

INTERNAL AUDIT CONTROL

BY

C. AUBREY SMITH, M.B.A., C.P.A.

Associate Professor of Accounting, School of Business Administration
The University of Texas



*Submitted in partial fulfillment of the requirements for the
Degree of Doctor of Philosophy, in the Faculty of the
School of Business, Columbia University*

INTERNAL AUDIT CONTROL.

BY

C. AUBREY SMITH, M.B.A., C.P.A.

**Associate Professor of Accounting, School of Business Administration
The University of Texas**

*Submitted in partial fulfillment of the requirements for the
Degree of Doctor of Philosophy, in the Faculty of the
School of Business, Columbia University*

in the "Studies in History, Economics and
Public Law" of Columbia University.

THE UNIVERSITY CO-OPERATIVE SOCIETY
AUSTIN, TEXAS
1933

Copyright 1933
By C. AUBREY SMITH

All Rights Reserved

CONTENTS

PART I

INTRODUCTION

CHAPTER		PAGE
I.	<i>Introduction—Statement of the Problem</i>	1
	Why Internal Auditing. Financial Crime. Causes of Increasing Crime. Accounting versus Accountability. Definition of Internal Audit Control. Causes and Classes of Accounting Errors. Classes of Fraud in Accounts. Fraud Methods Used with Cash Receipts. Fraud Methods Used with Cash Payments. Methods Used with Merchandise. Methods Used with Securities. Miscellaneous Fraud Methods.	
II.	<i>Classification and Evaluation of Methods—Internal Audit Control</i>	14
	Definition of Control. Double-entry Book-keeping. Use of Records and Checkable Evidence. Controlling Accounts. Perpetual or Book Inventory Records. Mechanical Devices. Registering Machines. Bookkeeping and Billing Machines. Publicity. Bonding Officers and Employees. Personnel Control. Internal Check. Deliberate Internal Auditing.	

PART II

PRINCIPLES OF INTERNAL CHECK

III.	<i>General Principles of Internal Check</i>	29
	As a Phase of Auditing. As a Phase of Accounting Systems. Internal Check—The Automatic Audit. Basic Rule of Internal Check. Illustrations of Automatic Audit. Internal Check in the Small Concern. Business Transactions and Internal Audit Control. Internal Transfers.	

CHAPTER	PAGE
IV. <i>Internal Check on Cash Receipts</i>	37
<p>Importance of Subject. Sources of Cash Receipts. Receipts from Cash Sales. Collections from Customers on Account. Handling Receipts Through Incoming Mail. Cash Received at Cashier's Window. Subsequent Audit of Receipts on Account. Withholding Cash Received and Making Proper Entry. Withholding Cash Receipts Making No Entry. Lapping. Falsifying Totals in Daily Cash Receipt Book. Overstating Sales Discounts. Receipts from Refunds and Allowances. Collections in a Public Utility. Miscellaneous Receipts. Organization for Control Over Cash Receipts. Explanation of Flow Chart for Cash Receipts. Conclusions on Cash Receipts.</p>	
V. <i>Internal Check on Cash Disbursements</i>	55
<p>Analysis of Cash Disbursements. Liquidation of Accounts Payable. Pay Roll Disbursements. Payments of Operating Expenses. Liquidating Liabilities Other Than Accounts Payable. Miscellaneous Disbursements. Transfers Between Banks. Petty Cash Disbursements. Working Funds. Cash Disbursements by Branches. Summary.</p>	
VI. <i>Internal Check on Sales</i>	69
<p>Possibilities of Fraud and Error in Sales. Organization for Handling Charge Sales. Internal Paper Work. Sales Routine in a Manufacturing Establishment. Routine in a Wholesale Concern. Sales Returns and Allowances. Large Retail Store Procedure. Room Sales in a Hotel. Restaurant and Dining Room Sales. Sales in a Public Utility. Summary.</p>	
VII. <i>Internal Check on Commodity Purchases and Expenses</i>	86
<p>Purchasing and Internal Check. Buying in the Small Concern. Types of Purchases and the Purchasing Agent. Steps in the Purchase Routine. The Purchase Requisition. The</p>	

CHAPTER	PAGE
Purchase Order. Fraud in Purchasing. The Receiving Department. Routine in the Receiving Department. Approval of Invoices. The Voucher System. Variations in Procedure. Local Purchases. Purchases of Services.	
VIII. <i>Internal Check on Pay Roll</i>	100
Importance of Subject. Payment by Check versus Payment in Cash. Fraud in the Pay Roll. Steps in Pay Roll Procedure. Internal Check Through Correlation of Steps in Routine. Unclaimed Wages. Pay Roll Procedure in an Ice Company. Factory Piece-work and Premium Wages. Sales and Office Salaries. Commissions. Summary.	
IX. <i>Internal Control Over Sundry Assets and Company Transfers</i>	114
Internal Transactions. Control of Notes. Control of Securities. Inventory Control. Establishment of Inventory Control. Holding the Storekeeper Accountable. Methods of Inventory Control. Goods in Process of Manufacture. Scrap. Loose Tools. Other Internal Company Transfers.	
X. <i>Internal Control Over Plant Additions and Repairs</i>	126
Importance of Fixed Asset Property Accounting. Authorization System. Preparation of Authorization Forms. Authorization Procedure. Transfers and Retirements. Need for Fixed Property Records. Classification of Fixed Property Accounts. Property Record Cards. Continuous Audit of Plant Property. Summary.	
XI. <i>Summary and Conclusions on Principles of Internal Check</i>	136
Purposes Served by Internal Check. Questionnaire Relating to a System of Internal Check. Limitations of Internal Check. Collusion. Illustration of Wholesale Collusion. Conclusions.	

