

THESIS

Department Store Accounting

DEPARTMENT STORE ACCOUNTING

A study of accounting systems employed
by selected department stores

in

Lansing, Michigan

and

Chattanooga, Tennessee

Thesis for Degree of A. M.

Hans Melvin Vixie

1930

THESIS

Author's Preface

Because of the extremely keen competition existing in modern business, only those who practice scientific methods can hope to survive in the conflict. Every boom and depression period leaves in its wake the wreckage of large numbers of business ventures which were unprepared to compete in the struggle. These failures are of two kinds. Either there has been a lack of the instruments necessary to the conduct of a successful business or the knowledge has been lacking of how to coordinate properly the instruments in hand. Whatever the situation happens to be, failure follows sooner or later.

Department stores in general have come to appreciate the importance of a thorough understanding of business principles and shape their policies so as not to take undue risks.

As a basis for the writing of this Thesis, the author made a survey of the accounting systems of the A.N.Arbaugh Department Store, the Lansing Dry Goods Company and the Peoples Store, all of Lansing Michigan. Also the Miller Brothers Department store and the B.D. Loveman Company of Chattanooga Tennessee. The management in these stores showed every courtesy and cooperated in every way by giving information which made the work a delight.

The author also has clearly in mind the contributions made directly and indirectly, by instructors of both the major

and minor departments. However, special mention is due Professor E.A. Gee who personally supervised this writing, and Dr. H.S. Patton who has made many valuable suggestions and corrections. And to close this section I pay tribute to my Wife who has valued that for which this thesis stands more than the finer comforts and personal ends so much desired by everyone

H.M. Vixie

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CHAPTER 1

Accounting, A Means of Measuring and Controlling the Merchandising Enterprise

It is not at all uncommon to read reports in the public press concerning the failure of this or that business venture, in which the point stands out that only the close work of a trained accountant revealed the actual standing of the business financially. The frequency of such statements naturally suggests a causal connection between sound accounting practice and business solvency.

The head of the manufacturing department of a large consolidation once remarked that prior to the consolidation he used to marvel that his competitors could quote prices so much lower than he could. But after the consolidation he discovered that many of the contracts had been taken at actual losses. The only redeeming feature was to be found in the fact that other contracts carried unusually wide margins which saved the firms from inevitable bankruptcy. The keen competition, found in every industry, which tends to bring selling prices down to approximate the cost of production unquestionably indicates the need of a system of accounting which will insure a narrow, but sure margin of profit from every line undertaken.

The buying public will settle upon such an institution as a source for supplying their needs, and the fact that an institution measures its profits by the utilities added, will make for confidence and stability on the part of its customers, and ultimate success to the institution.

All social organizations are dynamic, not static. Our economic order has seen decided departures from the old accepted standards. Not many years ago our government, as well as the people at large, frowned upon large industrial combinations as being anti-social and contrary to the best interests and welfare of the people. They did not distinguish between monopolies and big business. The Sherman Anti-Trust Act of 1890 was designed especially to break up and prevent such combinations. But we have had a change of heart. While we are not inclined toward monopolies, we invite the benefits which may and should come from employing the economies made possible in big business. We desire competition within a given industry, but not to the extent of lowering efficiency. Because of the evolution of these economic forces the sole proprietor is coming to be more and more an exception, while the corporation is steadily taking its place.

With the advent of the corporate form of business enterprise, capital is becoming increasingly centralized. Large mergers have taken place which have brought millions, and in case of the American Telephone and Telegraph Company a capitalization of about four billion dollars, under one management.

In such institutions it is beyond the power of the most intelligent business manager to supervise and direct personally the many and varied processes being carried on under his control. His task is rather to co-ordinate the work of the body of picked men, all specialists in their respective lines, who are responsible for the varied activities.³

With this relation existing between the manager of the enterprise and the men of responsibility working under him, and the manager and the stock holders, some means of control must be found. Modern accountancy is the answer to this need.

Accounting has two major and general aims. These aims are to measure accomplishments or results, and to furnish the basis for executive control.⁴ In the past the science of accounting has seemingly been contented to rest with the accomplishment of this first aim. But as scientific management finds its application in business the second aim and phase of accounting must be realized in order to secure maximum results. It is not the intention of the author to convey the thought that the science of management has undergone a revolution. It is rather the trend of current works on accounting to stress accounting as a means of control. This act of drawing into action a most powerful instrument for the systematic analysis of the problems of management is seen to hold in store great promises. It is the means of conveying to the chief executive the information which he needs in order to guide intelligently the affairs of the business.

Accounting in terms of results is necessary in order to know whether or not that which has been done is in keeping with expectations. This phase ends with the measurement of the accomplished fact. It is a record of the hits and misses which have taken place during a given period of time.

The information obtained from financial reports indicates, first, additions of new capital which is one of the fundamental conditions of economic progress. Capital is drawn in the direction of greatest remuneration, and such reports then become the guides to the flow of capital and serve as the bases for investments. Likewise those who have already invested in a given business look to the periodic reports for information. Such information might lead an investor to buy additional shares, or it might lead him to sell the amount already held. Closely related to the investment phase is the element of securing credit. While the credit banker should do a certain amount of forecasting, his greatest security seemingly rests upon investing in businesses having a safe and sound ratio between assets and equities other than capital. It is this principle which leads banks and other institutions to publish their statements so that they may be available to the public at large. Such credit rating is built up over a period of years, and is an important element in the progress of any business.

The government also has become increasingly interested in the operations of business.

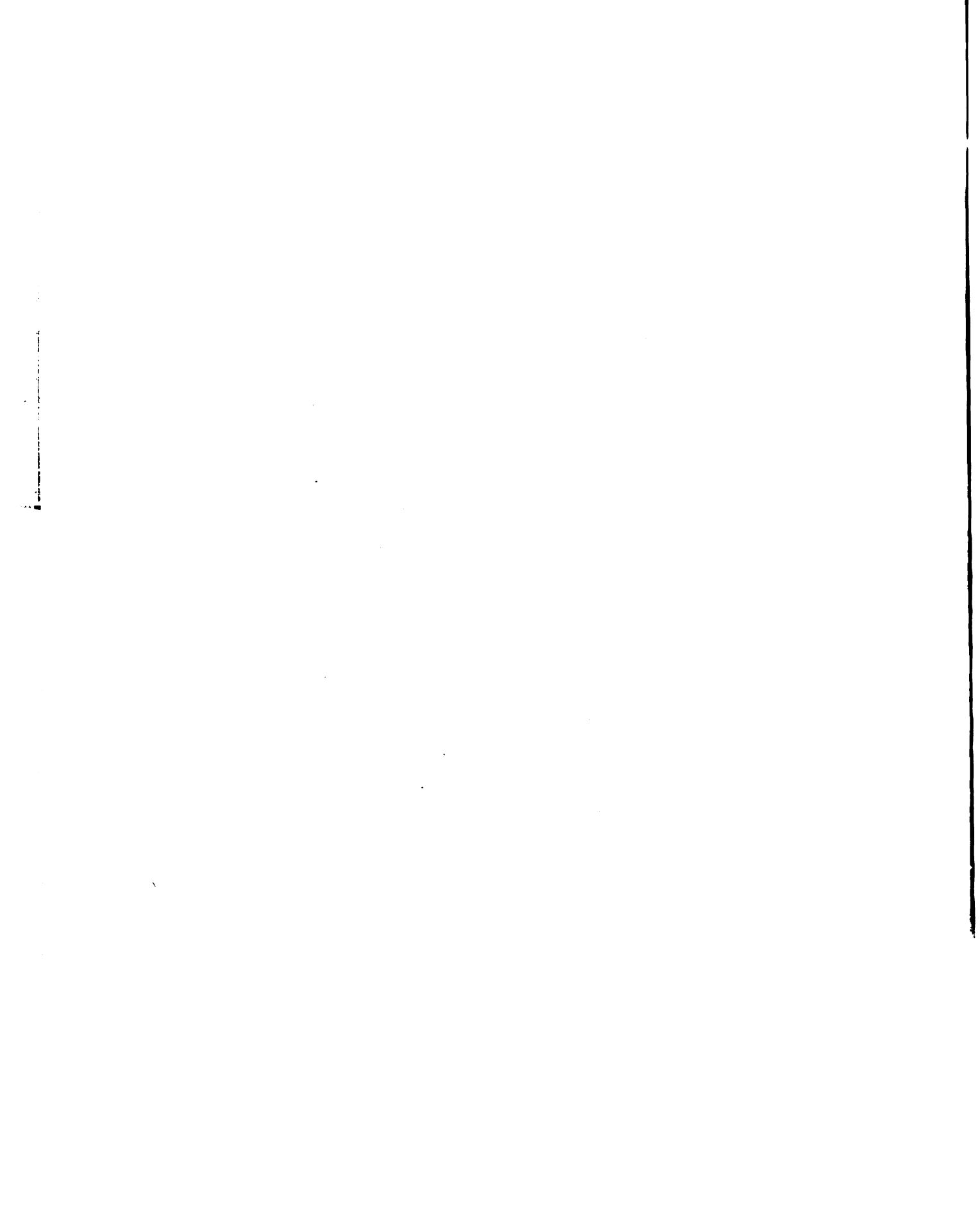
The income tax law of 1913 with its subsequent modifications requires the filing of returns by all business organizations which are not specifically exempt. In a majority of cases the government takes the liberty of prescribing the forms to be used, and such reports are purely accounting reports. An important element in connection with these forms is the uniformity which it injects into the keeping of accounts. It permits of no personal leanings of this or that accountant and should serve as a valuable unifying factor. Another valuable feature of this law is the compulsory filing of the return, which makes the keeping of records imperative. The lack of progress in accounting, especially in the small business enterprises, has been due not so much to the lack of available scientific information concerning accounting methods as it has been due to indifference on the part of the proprietor. This requirement then should prove a blessing in disguise, and should do much toward the promotion of sound business tactics.³

In a large department store each department head is an executive. He is clothed with certain authority and is charged with certain responsibilities. Such men are selected because of special qualities or accomplishments and are given great liberties in directing the affairs in their individual department. But in connection with such freedom rests a double responsibility of making good. An executive in connection with a great corporation in a recent address said that he did not expect his men to hit things

right every time, but stated that he expected their right decisions to be in the majority. This statement emphasizes the importance of a system of accounts so that responsibility may be placed at the proper door. In the presence of certain standards then the person would stand or fall according to his own merit.

