fine gold. No mention shall be made of coral or of crystal; Yea, the price of wisdom is above rubies. The topaz of Ethiopia shall not equal it, Neither shall it be valued with pure gold.

A GREEK POET WRITES THE EARLIEST RECORDED BANK ADVERTISEMENT



THEOCRITUS

[Charles J. Bullock, "Bank Advertisements: Ancient and Modern," from Barron's, vol. VIII, no. 31, July 30, 1928, p. 3.]

The earliest recorded bank advertisement was written by a Greek poet for a Greek banker, close to the middle of the third century B.C.—which proves not only that banking and advertising are old, but also that even poets must work for their living—or occasionally write for it, anyway. This is catalogued (though it is usually neglected or omitted entirely) as the Twenty-third Epigram of Theocritus, better known for his *Idylls*, the classical model of idyllic treatment of the joys and beauties of country life.

To citizens and foreigners this bank gives equal dealing;
Deposit and withdraw, when your account is correctly made up
Let another make excuse: but Caicus even at night
Pays foreign money to those who want it.

WHERE THE DOLLAR SIGN CAME FROM



AN ANONYMOUS WRITER AND FLORENCE EDLER DE ROOVER

[Both from Bulletin of the Business Historical Society Incorporated, ed. by Henrietta M. Larson, Baker Library, Boston. "Note on Our Dollar Sign," vol. XIII, no. 4, Oct. 1939, whole no. 79, pp. 57-58. Florence Edler de Roover, "Concerning the Ancestry of the Dollar Sign," vol. XIX, no. 2, April 1945, whole no. 113, pp. 63-64.]

Here is a "Note on Our Dollar Sign" from the October 1939 issue of the Bulletin of the Business Historical Society, which provides six different explanations of where this American, and now almost universal, symbol originated; and a little piece, "Concerning the Ancestry of the Dollar Sign," from the April 1945 issue of the same publication, which carries the conjecture in still another direction. With so many explanations available, you can take your pick; the Pillars of Hercules is probably the least likely, but the most romantic.

T

THE FAMILIAR SYMBOL of our American dollar came into existence not later than 1790-95. It may have been developed or adopted in New York or Philadelphia. But whence did it come?

Several explanations of the origin of the sign have been offered or can be thought of. First, it is merely the monogram of the United States formed by the merging of the initial letters of the two words. Second, it is the monogram of that uncertain person called Uncle Sam who, however, apparently came too late to get into the picture at all. Third, it represents the two Pillars of Hercules with the scroll found on the reverse of the Spanish dollar that was commonly used in the American colonies and in the youthful republic. Fourth, it is the abbreviation for *pesos* (8 pesos to the Spanish dollar). The

thought is that a monogram was constructed out of the Greek p, written Π , and the final s. It would be difficult, however, to demonstrate that the Greek letter was used in connection with pesos. But whatever particular objection may be urged against each of these explanations, there is an effective one that seems to overturn them all, namely, that the symbol commonly had only one vertical stroke in early days.

The fifth explanation is that the symbol has nothing to do with s but was originally an 8 and became conventionalized as an s. The idea is that the symbol 8 stood for 8 pesos or 8 bits, which the dollar contained. In other words, the dollar was a piece of eight. Now, the 8 was commonly written with an extended vertical line following the pen upward in the formation of the figure. Early merchants' accounts show it thus. Practice came to draw this line downward as well as to push it upward. The result was \$.

The sixth explanation is not in conflict with the fifth but supplements it. In some states, notably in New York and Pennsylvania, the Spanish dollar was valued at 8 shillings of local money. This amount was written either 8s or 8/. When the latter practice was followed, the form became substantially \$. It is an interesting fact that type faces have followed either one of these forms and historically either seems to be correct, though originally it is doubtful whether the symbol with the double vertical lines was commonly found in any states except where the dollar was worth 8 shillings. . . .

TT

Among the numerous explanations offered for the origin of the American dollar sign, no one seems to have raised the question of whether the dollar sign may have the same ancestry as the word "dollar." There is no doubt about the etymology of dollar. It is derived from the German word Thaler, through the Dutch daalder. Furthermore, it is certain that Thaler is an abbreviation of Joachimsthaler.



Fig. 144. Joachimsthaler. First minted in Bohemia in 1520.