PART III

DELIBERATE INTERNAL AUDIT CONTROL

CHARTER	PAGE
XII. <i>Organization for Internal Audit Control</i>	149
Need for Internal Auditing. Place of the Auditor in the Business Organization. As Executive Head of the Accounting Department. As Assistant to the Comptroller. As a Free Lance Officer. Conclusions.	
XIII. <i>The Internal Auditor: His Place in the Organization</i>	160
Duties of the General Auditor. Relation of the Auditor to the Accounting Department. Relation of the General Auditor to the Public Accountant. The Auditor's Calendar. Types of Internal Audits.	
XIV. <i>The Internal Auditor: His Procedure and Method</i>	169
Internal Auditing Methods. Protective Control. Supplementary and Duplicate Records. Daily Audit of Routine Transactions. Use of Budgets. Standards and Ratios.	
XV. <i>The Traveling Auditor</i>	176
A Positive Verification. Verifying Cash on Hand. Verifying Cash in Bank. Verification of Notes and Accounts Receivable. Verifying Inventories. Verification of Plant and Other Fixed Assets. Verification of Liabilities. Additional Work of the Traveling Auditor. The Traveling Auditor of a Large Oil Company.	

PART IV

APPENDICES

Appendix A. <i>History of Internal Auditing</i>	189
Introduction. Egypt. Greece. Rome. Following the Overthrow of Rome. Guilds of Florence. Early Double Entry. Early English Auditing. Auditing in the Household of a Tudor Nobleman. Livery Companies. English Government. American Situation. Internal Auditing in Business a Recent Development.	
Appendix B. <i>Bibliography</i>	201

LIST OF ILLUSTRATIVE FORMS

Form	Page
1. Billing Slip for a Public Utility.....	49
2. Flow Sheet for Cash Receipts.....	53
3. Flow Sheet for Cash Disbursements	56
4. Flow Sheet Showing Interrelations of Departments to Effect Internal Check on Sales.....	74
5. Chart Showing Order and Billing Routine in a Wholesale Concern	76
6. Chart Showing Purchase Procedure in a Manu- facturing Business to Secure an Internal Check on Purchase Transactions.....	90
7. Flow Sheet for Internal Check on Pay Roll in a Manufacturing Concern	108
8. Flow Sheet for Internal Check on Pay Roll in an Ice Company	110
9. Request and Estimate for Fixed Property Ex- penditures	128

PART IV
APPENDICES

APPENDIX A

HISTORY OF INTERNAL AUDITING

Introduction

Just when and where auditing first took root is not easy to determine, nor is it particularly significant. It is enough to know that at a very early date, in a primitive civilization, whenever one man was entrusted with the property of another, the owner of the property began searching for methods whereby a check would be placed upon the fidelity of the one trusted. Since accounting records are in themselves a means of recording and checking against the actual property received and disbursed, it follows that auditing goes back to the time when financial records of receipts and disbursements were first prepared—undoubtedly a practice as old as civilization itself.

Egypt

Probably the first attempt at any determined effort to set up checks and double-checks so as to safeguard property was in connection with the first regularly organized governments. Among these, the ancient Egyptians recognized the principle of double-check and arranged that receipts be recorded separately by two officials. In these very early times money was unknown and the receipts from subjects were in kind, such as oxen, corn, materials for clothing, and other products of the day. Since large quantities of these goods were paid in periodically, it was necessary that warehouses be constructed and farms operated. To carry on this type of treasury the services of porters, supervisors, and accountants—this latter group consisting of scribes—were required. Pictures in many of the old tombs give mute evidence of the existence of the scribe, who was present on all occasions writing down numbers of bushels of corn as they were measured out and numbers of cattle as they passed by. To prevent peculation on the part of the workman, the taxpayer upon delivering his product was stopped at the first entrance by a scribe who made a complete statement of the article as to quality and quantity, and then when formal delivery was made at the granary or the pasture

another scribe made a second record of the amount. These two records were independently made and had to agree. As nothing was given out of the treasury without a written order, accountability for "Pharaoh's "treasure" was definite and assured.