The system of measurement which accounting brings about is further valuable because it reduces waste. Even the most careful spender among us would be astonished at his spendings would he but keep strict count. A farmer when selling his grain does not step into the bin with a scoop and proceed to transfer say fifty bushels into someone's wagon, just by guess. There must be careful measurement or one or the other is very likely to lose in the deal. The Cities Service Company realizes the wastefulness of guessing and is urging the necessity of budgeting upon the American family. The budget is merely distributing our expenditures by measure rather than by guess.

In a report published in 1921 by the Federated American Engineering Societies brought to the attention of both the industrial and social world the extent to which waste existed. These reports specifically pointed out the extent to which industry and society as a whole were responsible for such waste. The survey made public reported the waste to be approximately 49% and chargeable to poor management. The proper direction, control, and coordination of the various activities of a business are the only means of eliminating and reducing its wastes. This is accomplished by properly organizing the activities of the business along fund-



amentally sound lines which include functionalization, departmentalization, centralization of executive control, proper balance of factors, provision for adequate records and statistics. The social and economic development of the nation is hampered by the waste of human energy and material resources. In view of the fact that most of this waste can be eliminated, it is the duty of industrial leaders and executives to organize and operate business to bring about the utmost utilization of the available productive facilities and thereby increase human welfare.

It is therefore highly important that there should be constructed in every business institution a system of standards and measurements in accordance with the aims and ends sought. As every important operation in a fully organized business normally has a responsible functional officer in charge, the reports covering departments should be built around such an officer and made to reflect the complete standing of the particular department.

Because of the great number of variables, the controlling/^{phase}of accounting would seem to offer the greatest challenge. Along this line scientific management must wrestle in an attempt to reduce the number of variables and bring the predictive element upon a sound basis.

This prognostic feature is at once recognized as the prerogative of management, and with the two factors above brought together, the result would be scientific management. If accounting is ever to serve its highest purpose it should be of definite assistance to the executive body in the control of the business enterprise. But in order

for the accounting system to render service commensurate with its potentiality the system must be properly designed. The accountant as well as the executive must be a keen analyst of the symptoms of the economic structure, and must device, design, and interpret the records in such a way as to be useful to the greatest degree to the captain of the business ship.

The control phase of accounting can no longer be limited to financial reports. It must exhibit physical as well as value facts, both of which are needed by the manager. The accountant's responsibility then is that of delivering his service in such form as to be useful as statistics to the business executive. In this respect the service of the accountant is similar to goods sold by a given organization, the quality of which may be the best, but unless the service of handling orders and delivering such orders is well taken care of business contacts cannot be satisfactory.

The viewpoint of the accountant should always be that of the proprietor or executive, and the value of the service he may render an organization is largely dependent upon the breadth of his viewpoint. In this respect a close co-operation between the management and the accounting force is essential to the development of an efficient accounting service. They must see in terms of each other. The undertaking must be a joint effort, because the responsibility rests jointly upon these two forces.⁴

In the control and coordination of the activities of a business, records and statistics play a vital part. But it is not enough that we stress the importance of sup-

plying complete and usable information on the part of the accounting force. Such information would be of little importance unless the business managers appreciate its potential value. And, unless the accounting information which is supplied is used, the very fact of its completeness would add to its wastefulness. Every department store is bidding for business, and it would seem that this competitive urge would lead the really progressive executive to develop his knowledge to the extent that he would be a master of such important instruments.

In a business enterprise of considerable size the chief executive does not find time to attend to particular details. With the growth of the business he was obliged to delegate certain functions to men who were especially qualified to discharge such functions. Control is the attribute of the chief, and he delegates such powers to other men whom he appoints to fill his place when the occasion demands it. Such men serve as his second self, and act for him. So long as the business is small, he may direct the various lines personally, and it is to be expected that he would direct them uniformly and without favoritism. With this function distributed among a number of men, who have diverging interests, harmony is not always assured, and such interests must converge in the manager-in-chief. It now becomes his work to harmonize and unify the interests of these men under his supervision, so that the greatest results may be realized. The

information which enables him to give wise direction is supplied by the controller from the accounting department, which is equally interested in all departments and is therefore a fair source of information. One department store of which the author made a survey, carried forty departments, and the work of co-ordinating such an extensive enterprise presents no small task.

It is the external side of any business which presents the perplexing problems. It is on the outside that a business encounters many independent and antagonistic influences. Such problems may be in the form of competing enterprises aiming at their destruction in order to clear the field of competition, or it may be the conditions of business in general which are antagonistic to the future welfare of the business. Regardless of its nature these are exterior forces over which an executive has no control. The solution lies in understanding these forces so thoroughly that he can manipulate the controllable interior factors so as to realize a desired result. It then becomes largely a matter of matching the skill of one executive against that of another and the executive should have scientific knowledge both of his own business and of the economic situation in general.

We shall next consider the instruments or tools by means of which he seeks to bring about satisfactory business relations. These instruments are the intellectual processes of analysis and synthesis.⁵ During the developing years of our industrial society, the point of competition was between the factory system and the home hand worker. This was no competition at all to the factory manager and he practically

ignored it amidst his eagerness of forging ahead. His margin of profit was wide and he had no cause for concern. But as the point of competition changed to those of his own standing it became necessary to employ the instrument of analysis. If profits were not earned, why were they not earned? This last element has not superseded or removed the former. Competitive business must employ both these in their proper relations or ratios.

The keen business executive will analyse the business trends in order to discover the elements that act upon such data and will seek to find the cause for such action. The extent to which he is able to point out these causes will measure the effectiveness of the solution proposed. A proper understanding of the term synthesis will make it clear that it cannot be applied in the past tense. Its meaning lies only in the present tense. It is the act of combining and this act assumes a plan in the present perfect tense. The instrument of analysis on the other hand is a tool operating in all tenses. The executive analyses the past and observes certain causes. Again he analyses the present and observes certain trends. He then predicts what the outcome of these trends will be, and sets about by means of synthesis to build his business to take advantage of the observations made.

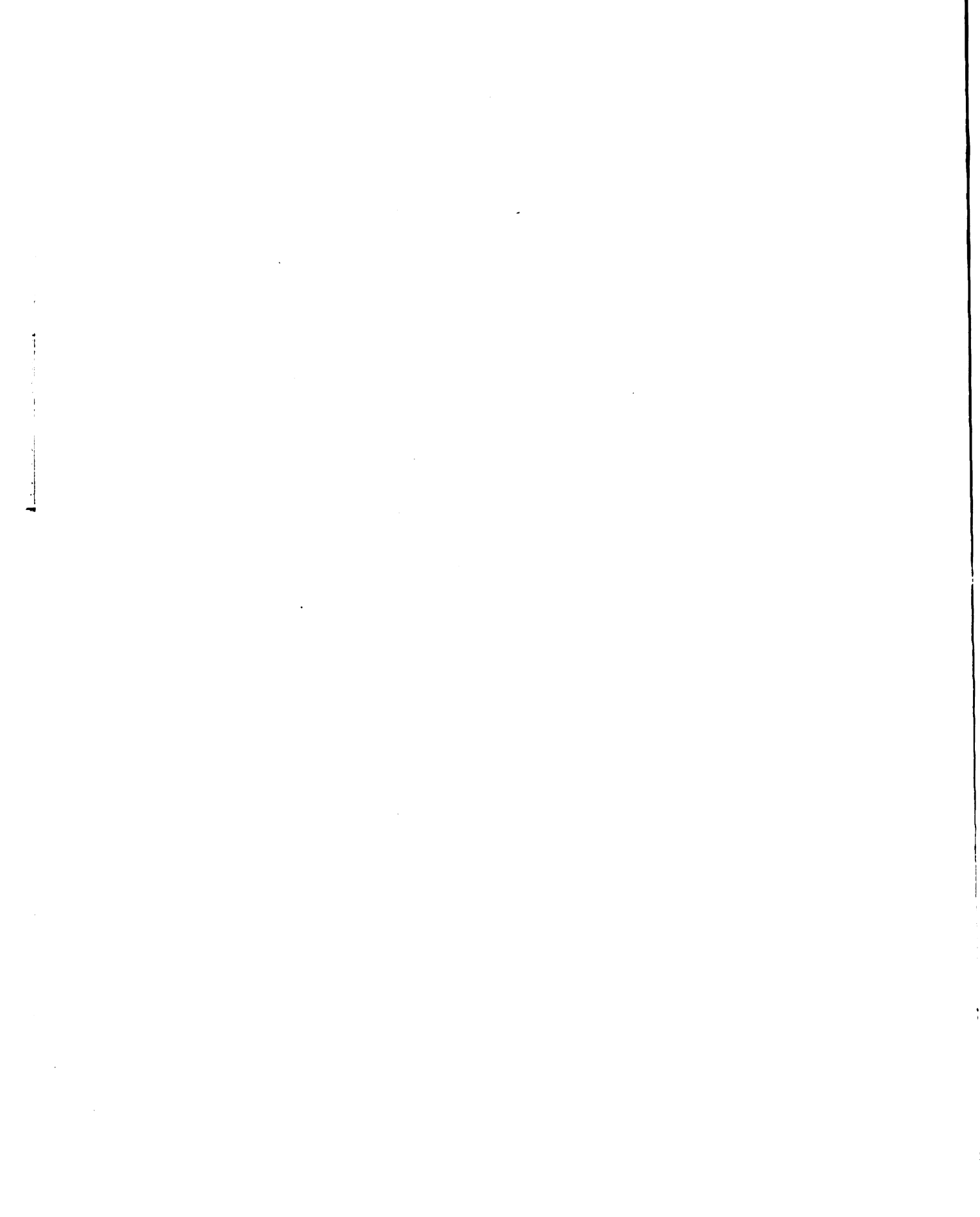
To sum the arguments of this chapter then we restate that the tendency toward mergers and big business makes an effective accounting system a necessity. The accounting