Greece

The Greeks recognized the necessity of setting up means for preventing graft and theft of the state's money. The Treasurer of the Public Revenue was subject to certain legal checks and to the will of the people. The will of the people was evinced through publicity of the accounts kept by the treasurer and exhibited where the public could come and view. Publicity as a means of internal audit control dates from this period. In addition to the state treasurer there were separate treasurers of the goddess, of the tribe, the burgh and of the generals, each of whom kept records which were subject to close scrutiny at the end of their term of office. In addition to the treasurers, there were clerks who kept records of receipts and disbursements. Also, there were a head checking-clerk of disbursements and a number of subordinate checking-clerks of receipts and disbursements. It can be seen from these titles that there was a well-conceived plan for administering the finances of the state, an excellent system of checks and double-check. Unfortunately, the system seemed to fail for some reason if the statement of the historian Polybius is to be taken at face value. He said, "but if in Greece the state entrusted to anyone only a talent, and if it had ten checking-clerks and as many seals and twice as many witnesses, it could not ensure his honesty." While no doubt the spirit of administering the finances in Greece must have been bad, the failure was due to no fault of the system, but to collusion on the part of the clerks, treasurer, and checking-clerks—something which no scheme of internal check can entirely eliminate.

Rome

Since commerce and industry in early Rome was on a small scale and then operated usually through the family, there was little need for internal checking methods. The father of the family did such bookkeeping as was needed and controlled the finances of the group.

The system developed by the state, on the other hand, was such that definite safeguards were established over

revenues. The three officials who had a part in this system were the censors, the quaestors, and the magistrates. The censors stood charged with the responsibility of taking a census of the population, which formed the basis of tax assessments, tax collections, and a check upon the treasurer. Under Augustus numerous provincial or district treasuries were operated and their records in turn were examined by the quaestors to insure that such district treasurers and governors of the provinces had made a proper accounting to the central treasury at Rome.

The Romans were concerned not only with seeing that financial officers had rendered to Caesar the things that were Caesar's but also in determining that once the funds were placed in the treasury, they should not be paid out without proper authority. A separate body was entrusted with the authority to pass on all claims against the state and to order their payment. As one writer puts it

"Disbursements from the state treasury had to be legally ordered by a magistrate. In order that funds be disbursed from the state treasury, it was incumbent upon the creditors to submit to a magistrate his account supported by proper documentary evidence as his authority for the debt and his guarantee that the work undertaken had been properly completed."¹

During the later empire the routine, although it provided for complete methods of accountability from all those collecting revenues belonging to the state, must have been top-heavy and expensive, for as Kester says, "eight of the ten or twelve central offices or departments of control were devoted to accounting."²

Following the Overthrow of Rome

After the fall of Rome as a dominant political power Charlemagne, the Emperor of the Franks, is found to have developed crude methods of accounting for his vast estate. To audit and keep the accounts of his properties, he employed men called "judices." To what extent these men really audited as opposed to simply keeping records of transactions it is difficult to say. The same may be said with regard to the revenues of the Papacy. It is said, however, that the Pope was assisted in safeguard-

¹Green, *History and Survey of Accounting*, p. 39.

²Kester, *Accounting Theory and Practice*, 1st Edition, Vol. I, p. 4.

ing these revenues by a staff of auditors, the head of whom was called a Prato Scrivarius.

Guilds of Florence

During the twelfth and thirteenth centuries some of the Italian cities, enjoying a revival of trade and commerce as a result of their strategic position during and immediately following the Crusades, developed on economic organization far ahead of anything known in that day. The center of the Levant trade in the thirteenth century was definitely located in these cities. Florence may be taken as typical of the Italian industrial town. Here under the guild system attention was given to the need for methods of safeguarding the properties of the guild. As an illustration it may be noted that the Calimala Guild, an organization of workmen in the woolen industry which had its beginning in 1190, had fortified itself against speculation on the part of its officers. Accordingly, it was required that the treasurer of the guild upon taking office deposit as a guarantee or bond of good faith the sum of 100 lire. He was further restricted as to disbursements of the guild's funds by the approval of all four consuls, or in present-day terminology, all four directors of the guild.

The treasurer was assisted by an executive officer bearing the title of *Sindaco*, equivalent to the present-day *cashier*. His duties consisted in keeping the daily cash account at the headquarters of the guild. All payments passed through his hands, after their delegation by the treasurer, and he acknowledged receipts of all kinds. At the end of each day he submitted his report to the treasurer and transferred to him all cash on hand.

Once a year, during the month of January, a deliberate check was made by three General Inspectors, all of whom had served the offices of consul or treasurer and whose duties included among other things the checking of the acts and business transactions of the officers of the guild and the locating and exposing of irregularities if any had occurred. There were also in this organization three *Corrieri*, forerunners of our traveling auditors, two who traveled between Florence and France and one between Florence and Rome. Their duties were many, including an audit of the cash accounts of the affiliated operative companies.

A more direct example of deliberate internal auditing of this period is found in the Guild of Bankers and Money Changers. As Staley put it, "The books of all the

money-lenders were required to be open to the inspection of the agents of the Guild, who made periodical and surprise visits to every lender's table. Want of neatness in entry and illegibility were quite as severely censured as were inaccuracies and falsifications."²

Early Double Entry

Paciolo published in 1494 his memorable book on double-entry bookkeeping, which he states was the method of bookkeeping then practiced in Italy, and other subsequent writers on the same subject, gave thus early a method of discovering the bookkeeper's mechanical errors in posting within an organization. His procedure was the same as at present, one man calling the entries out to another and both of them putting tick marks to show agreement, or as Paciolo instructed:

"First you shall get a helper as you could hardly do it alone. You give him the Journal for greater precaution and you shall keep the ledger. Then you tell him, beginning with the first entry in the Journal, to call the numbers of the pages of your Ledger where that entry has been made, first in debit and then in credit. Accordingly, in turn you shall obey him and shall always find the page in the Ledger that he calls and you shall ask him what kind of an entry it is, that is, for what and for whom, and you shall look at the pages to which he refers to see if you find that item and that account. If the amount is the same, call it out. If you find it there the same as in the journal, check it (*lanzarala*—"mark it with a lance A or V") or dot it (*pontarala*), or any proper mark over the lire mark, or in some other place, so that you can readily see it. You ask your helper to make a similar mark or check—as we are used to call it in some places—in the Journal at the same entry. Care must be taken that no entry will be dotted (*pontata*) either by you without him, or by him without you, as great mistakes might be made otherwise, for once the entry is dotted it means that it is correct. The same is done in making our statements of accounts for your debtors before you deliver them. They should have been compared with the Ledger and Journal, or with any other writing in which the entries of the transaction have been recorded.

"After you have proceeded in this way through all the accounts of the Ledger and Journal and found that the

²Staley, *The Guilds of Florence*, p. 177.

two books correspond in debt and credit, it will mean that all the accounts are correct and the entries entered correctly. Take care that your helper shall mark each entry in the Journal with two dots or little lances; in the Ledger you mark down only one for each entry because you know that for each entry in the Journal there are two to make in the Ledger; therefore, the two dots or lances.

“After you have finished checking off the Journal, if you find in the Ledger, some account or entry which has not been checked off in debt or credit, this would indicate that there has been some mistake in the Ledger; that is, that that entry is superfluous whether in the debit or credit, and you shall correct this error by making an entry for the same amount in the opposite side—that is, if the superfluous entry was in the debit, you make an entry on the credit side, or *vice versa*. The same would be done in case your helper finds some entry which your Ledger did not show whether in the debit or credit column, which also would indicate an error in the Ledger and should be corrected in a different way. That is, you should make that entry or open that account in the debit or credit, mentioning the different dates, as the entry would be made later than it should have been. A good bookkeeper should always mention why such differences arise, so that the books are above suspicion; thus the notary public in his instruments need not mention what has been added or omitted.

“But if the said entry should have been entered on only one side, debit or credit, then it would be sufficient for you to put it where it is missing, mentioning how it happened through mistake, etc. So you will go on through all your accounts, and, if they agree, you know that your Ledger is right and well kept.”⁴

Paciolo has nothing to say about methods of control which might be considered as internal checking methods, probably because of the fact that he was addressing himself to the small merchant who would either keep his own books or supervise the work of the bookkeeper and cashier closely. However, a Dutch writer on double-entry in the latter part of the sixteenth century, Simon Stevin by name, did work out ingenious methods of control which today are called methods of internal check. As an example, Stevin says that in order to check the pay roll of the soldiers and other public officials, the

⁴Geijsbeek, *Ancient Double-Entry Bookkeeping*, pp. 69-11.

pay roll should be sent direct to the auditor, and then, he insists, the cook at the mess-house where the soldiers and officials were fed should report independently to the auditors the numbers of meals served. Another method of double-check in connection with the accounts of the government which Stevin suggested in order to stop the making of errors and the stealing of tax and rental revenues was, as reported by Geijsbeek,

“to make the subtreasurer’s report to the general treasurer each month of not only the cash receipts and disbursements, but the person remaining delinquent in their payments. After the reported delinquents remained so for three months, he suggested the sending of the sheriff by the general treasurer (not the subtreasurer) to sell the property of the delinquent taxpayers or to collect from him a bond. He explains that thus you can force the taxpayer to demand a receipt from the subtreasurer when paying and display it to the sheriff and thus get evidence against the subtreasurer of stealing.”⁵

Stevin was also one of the first, if not the first, to suggest the use of controlling accounts as a method of double-check against errors. He also advocated and set up a form for the keeping of a perpetual inventory on each kind of merchandise handled in order that a closer check might be had on stock leakage.