service is divided into two major functions. The first is the measurement of the quantitative elements and indicates progress or retardation during a given period. The second function is the interpretation which the trained accountant gives to the physical and value facts which makes them immediately useful to the manager.

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CHAPTER II

Department Store Accounting

Forms - - Records

The department store usually finds its origin in the general store. It is a combination of a number of departments or stores located under one roof and under one management. To the various department heads are delegated duties in connection with the buying and selling of merchandise and to a limited extent its displays and advertising schedules. Possibly one factor which has aided in the development of the department store is the trend of accounting to the end of keeping accurate records with specific classes of goods. A merchant operating a general store would naturally desire to know whether his stores had been profitable during a given period and this would tend toward segregation.

There are many problems that arise with the buying of merchandise for the purpose of selling. The first question to ask is: What does the public want? It is evident that there are many commodities which never reach the market. They do not pass the initial test. But this is not so serious as it would be to have them find their way to the market and later be rejected by the public.

The incident is related of a well known chair store promoter who while visiting one of his stores, learned that a certain line of neckties was

not moving. He thereupon stepped out in front of his store observing the passersby. In a half hour he returned to the store and asked that the ties be put aside because they were not what the people used. Styles are constantly changing and the well versed buyers keep one step ahead of the public.

With the reduction of inventories the purchasing problem has diminished considerably. Seasonal buying is largely a thing of the past. Much is monthly buying and many items are purchased on a bi-weekly basis. The above items pertain to changing commodities. Again certain lines such as linens, underwear, handkerchiefs and the like are ordered six months ahead.

While the style changes are subtle and uncertain, there are other risks which come about because of seasonal variations. A store may buy a normal supply of footwear, but because of unusual climatic conditions the line may not move at all or the supply may fall far short. The buyer may secure a normal supply of rain coats and umbrellas. The season might chance to be unusually dry and the stock would be left on their hands. Serious as these problems may be, the risk is greatly mitigated by frequent buying and in much smaller quantities. Another phase of buying is one that is always present. Buying must be done at a price which will enable the store to sell at a profit. In a highly competitive field great stress is placed upon buying because the sales price must be as low as possible. It is here that skill in business management is rewarded. In order to meet this competition, a detailed stock record should be kept.

We shall consider purchasing as our first step and shall describe the system in detail. The purchase request should originate with the stock man, where a stock room is kept, or with the departments. The request should pass over the perpetual inventory desk for a check and then pass on to the purchase department. The purchase order is made out in triplicate. The first copy goes to the vendor, the second goes to the receiving department, and the third form is retained in the order file. In a large business it is well to have the purchase orders made out in different colors and marked to indicate degrees of urgency. In this way a rush order would have special attention.¹ All purchase orders should be by departments and any one order should never represent more than one department. This is very important as it makes possible a complete separation of freight and express charges by departments and simplifies the handling of such items on the books. The purchase order should be made out carefully so as to give complete information. The department for which the goods are ordered should be indicated and many stores refuse¹ to acknowledge the invoice unless the department is indicated.

As the goods arrive at the receiving room they are checked on the form prepared which we shall term the invoice apron. This apron is attached to the invoice and gives all the information in connection with receiving and billing of goods. Such information covers the work of four steps or divisions-- the order department, the receiving room, the marking room and finally passes on to the accounting department. In the accounting department the invoice is entered in the purchase register.

PURCHASE ORDER

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	A	B	C	D	E
No. _____ Date _____																							
Please Ship to _____																							
Quantity	Description	Discount	Net	Ship Date																			
Route Via _____										Terms _____													
										Miller Mercantile Co.													
										Pur. Agent													

Form 9

From Bennett

Chicago Ill.

December 15, 1929

MARK'S NOVELTY SHOE CO.

Sold to

Terms

(Form 10)

APRON PASTED TO INVOICE

By Courtesy of A.N. Arbough Co.

INVOICE APRON

ORDER CLERK	RECEIVING ROOM	MARKING ROOM	OFFICE		
Invoice No.	Date Received	Date Received	Cost Checked	Invoice Cost	
Dep't. No.	Carrying Charges	Quantity Checked By	Retail Fig- ured By	Wdse. Ret'd.	
Order No.	Date Checked	Checked By	Ticket Attached By	Retail Ck'd. By	Invoice Cost
Date Due	Over-short	Rechecked by	Date to De- partment	Reviewed By	Dis- count
Date Checked From Order					Antici- pation
No. Sheets			Buyer's O. K.	Date Posted	Net Retail

(Form 11)

It now has the buyers O.K. for quality and other particulars. In a large stor- where many invoices are received, systematic handling of such invoices must be made possible. When invoices are received in advance of the goods they are placed in a file until the goods arrive, when the routine described above is carried out. As the invoices arrive from the packing room they are entered in the purchase register as indicated and filed among the unpaid invoices, which should be by firms, always placing the new invoices to the back.

Quite often it is necessary to return some of the items on a given invoice. In such events proper debit memoranda must be prepared. In this case one should make sure that all terms and dating are adjusted to the invoice so that no discount loss will occur when the bill is paid. Care must be exercised also that the business does not stand the carriage charges. By referring to the invoice apron it will be seen that the retail extensions and footings are marked as well as the cost extensions and footings. It is also well to have such retail extensions marked in red ink. This is a safeguard against paying the retail price instead of the invoice price. After the invoice has been entered on the Purchase Record the page and line thereof should be marked on the invoice in order to facilitate quick turning in case it is desired.

In returning goods as indicated above the debit memorandum is prepared in triplicate. The original is sent to the vendor. The second carrying only debit memorandum number is retained in the pad. The third is attached to the invoice and is handled as a credit memorandum when entry is made in

Purchase Register

Department _____

Page _____

Yr	Da	Inv. No.	Creditor	L.F.	Date	Inv.	Net	Returns	Inv.	Net	Date	Pd.	Sel.	Price	M.U.	%	MJ
----	----	----------	----------	------	------	------	-----	---------	------	-----	------	-----	------	-------	------	---	----

RECEIVING REPORT

No _____	
Date _____	
Rec'd. From _____	
Via _____	
Checked By _____	Time Rec'd _____
Car No. _____	Charges _____
Placed _____	Released _____
Our Order No. _____	Requisition No. _____

Quantity	Description	Wt.	Remarks
Cs. BBI			

Checked to Inv _____	clerk _____
----------------------	-------------

Form 13

From Bennett

DEBIT MEMORANDUM

No _____

Date _____

Your A/c Debited \$ _____ as shown below

Date				Am't

2

the Purchase Record.

We shall next describe the Purchase Record illustrated above. In discussing the invoice apron we noted that this apron furnishes detailed information which enables the ledger clerk to make the proper entry. As the illustrative form shows, provision is made for considerable data. The first thing to be noted is that the Purchase Register is divided into sections, and gives one to each department. In this register both entry date and invoice date are given. The time allowance or discount period is readily ascertained and as the entries are progressive this register may be used as a basis for making out checks. As the date paid is stamped a complete record is obtained. The total of invoices would give the figures for purchases and the same amount would show the credit to Accounts Payable Control. As soon as the invoices are paid the credit is to Cash and the debit is to the Controlling Account Payable. Some enterprises do not think it worthwhile carrying ledger accounts with the creditors but it would seem that no rule can be laid down in this respect. The Purchase Register illustrated does not provide for a comparison among various departments. This comparison would seem to offer many advantages and is provided in the form of a daily summary of all the departments in the store. The percentages would be worked out on the basis of capital employed, sales and net gain. A comparative statement would stimulate rivalry and should make for efficiency. It not only gives total sales by departments, but by sales people

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By Courtesy of Miller Electric

Manufacturing

Form 15

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for the day and month. This summary may also serve as a basis for determining increases in wages. On the other hand it will show whether or not a clerk is profitable.

Thus far we have not studied the operations of the marking room and it would be well to observe what takes place there. After the merchandise has been inspected by the department head and has been accepted, provision should be made for marking every item which passes through the room. As many losses occur from not knowing the cost of merchandise, the plan is to have both cost and retail price marked on each item. The cost should be marked in code. For this purpose two five letter words may be used. Each letter would correspond to a given digit from one to ten. A historical record should be kept of code and should be changed at least once a year. The per cent of mark-up should be based on the rate of turnover. If the management has decided upon, say thirty-six per cent, as the necessary mark-up, thirty-six per cent would have to be added where only one turnover is made in a year. Where the turnover is rapid the percentage is arrived at by dividing the planned percentage mark-up by the number of turnovers. For example, assume that in a given department four turnovers are made in a year. The planned mark-up of thirty-six per cent would be divided by four and would give the necessary mark-up of nine per cent. The important thing is that the aggregate of all mark-ups corresponds to the thirty-six per cent planned. 1"

Sales are of two kinds--the cash sale and the credit sale. With the many features included on our modern cash registers it is not necessary for the salesperson to make out the cash sales ticket. An up-to-date cash register is so

constructed, that the cashier is able to bring out the necessary information by pressing certain keys on the machine. The information desired is the particular department, the clerk number, transaction number, the date, and amount of the sale. This information is retained on the machine in a cumulative form and may be totalled at will.

The credit sales involve more detail. After the sale has been made it is necessary for the clerk to interview the credit manager. The sales ticket is made out by hand and gives the name and address, the amount of the sale. The amount of the payment is then credited to offset the sale. Other information contained on the salesticket is the department number, clerk number, and date. Each clerk is provided with a pad of sales tickets and should never be permitted to use the pad of another and should also be required to account for every ticket. Sales tickets are used for no other purpose than to record sales. In case of returned sales, a Merchandise Returned Slip should be prepared in duplicate to replace such goods in stock. On the back inside cover is a tally card which the clerk is required to fill out. The entries on this card must agree with the total amount on the slips passed in. Another form is necessary to record payments made by customers. This record should be so made that it is impossible to overlook posting the amount to the credit of the customer. A controlling account should be maintained in the General Ledger so as to have a means of checking against the personal ledger. In order to assure a ready audit, it is necessary at times to issue both

a charge ticket and a cash ticket. When merchandise is sold at a discount the amount of the discount should be written in the lower left hand corner and circled. This is necessary in order to avoid discrepancies in inventories. Often items are called for by customers which are not carried in stock. If they are the line handled, every effort should be made to obtain them. The advisability of stocking the item should be considered. Care must be exercised however as it may be false demand created prior to the call of a salesman carrying such goods.³

The modern cash register is of improved design and is a decided convenience and safety measure. The register is emptied at the close of each day and the money on hand is placed in the safe. At the beginning of the day an amount sufficient for the purpose of making change is transferred from the safe to the register. A memorandum is left in its place so as to leave the cash undisturbed. The amount taken to begin the day is subtracted from the amount received in order to ascertain the total cash receipts for a given day.⁴

The daily sales tickets are divided into two classes-- cash sales and sales on account. These tickets are then sorted according to clerks under one or other of the above headings. The information obtained is entered on a daily Summary Sheet. This sheet is prepared so as to provide for both cash and credit by totals for every sales person in the store. It indicates the departments and shows the amount sold by clerks for a given day. These daily summaries again are added to make up a monthly summary.

CASE STUDIES

Case Study A

The stock requirements originate with the heads of the various departments. This is especially true in regard to quality of goods, styles, et cetera. The department head must stay within the capital allowance for his department.

As the department head is the functional officer for his department all the buying is done by him or by his direction. The Loveman Company as well as the Miller Brothers Store of Chattanooga and A.N. Arbough's of Lansing, being privately owned stores, reported that their buyers visited the New York markets as often as twice a month. This is particularly true of the buying of goods having frequent style changes. Again, small orders may be mailed or telegraphed as often as twice a week. On the other hand there is what is known as seasonal buying. Such buying covers about six months. The privately owned stores listed above reported such buying in connection with underwear, some types of hosiery, linens, handkerchiefs, blankets, et cetera. The trend however as stated hereafter is toward short-period purchases, and the stock room is steadily losing in importance.

Case Study B.

There are two general methods in handling credit. The first is the regular credit sale where no down payment is required, and the sale is made on an open book account. The second plan usually requires a down payment of 10% and is variously known as a contract account, chattel mortgage sale or club plan. Under this last plan, the merchandise may be repossessed by the store in case of a lapse in payments.

As a rule a person who wishes to obtain credit makes his desire known before making the purchase. After the customer has requested credit, the salesperson accompanies him or her to the office of the credit manager where a number of questions are asked. All stores may not use the same degree of precaution but in the case of Loveman's department store no account is opened without bank reference and a favorable report from the local credit association.

The credit manager with the Miller Brothers Company reported a remarkably small number of lapses in payment due to careful investigation of the customer's standing before credit is given.

Case Study C

Because of the keen competition existing everywhere, stores must carry their leaders - goods on which they have secured an exceptionally low price. From time to time manufacturers wish to close out and discontinue certain lines

and will quote such goods at very low prices so as to furnish special inducements to buyers. While the merchant in turn plans to feature these goods as leaders, he may realize a fair profit due to the low cost to him. On the other hand store managers and department heads are keenly alert to what is going on in competing stores and are forced to take a mark-down on certain goods in order to meet the prices of other stores. In so doing the planned percentage of mark-up is maintained with difficulty. In fact only an average can be aimed at except where the Retail Method of Inventory is maintained where both cost and retail is indicated. It was especially interesting to note the confidence which the men of the Chattanooga stores manifested in connection with the varying mark-ups and mark-downs.

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CHAPTER III

Department Store Accounting

The Statements

We next come to the step of preparing the accounting information in a form that may be presented to the managerial force. As stated previously the quality of the work of the accountant is determined by the extent to which his reports are useful to those who guide the affairs of the business. Reports may be very simple, covering only single aspects of a business operation, or they may be very complex, dealing with the enterprise as a whole or with several enterprises. Regardless of its simplicity or complexity, it must be designed to convey to the managerial force all the information needed for the purpose of control. In the matter of reporting it is readily understood that the system must be designed for the business in which it is to be used.

If the balance sheet of a particular business is to set forth a full and correct picture, the individual investments and liabilities must appear and be correctly described. Every account which represents a material element of investment or liability should be set out in the balance sheet. But it is not only important that items appear on the balance sheet; There must be some means of evaluating such items. To illustrate: John Smith & Company owes our business two thousand dollars in the form of accounts receivable. We have learned that their plant has been shut down because of

the fact that the patent right for making a given product is owned by another concern. The fact that the plant is closed makes collections more doubtful and should be considered in making the allowance for such accounts. In this respect the hard luck of one business enterprise becomes the hard luck of others. Banking institutions have often made slips along this line. The Florida boom and crisis in 1928 and 1929 is a good example. Banks thrived with the rest for some time--making loans and of course realizing profits therefrom, but when the crisis came, they were awakened to the fact that they had made loans on a given property which was many times the value of such property in normal times. The frequent occurrences of such situations emphasize the importance on the part of the accountant to prepare comparative statements and graphs, not only for the given year but over a period of years. In this respect the accounting information serves as a business thermometer, and we might say barometer, as well. As a boy the writer used to delight in the pastime of watching the firemen during threshing time. There seemed to be no limit to the amount of straw or coal those engines could burn, but the fireman usually kept one eye on the steam gauge. He aimed to keep the needle as close to one hundred twenty pounds as possible, but did not want it to go beyond that point because then the safety valve opened and waste ensued. The above illustration is somewhat analagous to business, we want to keep the "steam" at the top, but not to the extent of spilling over. It is the accountant who furnishes the gauge by which modern business is controlled.

We shall now turn to the actual instruments or gauges which the accountant sets up. Such instruments may be many and varied, but as we summarized the accounting data under two broad classifications, we shall accommodate our reporting systems to these two classifications. Our reports accordingly will be financial as pertaining to real accounts, and operating as applying to nominal accounts. The financial report is issued for the public, for stock holders, for the board of directors and for those who have their hands directly on the throttle of the business. The statement issued for public use is most commonly a synopsis of the balances of the real accounts. But in order to be of any service to owners, investors or interested persons in any capacity, each item should appear clothed in its true color. This critical evaluation often requires considerable supplementary information and may be expressed as follows:

1. Financial Report

Balance Sheet Reports

1. Cash Requirements Report
2. Accounts Receivable Report
3. Inventory Requirements Report
4. Equipment Requirements Report
5. Accounts Payable Report

The¹ second system of reporting which covers the operating phase of a business, should be equally complete, but such information is confined strictly to the managers of the business. Such operating reports reveal policies, and tactics which any business regards as secrets, and wishes withheld from its competitors.

As indicated, the operating statement must be complete but such completeness exhibits the business in the

Comparative Balance Sheet Jan. 1, 1929.