Early English Auditing

Checking by means of separate records or duplicate records was used not only in the Italian cities where notaries often kept records for comparison against the records of the bookkeeper, but also was a favorite scheme employed in the accounting of the English Exchequer and of the Royal Wardrobe. As Brown in his *History of Auditing* says,

“At the Exchequer the Great Roll was compiled from the dictation of the Treasurer, a second roll was written out by the Chancellor’s clerk, and in the early days of the Exchequer a third roll was kept by a special representative of the king. These rolls were independently kept records which had to agree in every respect, every leaf and page of the one corresponding to the leaves and pages of the other; thus ensuring a complete check at the close of the year. The rolls are neither a copy of the other,

⁵Geijsbeek, *Ancient Double-Entry Bookkeeping*, pp. 12-13.

but separately kept for the year, brought on the expiration of the year into agreement."

Auditing in the Household of a Tudor Nobleman

From many of the old records and account books of the English nobility of the fourteenth, fifteenth and sixteenth centuries are found evidence that large sums of money were received from the income of the estates, many of which were vast, so that the services of experts were required to prevent theft and the withholding of funds belonging to their lords. The division of duties was such that at even this early period a most satisfactory system of internal check was in operation. Heading the list of the essential servants in the household of a nobleman, were the Steward, the Comptroller, the Surveyor, the Receiver and the Auditor. Many of the estates could not boast all of these officers, but in any case there would be found a Surveyor, a Receiver, and an Auditor so as to separate the work of accounting for funds from that of receiving and paying out the money, or, as Brathwait puts it, "the one in taking accompt, the other in receiving rents and profits."⁶

The duty of the surveyor, among other things, was to ferret out and set down all the amounts to be collected from rentals. A rental book was made out based on his survey, signed by himself, and a copy of it was delivered to the Receiver-General as a basis for his subsequent collections. Another copy would be sent to the various bailiffs, managing estate farms, so that at the annual audit each could be held accountable for collections.

The post of Receiver or Receiver-General was without a doubt the position of highest trust in the Lord's service. He was the treasurer and cashier of all the funds coming in from the various estates. As Jones put it, "he stood charged by the surveyor's rental book, with the rentes of all manors, lordshippes, demeanes, hamlettes, farmes, or any other commodity arising with . . . the office of survey."⁷ As the bailiffs or others owing the lord made payments to the Receiver, he issued a signed receipt to be held by the payer until the date of audit.

When the money was disbursed by the Receiver, he was required to have a warrant for the amount from the master of the house, which could be used later as a voucher

⁶Jones, *Household of a Tudor Nobleman*, p. 135.

⁷Jones, *Household of a Tudor Nobleman*, p. 139.

when the Receiver's accounts were audited. As an example of the form of voucher used is the following, taken from the records of the *Northumberland Household Book*, pages 132-133:

"WELBILOVYD I grete you wele and wol ande strately charge you without delay as ye intende to have me your good Lorde ande wol exchew that as may issew unto you for the contrary doying at your jeopardy Fail not to content ande pay to my welbiloved Servaunts Robart Percy Countroller of my Hous ande Gilbert Weddell Cheefe Clarke of my Kichyng standyng charged with my saide House ofr the vij and last payment of th' Assignement assigned unto theym for the kepyng of my saide Hous for this Yere begynnyng at Michaelmas in the vj Yere of the reign of our Sovereign Lorde Kyng Henry the viij and shall ende at Michaelmas next following of the Revenus of all my Landes in Northumberlande to your handes comyng dewe to my Coffers of the Whitsonday Ferm payabill at Lambmas Ye content and pay the Some of ciiijl.xiiijs.ixd. in redy

Monay over ande besids that they have xv l.vj s. charged upon theym the saide tyme as parcell of there Assignment as in the Fermes of divers Meddows ande Pastures at Lekyngfeld ande Wresill as it appereth more playnly in the Booke of Orders of my saide Hous for the making up of cxxjl. ixd. assigned unto theym in the iij quarter betwixt Midsummer and Michaelmas Wiche is in full payment of there Hole Assignment for this Hoole Yere endyng at the said Michaelmas next for to come

Geven under my Signet and Sign Manuell at my Manour of Leckyngfeld the xxj day of Novembre in the vj Yere of the reign of our Soverayn Lord Kyng Henry the viij.

To my Trusty Servaunt WILLIAM WORME Gentleman Usher of my Chambre by Coffurer ande my Recyvoure Generall of all my Lands in the North Parties for this Yere."

The Auditor's work was primarily concerned with determining whether every servant of the household had been faithful in his respective trust. The books were balanced and audited once or twice a year at the pleasure of the lord, who often insisted that once the Auditor had begun the audit, he must not see anyone of the household, "the chardge and truste being sae greate, so well betwixt partie and partie" that an unbiased audit might not be

secured otherwise. The duties of the Auditor were set forth in this language:

“The auditor beeing the laste of all offecers, is to bee judge betwixte the lorde and his accomptants, and to deale trulies for and betweene all parties, and upon the determinac'on of his audite, to presente to his lorde by book or breviatē, all his receiptes, expences, imprestes, whatsoever, with the remaines of monye, if any bee.

After the Auditor had performed his work he was required to hold the “declaration of audit.” No doubt, the present-day professional auditor may trace his ancestry back to this period, inasmuch as many of the estates could not afford a full-time auditor, and hence there arose the need for a man who could serve as auditor for a number of the different lords' estates.

Livery Companies

Many references to auditing, as early as 1564, may be discovered in the records of such crafts as the Worshipful Company of Grocers of the City of London, and Worshipful Company of Pewterers. As in the case of the Italian guilds, the books of the company were audited by a committee chosen from members of the craft. In the case of the Company of Pewterers, there is found, in their Ordinance book of the middle sixteenth century this “order for ye audytors”: “Also it is agreed there shalbe foure awdytours chosen every yeare to awdit the crafte accompte and they to parvse and search it that it be perfect.”

English Government

In the eighteenth century in England there were two officers bearing the title of “Auditors of Imprest.” These men, however, merely held the position, delegating to under-clerks the work of audit, which consisted of a mere ascertaining whether the accounts had been correctly added. The so-called audit was in no way a real investigation. The position “Auditors of Imprest” was abolished by Pitt and was replaced by a board of five commissioners, who were given the power to make strict audits of the accounts of each department. This committee system of auditing has its counterpart in the directors' auditing committee of our state and national banks.

¹*Ibid.*

American Situation

From the standpoint of private business and industry, there is little evidence that methods of internal auditing were seriously thought about in Colonial America. Such methods as were in use were brought over from England and Continental Europe. The bookkeeping texts of this period have nothing to say concerning internal checking through division of duties nor deliberate checks by either internal or external auditors. John Mair, a Scotch writer, published in 1736 *Bookkeeping Methodized*. This book was probably the most popular of all bookkeeping texts between the years 1740 to 1800, and many copies were sold in America. It is interesting to note that he limited his discussion regarding internal control to the checking of postings in almost the same manner as had Paciolo 300 years before. A study made by two graduate students of the University of Illinois of one hundred English and American text-books on bookkeeping published before 1900 brought to light only one book that even discussed the use of controlling accounts, and this book came late in the nineteenth century.

Governmental accounting, however, had reached the stage of development where internal auditing was found necessary. Practically all the state constitutions made provision for some kind of internal checking by distributing responsibility to the various departments and through the keeping of duplicate records, a system of checks and balances of one department on another. In the Federal Government definite provision was made by the act of the First Congress in 1789 for a Secretary of the Treasury, a Comptroller, an Auditor, and a Register. It was the duty of the auditor to receive all public accounts, and after examination, to certify the balances and transmit the accounts, with vouchers and certificates, to the Comptroller for his decision thereon.

Internal Auditing in Business a Recent Development

As long as industry and commerce was carried on by the individual owner and through small partnerships there was little need for highly-developed methods of internal check. The personnel of any particular house was small and closely supervised by the owner. Cash and securities were generally under the control of the master, one of the partners, or a confidential clerk. Branches were few, such business as is now carried on through branches then being handled by correspondents or agents.

Under these circumstances, the chance of a clerk's covering up errors and fraud in accounts was at a minimum. Dishonesty in a trusted employe was rare and sure to be discovered. With the advent, however, of the modern corporation and large-scale business, the need for methods of determining accountability and preventing defalcations quickly came into existence. This development in the size and extent of business transactions brought with it a desire on the part of the executives to do away with the old home-spun methods of controlling cash and other assets by a close supervision on the part of the chief executive and to substitute a system whereby a division of duties among the employees and a separation of the functions of the operating departments from those of the recording or accounting departments would give the necessary internal control required over transactions. Internal check was the method chosen, with an outside auditor to come in occasionally, probably once a year, to check out thoroughly the detailed transactions.

The present tendency in the larger businesses seems to be toward a further elaboration of methods of internal check, together with the use of an internal auditing staff whose duties are concerned mostly with doing the detailed examining of transactions at the source, as they occur—the work formerly performed by the public auditor at his annual visit—and leaving thus for the outside auditor the functions of making a limited-test audit (a balance-sheet audit), or special examinations of one kind or another, and of consulting work. This tendency to meet a present-day need by extending the scope and effectiveness of internal audit control has been the basis of this dissertation.