Fixed Assets	1928	%	1929	%
Land	\$25,000	21.3	\$25,000	21.4
Buildings.....	25,500	21.7	24,000	23.5
Office Equipment.....	1,000	0.8	900	0.8
Delivery Equipment.....	3,500	3.0	2,820	2.7
Total Fixed Assets	\$55,000	46.9	\$52,720	51.6
Current Assets				
Inventories:				
Dry Goods	\$10,500	8.9	\$9,000	8.8
Furniture	12,000	10.2	12,500	12.2
Groceries	10,000	8.5	9,000	8.8
Total Inventories	\$32,500	27.7	\$30,500	29.8
Notes Receivable	525	0.4	500	0.4
Accounts Receivable.....	27,000	23.0	15,980	15.6
Cash	1,350	1.1	1,300	1.2
Total Current Assets.....	\$61,375	52.4	\$48,280	47.3
Deferred Assets				
Prepaid Insurance.....	\$200	0.1	\$300	0.3
Prepaid Advertising.....	500	0.4	800	0.8
	<u>\$700</u>	<u>0.5</u>	<u>\$1100</u>	<u>1.1</u>
Total Assets.....	\$117,075	100.0	\$102,100	100.0
Fixed Liabilities				
Mortgage Payable.....	\$20,000	17.0	\$20,000	19.5
Current Liabilities.....				
Notes Payable	6,075	5.2	1,000	0.9
Accounts Payable.....	30,000	25.6	14,980	14.6
Total Current Liabilities...	\$36,075	30.8	\$15,980	15.6
Proprietorship				
Miller Brothers	\$61,000	52.0	\$66,120	64.6
Total Liabilities and Prop.	\$117,075	100.0	\$102,100	100.0

Numbering the Accounts

Assets

100 Cash	105 Buildings
101 Bank	106 Furniture and Fixtures
102 Notes Receivable	107 Delivery Equipment
103 Accounts Receivable Control	108 Deferred Charges
104 Inventory	

Liabilities

200 Notes Payable	308 Reserve for Depreciation on Furniture and Fixtures
201 Creditors' Ledger Control	309 Reserve for Depreciation on Delivery Equipment
202 Trade Checks	310 Capital
203 Taxes Accrued	311 Proprietors' Drawings Accounts
205 Accrued Wages	312 Surplus
206 Allowance for Bad Debts	313 Profit and Loss
207 Allowance for Depreciation on buildings	314 Dividends

Incomes

300 Sales	303 Rent Earned
301 Discount on Purchases	304 Miscellaneous
302 Interest Earned	

Expenses

400 Sales Salaries	410 Taxes
401 Bonus	411 General Expense
402 Buying Expense	412 Insurance
403 Advertising	413 Administration Salaries
404 Delivery Expense	414 Office Expense
405 Freight and Express	415 Telephone and Telegraph
406 Departmental Expense	416 Interest
407 Departmental Supplies	417 Depreciation
408 Rent	
409 Light, Heat and Power	

form of a moving picture. The balance sheet is analogous to a snapshot. It pictures the business of a given moment. The operating statement, as the term suggests, gives a motion picture of the business--of the events within the business between the periods of the balance sheets. The picture must indicate volume, content and extent. Such a statement shows how changes came about, and not merely that changes had come.

3. Operating Ratios

- (a) Marketing Reports
 - (1) Sales Reports
 - (2) Publicity Reports
- (b) Procurement Reports
 - (1) Purchases
 - (2) Warehouse Reports
- (c) Labor Reports
 - (1) Employment Reports
 - (2) Training Reports
- (d) Management Reports
 - (1) Expense Reports of Various Kinds

(From Hayes)

In the preparation of such a reporting system the accountant should seek to answer such questions as the following: What are the important relationships between groups of data in an accounting report? What type of facts or estimates should the executive attempt to deduce from a report? It may accordingly be stated that the executive finds considerable assistance in considering business facts in terms of ratios. Quantitative ratios are important in a great many instances. There is the ratio of the average stock to total sales; the ratio of selling expense to total sales, and many such comparisons which may be made with benefit and profit to the management of the business.²

Another important relationship is found in considering averages. For example, average sales would give more

HILLER MERCANTILE COMPANY

Profit and Loss Statement

January 1, 1929.

Sales		\$160,000
Cost of Goods Sold		
Inventory, Dec. 31, 1928.....	\$32,500	
Purchases.....	118,000	
	<u>\$150,500</u>	
Deduct Inventory Dec. 31, 1929	<u>30,500</u>	<u>120,000</u>
Gross Trading Margin.....		40,000
Selling Expenses		
Salaries of Sales Force.....	10,000	
Advertising.....	5,000	
Delivery Expense.....	4,000	
Dep. on Delivery Equip....	700	
Sundry Selling Expenses..	<u>1,300</u>	<u>21,000</u>
Net Trading Profit.....		19,000
Administration Expenses		
Management and Office Sal.	6,000	
Heat, Water, and Lights	800	
Building Repairs.....	900	
Building Depreciation....	1,500	
Stationery & Printing....	200	
Dep'n. on Office Equip....	100	
Insurance.....	1,700	
Taxes.....	2,000	
Tel. and Telegraph.....	<u>90</u>	<u>13,290</u>
Net Operating Profit.....		5,710
Financial Expenses		
Interest Expense.....	1,750	
Sales Discount	<u>845</u>	2,595
Financial Income		
Interest Income.....	535	
Discount Received.....	<u>1,470</u>	<u>2,005</u>
Net Financial Costs.....		<u>590</u>
Net Profit.....		<u>\$5,120</u>

MILLER MERCANTILE COMPANY

Percentage Profit and Loss Statement

Year Ending Dec. 31, 1929.

Sales.....		¹⁰⁰	100
Cost of Goods Sold.....			<u>75</u>
Gross Trading Margin.....			25
Selling Expenses	¹³		
Salaries and Sales	6.25		
Advertising.....	3.13		
Delivery Expense.....	2.50		
Dep'n. on Del. Equip.....	0.44		
Sundry Selling Expenses.....	<u>0.81</u>		<u>13.13</u>
Net Trading Profit.....			11.87
Administration Expenses			
Magnt. and Office Salaries.....	3.75		
Heat, Water and Lights.....	0.50		
Building Repairs.....	0.56		
Allowance for Dep'n.....	0.84		
Stationery and Printing.....	0.13		
Dep'n. on Office Equip.....	0.06		
Insurance.....	1.06		
Taxes.....	1.25		
Tel. and Telegraph.....	0.05		<u>8.30</u>
Net Operating Profit.....			3.57
Financial Expenses			
Interest Expense.....	1.09		
Sales Discount.....	<u>0.53</u>	1.62	
Financial Income			
Interest Income.....	0.33		
Discounts Received.....	<u>0.91</u>	<u>1.24</u>	
Net Financial Costs.....			<u>0.38</u>
Net Profit.....			<u><u>3.19</u></u>

SCHEDULE A

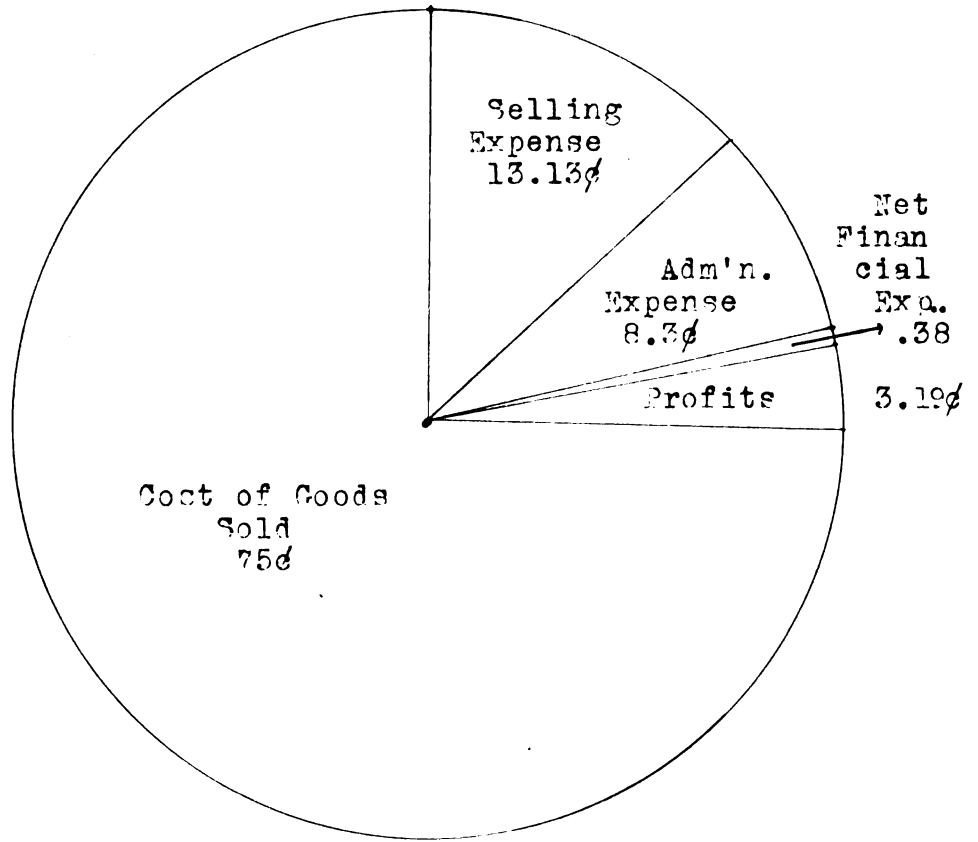
Percentage Income and Costs

Sales.....	100%
Cost of Goods Sold.....	75
	<hr/>
Gross Trading Margin.....	25
Selling Expenses.....	13.13
	<hr/>
Net Trading Margin.....	11.87
Administration Expenses.....	8.30
	<hr/>
Net Operating Profit.....	3.57
Net Financial Costs.....	0.38
	<hr/>
Net Profit.....	3.19