APPENDIX B
BIBLIOGRAPHY

Books

- Accountants Library, *Fraud in Accounts*, Vol. 30, Gee & Co., London, 1919.
- Altman, *Cash Records*, The Ronald Press, New York, 1924.
- Bacas, P. E., "Principles of Department Store Accounting, in Kester, R. B., *Accounting Theory and Practice*, Vol. III, The Ronald Press, New York, 1921, pp. 396-422.
- Beach, F. L., *Bank System and Accounting*, Chap. XIII, "Auditing Department," The Ronald Press, New York, 1927, pp. 255-278.
- Beckman, T. N., *Wholesaling*, The Ronald Press, New York, 1926.
- Bennett, G. E., *Fraud—Its Control Through Accounts*, The Century Company, New York, 1930.
- Bliss, J. H., *Management Through Accounts*, The Ronald Press, New York, 1924, pp. 169-170, 178-180.
- Brown, Richard, *A History of Accounting and Accountants*, Chap. IV, "History of Auditing, T. C. and E. C. Jack, Edinburgh, 1905.
- Burton, J. H., *Stores Accounts and Stores Control*, Sir Isaac Pitman and Sons, Ltd., London, 1929.
- Comstock, L. M., *Modern Retail Methods, Records and Accounting*, U. S. Corporation Company, New York, 1925.
- Eggleston, D. C., *Auditing Procedure*, John Wiley and Sons, New York, 1926.
- Eggleston, D. C., *Department Store Accounting*, Greenberg, New York, 1931.
- Encyclopedia of Accounting, *Frauds in Accounts*, Vol. III, pp. 113-149, Wm. Green & Sons, Edinburgh, 1903.
- Fowler, M. K., *The Cause and Prevention of Bank Defalcations*, The Bankers Publishing Company, New York, 1924.
- Greer, H. C., *Chain Store Accounting*, McGraw-Hill Book Company, New York, 1924.
- Hayes, M. V., *Accounting for Executive Control*, Harper & Brothers, New York, 1929.

- Hodge, A. C., *Retail Accounting and Control*, University of Chicago Press, Chicago, 1925.
- Horwath and Toth, *Hotel Accounting*, The Ronald Press, New York, 1928.
- International Accounting Society, Inc., *Internal Auditing*, Chicago, 1930.
- Kester, R. B., *Office Organization for Control in Accounting Theory and Practice*, Vol. I, Third Revised Edition, The Ronald Press, New York, 1930.
- Kilduff, R. W., *Auditing and Accounting Hand Book*, McGraw Hill Book Company, New York, 1924.
- Langston, L. H., *Practical Bank Operation*, Chap. 24, "Auditing," The Ronald Press Co., New York, 1921.
- Lazarus, Arthur, *Stock Control in Department Stores*, Dry Goods Economist, New York, 1925.
- May, I. A., *Street Railway Accounting*, Chap. XXIV, "Audits," The Ronald Press, New York, 1917.
- McKinsey, J. O., *Bookkeeping and Accounting*, Second Edition, Chaps. 45 and 47, South-Western Publishing Company, Cincinnati, 1927.
- McKinsey, J. O., "Organization for Accounting Control," in Kester, R. B., *Accounting Theory and Practice*, Vol. III, The Ronald Press, New York, pp. 1-17.
- Moreland and McKee, *Accounting for the Petroleum Industry*, McGraw-Hill Book Company, 1927.
- Montgomery, R. H., *Auditing Theory and Practice*, Fourth Edition, The Ronald Press Co., New York, 1927.
- Paton, W. A., *Accounting Hand Book, Second Edition*, The Ronald Press, New York, 1932.
- Spicer and Pegler, *Practical Auditing*, Fifth Edition, H. Faulks Lynch and Company, Ltd., London, 1930.
- Staley, *The Guilds of Florence*, Methuen & Company, London, 1906.
- Schnakel and Lang, *Accounting by Machine Methods*, The Ronald Press, New York, 1929.
- Westerfield, R. B., *Banking Principles and Practice*, Vol. III, Chap. XLI, "The Auditing Department," The Ronald Press, New York, 1929.

Periodicals and Fugitive Literature

- American Institute of Accountants, Letter Bulletin No. 2.
- Bennington, Harold, *The Detection of Fraud*, A Pamphlet, LaSalle Extension University, Chicago, 1918.
- Boddington, A. L., "Internal Check, Its Importance and Application," *The Indian Accountant*, August, 1922.