SCHEDULE B

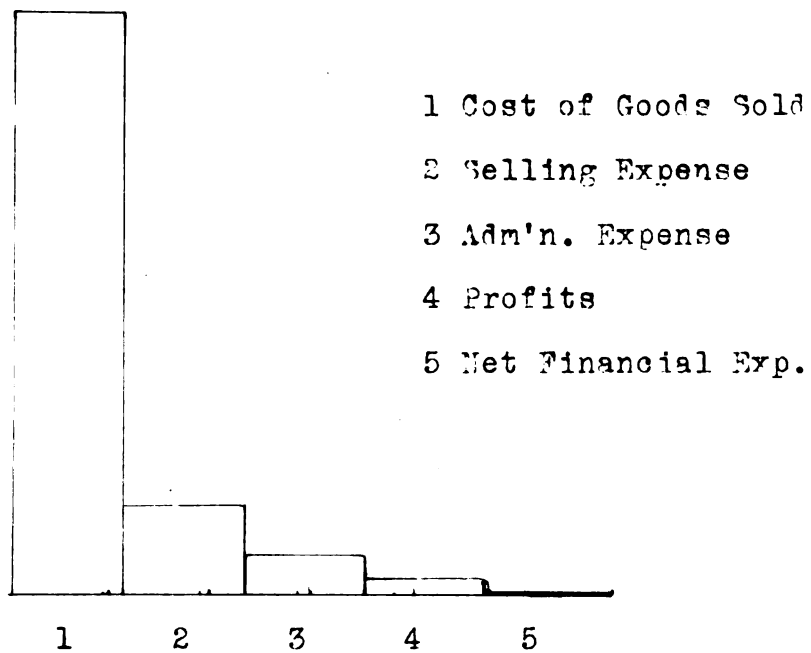
Distribution of 25% Margin

Selling Expenses.....	13.13% of Sales
Administration Exp.....	8.30
Net Financial Costs.....	0.38
Net Profit.....	3.19
	<hr/>
Gross Trading Margin.....	25.00



Form 16

Chart Showing Distribution of Sales Dollar



Form 17

information than would the figures of any one particular day. There are many circumstances which have a bearing upon activities of a community, such as the weather, the social activities, health conditions and so on. The average sale for a period, however, would serve to iron out the variations and would be far more satisfactory.

Again the management is interested in knowing the trend of the time. This may have reference to employment, the readiness of money, which involves credit. This last element may include the two previously mentioned. There are any number of single items which combine to make up these important indicators. In the department store a complete stock record should be kept. This record should be divided into departments and should show such information as: amount bought year by year, amount sold at regular price. It should give information concerning styles. The purchase as well as selling price should always be given, where bought, and when bought. Supplementary information is of great value. A graph showing the temperature day by day also rainfall would be valuable. It would be well to show the conditions of employment, as well as the agricultural situation. If access could be had to index numbers and also the relative money values all these factors would aid considerably in showing important trends which could be made useful in shaping future policies.

In order to display all these important elements, factors and relationships, the accountant and controller will resort to many devices. We have discussed the conventional statements, which may be supported by supplementary information, all of which should have for their aim to explain and make clear

the main subject. Often such statements make a comparison with previous years, showing variations in percentages or by graphs. Often the standard or the expected, is shown, and any deviation from this goal is indicated. We therefore, have presented a few of the means which the accountant may resort to in order that his services may extend to the point where it will link up with the direct controlling force and be used in the guidance of the business enterprise.

In order to facilitate the distribution of the various expenses a columnar record is used in which the departments are all listed. Aside from the charge which is made to each department, provision must be made to classify the expenses according to function performed. Advertising, as an example, is a function and must be listed as such but aside from the total figure being given, each department is charged with its share of this burden. So far as the direct expenses are concerned no special problem is involved as such expenses are charged against the particular department in which they take place. Expenses of this type are clerk salaries, freight and express, advertising, traveling, etc. One of the above items which in the past used to be a bone of contention was the freight and express. It is difficult to place it upon a basis that will be acceptable unless each department has its own shipments come separate from all other shipments consigned to the same store. This plan leaves no question as to the amount to be charged to any given department. One store in Lansing, Michigan gave this question of expense distribution as one of its major accounting problems.

Rent is distributed on the basis of location with reference to traffic. The first floor is always charged the

highest rent, while the second floor ranges somewhere around half that of the first. All floors above the second are charged the same rent. Again, rents vary according to the particular location on a given floor.

The indirect expenses are distributed on a pro-rata basis. Each department must carry its portion of the general burden, and it is aimed to distribute this burden according to the income of each department brought about by its advantage.

1930
July

Day	Sale Regular (1) (2)	Employment	Dollar Purchasing Pow	Social Functio	Health	Temperature	Rainfall	Interest Rate	Credit	Prices (Rising (Falling (Normal				
1	2	Bad	High	Nor.	Nor.	89	1.2	7%	Good	2				
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Form 18

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Chapter IV

Department Store Accounting

The Inventory

In any merchandising enterprise the inventory, consisting of stock in trade, comprises one of the most important forms of assets. With the enactment of Income Tax legislation this importance has seemingly increased. In any mercantile business an accurate determination of the profit earned during a given period is dependent upon a proper evaluation of the inventory of the merchandise on hand at the close of the period. With this inventory known it becomes a simple matter to ascertain the cost of sales figure, which subtracted from net sales gives the gross profit. The government is endeavoring to standardize the methods employed in the taking of inventories, so as to make the burden of taxation as equitable as possible.

In addition to the necessity of having accurate inventory figures on hand at the end of a period, a knowledge of the goods on hand during the period is important because it enables the merchant to know when to buy and also how much to buy. The writer was forcibly impressed with the trend toward inventory reduction. The stock room is largely a thing of the past, and the quantity of the various units carried is left pretty much to the department heads.

The pricing of inventories during periods of stress

or changing prices present real problems to the merchant. The same problem is encountered in the case of physical deterioration of goods. It may be asked why these considerations should affect inventory valuation. The real loss does not appear to be sustained until the goods are sold. The effect of recognizing deterioration or depreciation at inventory time is to decrease the amount of profit for the period. This decrease in profit is due to a corresponding increase in the cost of goods sold, which decreases the gross margin. This important principle emphasizes the importance of exercising foresight, even to the point of anticipating losses when they are but dimly visible. It is important to note in connection with the point cited that the loss was not chargeable to sales but rather to purchases. This being true, it is proper to charge it against the profit of the current period. It is a safe rule to follow to value merchandise at the actual cost of replacement. (1)

From the standpoint of control, the amount of stock shortage should be known, otherwise this element may run into immense proportions. There is no possibility of such a check unless there exists entirely independent of the physical inventory some other means of determining the amount of merchandise in stock and the cost of the goods sold. If merchandise records are operated in such a way as to provide book figures of the stock that should be on hand, these figures may be compared and any discrepancy noted. (2)

In order to control the business efficiently the business executive must have some means of knowing at frequent intervals whether or not the planned rate of profit is being maintained. As previously pointed out the profit of a given period cannot be determined in a mercantile business without a consideration of the value of the merchandise left on hand at the close of the season. It is therefore seen that there must be some means of obtaining frequent checks on business operations without going through the laborious and costly method of physical inventory taking. Such a check-up may be had if book figures are maintained which show at all times the value of goods on hand and the cost of goods sold. This last feature requires that book figures be kept on a monetary basis, which is complicated by the fact that goods are bought at one price and sold at another. This is made possible by employing what is known as the Retail Method of Inventory, which we shall discuss in detail very shortly. ⁽³⁾

There are three systems of inventories employed in department stores. These are the perpetual inventory, the physical inventory and the retail method of inventory. We shall now discuss these systems in the order named above.

The perpetual inventory finds its most ready application to stores which carry a number of units of standard articles on hand at all times, and where those sold are replaced by identical articles. The perpetual inventory may be kept in terms of quantities of units,

in values only or it may be kept in terms of quantities and values. This point must be determined with the nature of the product in mind. Minimum stock in any department may be disclosed first by the perpetual inventory clerk, and it is therefore customary to pass the purchase order over the desk of this clerk to serve as a check against unnecessary ordering.

INVENTORY RECORD							
Date	Rec'd.	Sold	Balance	Date	Rec'd.	Sold	Balance
1929							
12/31			10,000				
1930							
1/15	1500	2,000	9,500				
1/20		500	9,000				
Article <u>Furniture</u> (From Mr. Hall)							

By referring to the above chart it is seen that records are kept of individual lines of commodities which are charged to stores. Credits are made for goods drawn, and the balance at unit prices constitutes the current inventory which is subject to periodic count for verification. Because of the steady trend toward stock reduction, the perpetual inventory is gradually losing its accustomed place among accounting records, or is being adapted to give more effective service. This modified form will be treated fully in the latter portion of this chapter.

The second system to claim our attention is the physical inventory which every merchant must take at greater or lesser intervals. The taking of the physical inventory is an important piece of work. While methods are in use which enable managers to arrive at the amount of merchandise in stock with a fair degree of accuracy, such methods do not reveal shortages which may exist. While the expense and inconvenience of inventory taking is great, it is never-the-less necessary to go through this routine in order to check any shortage which may exist.

The inventory should be taken on loose sheets. These sheets should be prepared for each department in advance, by having the heading written in and the sheets numbered consecutively for each department. It is always well to have a clerk do all the recording, while another person devotes his entire time to actual stock taking. As the physical inventory is commonly taken while the business is in operation, the inventory sheets should be pinned to the counter or shelf, and sales should be noted as they are made until such time as the count is completed. The sales indicated are then deducted and the net figure becomes the inventory of stock on hand. While errors in count and translation of code occur, it is commonly agreed that the physical inventory is the most accurate system in present use. Because of this fact it is used as a check on other methods which are less reliable but more economically employed.

(4)

Department store merchandise may be roughly

classified under three heads. (1) Goods which must be weighed or measured. (2) Piece goods, and (3) goods which come in boxes. After the number of units have been recorded and the price per unit or group of units has been listed the actual inventory figure is arrived at as a part of the regular office routine.

The method of inventory taking which we shall devote most of our attention to is known as the Retail Method. It is of comparatively recent origin although traces of it may be found in some stores dating back as far as twenty years. With the keen competition entering into business, it is very essential to have the means of frequent checking up so that the management may know that the business is progressing properly.

Even a young person can remember the day when the customer would haggle over the price of a given article and would often buy the article at a price which was considerably below the figure quoted. Such price reduction on some of the goods carried by the merchant would throw a disproportionate expense burden upon the profit margin of the goods sold at regular prices. The outcome naturally was that the profits were below the expected figure and did not represent a fair return on the capital invested. It seems that the merchant would entrench himself about the cost price of a given commodity and if necessary would sell the article uncomfortably close to that figure.

With the shifting of the emphasis from the purchase to the selling price, the retail method of inventory is but the natural outcome. In the opinion of the writer the system has sufficient merit to bring it into considerable prominence, and we shall therefore describe the working principle in considerable detail.

To illustrate let us assume that in the furniture department of a store, the stock on hand at the beginning of a period is \$1,800 at cost and \$2,700 retail. Subsequent purchases total \$4,200 cost and \$6,000 at retail. The sales during the period amounted to \$5,800 which left an inventory valued at \$2,900 retail. ($2700 \text{ plus } 6000 = \$8,700$. $\$8,700 - \$5,800 = \$2,900$) In order to determine the cost value of the inventory the percentages of cost and mark-up must be known. In our example the total cost is \$6,000. ($1800 \text{ plus } 4200$) The total retail figure as noted was \$8,700. ($2700 \text{ plus } 6000$) The total mark-up is therefore \$2,700. By dividing this last figure by the retail price (\$8,700) taken as 100%, we are given 31 as the per cent of mark-up. The complement of this is 69 which corresponds to the cost of goods on hand and sold. By applying this cost percentage (69) to the inventory sales price, we obtain \$2,001 which is the cost of our inventory. Similarly we can apply the same percentage to the sales and obtain the cost of sales. This figure in our example is found to be \$4,002. (69% of \$5,800) The gross margin is then obtained by merely subtracting \$4,002 from \$5,800 which is \$1,798.

As previously stated there is a growing tendency to place emphasis on sales rather than purchases or the cost price. In some respects it seems logical that the gain is a certain per cent of the cost price, or as it is some times stated a per cent of the investment. No particular fault could be found with this method of computing gross and net profit. However as one attempts to apply this same rule to expenses it does not work so well. In the routine of selling, the wages of the selling force, rent, advertising and other expenses are paid out of receipts from sales, and it seems equally logical that in view of this fact sales should be taken as the base, and have the various expense items conform to percentages of the sales figure.

It is quite common to hear the expression that an up-to-date merchandise manager in a department store sells the goods before they are bought. This simply means that he plans the sales in advance. He decides what commodities are wanted as well as the price at which they must be sold. Having determined these points he endeavors to have his buying conform to his plans. When the purchases, stock, and sales are all planned in terms of the selling price it is very natural that the inventory should be maintained in similar terms. Even the turn-over is overstated when the net sales are divided by the inventory at cost. These two figures do not rest on the same denominator, and therefore cannot give an accurate statement of facts. When the inventory is maintained in terms of the selling price it is seen that

Complete computation according to Retail Method

Merchandise	1 Cost	2 Retail	3 Mark-up	4 % Mrk-up
1. Opening Inventory (Lines 9 and 10 of preceding period).....	.....	.....	.....	.....
2. Purchases .....	.....	.....	.....	.....
3. Freight, Express, and Cartage In ..	.....	000	000	000
4. Additional Mark-up, Less Additional Mark-up Cancellations	000	.....	.....	000
5. Total Inventory Plus Additions .....	.....	.....	.....	.....
6. Net Sales	000	.....	000	000
7. Mark-downs, Less Mark-down cancellations.....	000	.....	000	000
8. Total Retail Deductions (Sum of lines 6 & 7)	000	.....	000	000
9. Resultant Retail Inventory (Line 5 Column 2, minus Line 8).....	000	.....	000	000
10. Calculation of Cost Percentage: (a) Total Percentage.....100 % (b) Percentage of Mark-up (line 5, column 4),, _____ % (c) Percentage of Cost (a - b)..... %				
11. Cost Inventory (item 10 c Applied to item 9).....	.....	000	000	000
12. Resultant Mark-up and Percentage (item 9, minus item 11 ..	000	000	.....	.....
13. Gross Cost of Merchandise Sold (difference between cost inventories on lines 5&11) .....	.....	000	000	000
(Total No. Units)				

it is but a short step to reduce it to cost by applying the percentage representing cost. The above diagram is given so as to enable anyone to compute the figures necessary in the conduct of the modern department store.

With the many possibilities of price changes it is readily seen that prices may vary considerably during any given period, and one would encounter difficulty in hitting upon a figure which would represent the average mark-up or mark-down as the case may be. For each department or for each class of merchandise, inventory is entered at the beginning of a period at both cost and retail figures. Likewise all purchases during the period are entered at cost and retail. To the total retail figure is added the sum of additional mark-ups less mark-up cancellations. By observing these rules consistently complete cost and retail figures are available at all times for all merchandise handled during any given period. The difference between the total cost and the total retail figures is the margin of gross profit or mark-up. This margin is computed as a percentage of the total retail figure and the complement of this percentage represents the cost of merchandise. With such costs at hand the managers may have check-ups as frequently as desired and it readily seen that such available data would give the user a decided advantage over competitors who do not have access to similar information. (3)

From the total retail figures are subtracted net sales for the period plus mark-downs less mark-down cancellations. The resulting figure is the book retail value

of the merchandise which should be on hand. In order to account for any losses the physical inventory would have to be taken and serve as a check, but this clearly is not necessary more than once or twice a year. At such times discrepancies may be adjusted and listed as a shortage or overage as the case may be. To the actual retail inventory figure is applied the complement of the percentage of mark-up in order to ascertain the cost or market valuation of the closing inventory. The two diagrams which follow will illustrate the method of handling such mark-ups or mark-downs.

Correct Method of Handling Additional Mark-ups

Merchandise	Cost	Retail	Mark-up	% Mark-up	% Cost
Opening Inventory.....	\$2,000	\$3,000	\$1,000	33.33	66.67
Purchases	3,000	4,000	1,000	25.00	75.00
Additional Mark-up(Net)		300	300	.....	.....
Total Inventory.....	5,000	7,300	2,300	31.51	68.49
Net Sales		5,215	.....	.....	...
Retail Book Inventory..		2,085	.....	.....	.....
Cost of Inventory = 68.49% of Retail					

Correct Method of Handling Mark-downs

Merchandise	Cost	Retail	Mrk-up	% Mrk-up	% Cost
Opening Inventory.....	\$2,000	\$3,000	\$1,000	33.33	66.67
Purchases.....	3,000	4,000	1,000	25.00	75.00
Total Inventory	5,000	7,000	2,000	28.57	71.43
Net Sales .....	.....	4,715	.....	.....	.....
Add Mark-downs.....	.....	400	.....	.....	.....
		5,115			
Retail Book Inventory		1,885	.....	.....	.....
Cost Value of Inventory = 71.43% of 1,885 = \$1,346.46					
(Book from No. 111)					

With the government entering upon its Income Tax program, the question of inventories immediately came into the lime light. The regulation published by the Treasury Department says, " In order to reflect the net income correctly, inventories at the beginning and end of each year are necessary in every case in which production, purchase, or sale of merchandise is an income-producing factor." (Article 1581 page 316 Regulation 62, "Treasury Department, United States Internal Revenue, 1922 edition.)

The interest of the Treasury Department in methods of inventory calculation is easy to understand, since in undervaluing an inventory of merchandise correspondingly understates the income of the business. It is not strange therefore that the federal tax authorities refused to accept the returns of department stores based on the retail method. In the meantime department stores interested in retaining the system for internal control purposes, were pressing their cases upon the attention of the Treasury Department. Trade Associations also made special efforts to secure permission for retail merchants to use the retail method in making out their tax returns. In response to these appeals a number of rulings have followed which have had considerable bearing upon the question of adopting the retail method.

On August 16, 1920, Treasury decision 3058 amended the existing income tax regulation by inserting an article permitting retail dry goods merchants to make their tax returns on the basis of the retail method. Later the same privilege was extended to other than dry goods merchants

and the final stand of the federal department is summarized in their statement of March 22, 1923, which added to previous rulings the provision that where a fictitious book profit was shown by a retail store at the time when it changed from the cost to the retail system of computing inventories, such book profit need not be included in the taxable income. This last ruling removed from many stores the final objection to the method or to its adoption. It is seen then that the Treasury Department does not only sanction the use of the retail method but has made every provision so as to make it possible for it to be adopted. (1)

Department stores using the retail method have found that the advantages which the system holds over other methods are of two classes: (1) advantages connected with the actual taking of the inventory, and (2) advantages in facilitating stock control.