- Burt, J. K., "Internal Check," *Accountants Journal*, New Zealand, November, 1927.
- Crawford, L. U., "Defalcations," *The Journal of Accountancy*, Vol. XX, No. 2, August, 1915, pp. 112-121.
- Dalrymple, R. A., "System Work Initiated by the Cash Questionnaire," *Haskins and Sells Bulletin*, Vol. XI, No. 11, November, 1928, pp. 82-85.
- Dicksee, L. R., "Fraudulent Accounting," *Accountants Journal* (England), April, 1925, pp. 885-889.
- Hacking, Hy., "Internal Audit—Its Basis, Scope and Function," *The Accountant*, Vol. LXXXV, No. 2963, September 19, 1931, pp. 405-410.
- Harris, F. H., "General Points in Internal Check," *Accountants Journal*, New Zealand, September, 1922.
- Haskins and Sells *Bulletin*, "Cases on Fraud," June, 1925, pp. 42-43; March, 1925, pp. 19-21; November, 1924, pp. 81-82; December, 1924; July, 1927, p. 49; November, 1924, pp. 83-86; March, 1928, p. 19.
- Horwath and Horwath, "Cases on Fraudulent Accounting," from issues of *The Alarm Clock* extending from July, 1927, through October, 1929.
- Hunt, E. W., "Prevention and Detection of Fraud in Accounts," *Accounting and Commerce*, Vol. VII, February and March, 1921, pp. 258-259; 283-288.
- Indiana Association of Certified Public Accountants, *Bulletin* on "Cash Safeguards," 1928.
- Jackson, J. H., "The Comptroller's Department," *1930 Year Book of The National Association of Cost Accountants*, pp. 114-127.
- James, C. C., "The Comptroller's Department," *1930 Year Book of The National Association of Cost Accountants*, pp. 128-136.
- La Frenz, F. W., "Defalcations," *The Journal of Accountancy*, Vol. 37, No. 4, April, 1924, pp. 254-261.
- Leicester, P. A., "Tests by Comparison, Their Use in Auditing," *The Accountants Journal*, December, 1921.
- Lenhart, N. J., "Detection by Accountants of Frauds and Defalcations," *The American Accountant*, December, 1930, pp. 540-544.
- Ling, V. J., "Methods and Internal Check," *The Incorporated Accountants Journal*, January, 1910, pp. 78-81.
- Manning, Anthony B., "Fixed Property Accounting," *Administration Magazine*, December, 1921, pp. 759-775; January, 1922, pp. 89-112; March, 1922, pp. 317-329.

- The National Auditgram*, Published by the National Conference of Bank Auditors and Controllers, Vols. II, III, IV, V, and VI.
- National Electric Light Association, *Internal Audits*, a pamphlet, April, 1927.
- Nixon, H. H., "Methods Employed by Defalcating Bookkeepers and Some Suggestions for the Prevention and Detection of Them," *The Accountant*, December, 1903, pp. 1578-1580.
- Pace Student, "Internal Check and the Disbursing Officer," September, 1926.
- Permewan, A. R., "Internal Check," *The Commonwealth Journal of Accountancy*, December, 1925, pp. 81-83.
- Piper, "Internal Auditing," *The Journal of Accountancy*, Vol. XLV, No. 6, June, 1928, pp. 441-447.
- Pitt, G. S., "Methods of Internal Check," *The Incorporated Accountants Journal*, January, 1910, pp. 78-81.
- Prickett, A. L., "Fixed Property Records—Their Forms and Uses," National Association of Cost Accountants *Bulletin*, Vol. XI, No. 4, October 15, 1929, pp. 169-204.
- Shore, H. W., "Comments Upon Internal Check and Audit," *Accounting and Commerce*, August, 1917, pp. 105-106.
- Spicer, E. E., *Internal Check in Relations to a Manufacturer's Business*, a pamphlet, H. Faulks Lynch & Co., Ltd., London, 1920.
- Sprague, C. E., "Embezzlement and Accountability," *The Journal of Accountancy*, Vol. 8, No. 2, June, 1909, pp. 85-96.
- St. John, S. A., "Accountant versus Embezzler," *The Journal of Accountancy*, Vol. 37, No. 6, June, 1924, pp. 441-451.
- Wagner, M. F., "Accounting for Fixed Capital Expenditures," National Association of Cost Accountants *Bulletin*, Vol. X, No. 12, February 15, 1929, pp. 751-765.
- Wagner, A. F., "Internal Audit in a Moderate-Sized Business," National Association of Cost Accountants *Bulletin*, Vol. X, No. 14, March 15, 1929, pp. 927-929.
- West, E. M. (Miss), "Internal Check in a Central Store," *Accounting, Commerce, and Insurance*, February, 1923, pp. 299-304.
- Wildman, J. R., "Favorite Methods of Business Crookdom," *The Accounting Review*, Vo. IX, No. 2, December, 1925, pp. 127-129.

VITA

The author was born in Fort Smith, Arkansas, April 24, 1901. His secondary education was secured in the Sherman, Texas, Public Schools. He attended Austin College, Sherman, Texas, and The University of Texas, Austin, Texas. From the latter institution he was graduated with the Bachelor of Business Administration degree in 1921, and secured the Master of Business Administration degree from the same institution in 1926. After pursuing additional graduate work in The University of Texas, he was in residence at Columbia University during the session 1929-1930, during which time he also worked as accounting laboratory supervisor.

From September, 1921, to January, 1923, he taught business subjects in the Orange, Texas, High School, going from there to Southeastern State Teachers College, Durant, Oklahoma, as head of the Department of Business. Feeling the need for further business experience, he joined the staff of Haskins and Sells, Certified Public Accountants, in the Tulsa, Oklahoma, office.

In September, 1924, he was called back to The University of Texas to take the position of Registrar and Instructor in the Houston Teaching Center of the Extension Teaching Division. In January, 1925, he was transferred to the Main University at Austin as Instructor in Business Administration. He was granted the C. P. A. certificate by Oklahoma in 1925 and by Texas in 1926. Raised to the rank of Adjunct Professor in 1927, he has occupied the position of Associate Professor of Business Administration since 1929.