When an inventory is taken to determine the cost of goods on hand, it becomes necessary to translate the code back to cost figures. This step is usually attended with many errors. By using the retail method this process of decoding is unnecessary. In addition to this protection against errors, a distinct saving of time is made possible. In some instances department stores have reported a saving in time amounting to one half has been accomplished because the retail figures are written clearly and may be recorded without any difficulty.

As the physical inventory becomes merely a means of checking against the book inventory, it may be taken at a convenient time as well as at a time when the stocks are low in various departments. Every one is familiar with the usual custom of up-turning the entire store at the close of the holiday season. New stock has to be laid out and inventories taken, a job which compresses into a day or two the work of as many weeks.

Even more important than the advantages enumerated above is the possibility of determining the proper valuation of merchandise on hand during a declining market. Federal income tax regulations do not permit of arbitrary percentage reductions to allow for price declines. In the use of the retail method either cost or market may be used depending upon which is lower. Under the old system therefore it is necessary to go through the entire stock and re-value every article in order to meet the requirement of treasury officials. In order to indicate the importance of this last point the experience of a large eastern department store will be cited. The sales of this firm were in excess of \$25,000,000. annually, and prior to the adoption of the retail method in 1923, the expense and difficulty of making an accurate appraisal at inventory time was so great that for several years the firm had preferred to take the inventory at cost and run the risk of paying taxes on unrealized profits. This point is enhanced when one bears in mind that the years prior to 1923 were years of readjustment following the war. Prices were on a continual decline.

Another advantage of far-reaching importance is

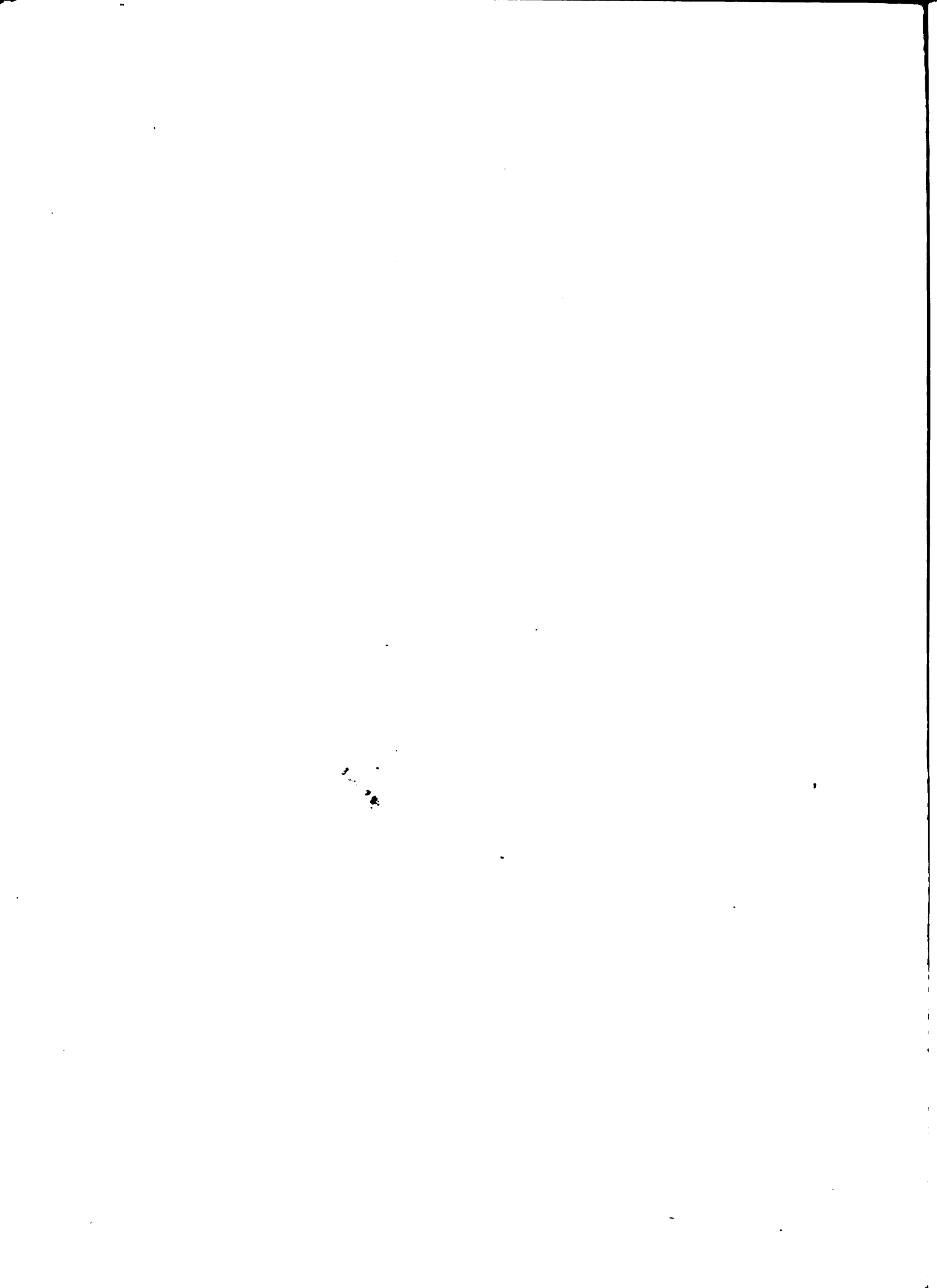
found in the fact that it shows at any time the effect on the gross margin of the mark-downs of the merchandise in stock. This feature makes it unnecessary for an enterprise to go through the season entertaining the belief that a satisfactory gross margin is being maintained only to find at the end that it was inadequate.

The point has previously been made that there has been a decided trend toward inventory reduction. This is true even to the extent of making the stock-room a thing of a past age. The retail method claims particular merit in this connection because the stock figure which has been set up is more effectively held to. The experience and testimony of a department store located in Atlanta, Georgia will be interesting to say the least. The manager of this store stated that they were able to reduce their inventory \$130,000. during the first two years which they used the system referred to, and felt that nothing more could be done along this line, only to be surprised by making another reduction of \$23,000 the following year. As one reflects the meaning of such reduction upon the returns on capital invested, as well as reducing the hazards connected with style changes, shelf-wear, insurance costs and many other elements which might be named, the system is seen to have considerable merit.

The merchant often suffers great losses in case of fire. The best he can do is to guess at the amount of stock lost, and often he is not able to meet the convincing

arguments of the trained insurance experts. On the other hand if he has cold book figures to present, his risk is reduced and the time of making adjustment stands to be reduced as well.

One point against the method is that it is an averaging method. This objection shows up when there is a disproportionate amount of high or low cost goods. Thus the valuation is too high when more low cost goods are included than high cost, and similarly too low when more high cost goods are carried. It would seem that this handicap could be overcome if the inventory were divided into sections conforming to certain price levels and then make the mark-up or mark-down applicable to each price level as a unit. These units could later be combined into a whole for recording purposes. For all practical purposes however the danger of error is but very slight. A second objection is the fact that accuracy is dependent upon the proper mark-downs. But this point does not apply to the retail method as being peculiar to this method. The solution of course lies in making the proper mark-downs as soon as they are evident. The third objection is also open to question. It is charged that more clerical aid is required, which may be true in very small stores. In stores whose average sales amount to \$500,000. annually there should be a saving of no mean amount. At any rate such costs should be compared with the costs of physical inventory taking, or with the advantages offered along other lines.



Form number 19 which is presented herewith, because of its complexity, should have considerable explanation. The present tendency is to have the various factors pertaining to the business under constant control. In order to make this possible, the facts concerning these elements must likewise be known, and be so coordinated that this relationship will start out with the minimum amount of study on the part of managers. The above chart has been designed to place the maximum amount of information at the finger-tips of those in charge.

A glance at the chart will show that the merchandise inventory as well as purchases during a period are carried both at cost and retail prices. Column 3 therefore represents the per cent of mark-up of the inventory additions. This is obtained by first subtracting the cost from the retail, and then divide the result by the retail price. As indicated this gives the per cent of mark-up as 29.37. and represents the margin of gross profit. In nearly all businesses it becomes necessary to sell various items at a reduced price. Such a reduction is termed a mark-down. We have assumed that in the example given, a mark-down of \$200 has been made and we wish to know what per cent this is of our sales price. By dividing \$200 by \$40,200 we find that it is 0.39%. Again it is almost unthinkable that a department store would go through any accounting period without realizing a shrinkage in goods. This, as already stated is ascertained by comparing the book inventory with the actual amount of the physical inventory

Such comparison is made in money value, or by comparing the retail prices of the two inventories. Again we wish to know what per cent this \$25. is of the retail value of the stock sold. . Accordingly we divide \$25.00 by \$40,200 and get as our result .047. Column 9 is obtained by combining columns 4 and 6 as is readily seen. By having available the selling price of the merchandise which was purchased and on hand, as well as the net sales for the period, we can easily arrive at the closing inventory by merely subtracting sales from the retail value of the goods held during the period. As the mark-up was 29.37 per cent, we take the complement of this which is 70.63% of the retail inventory, and thereby arrive at the cost of such inventory.

It is fairly safe to assume that the closing inventory of one period will be approximately the same as the inventory of another period, we are led to conclude that these inventories represent the average investment of a given business. As has been previously pointed out these elements are based on the same denominator, being expressed in terms of selling price, and by dividing the net sales by the closing inventory we arrive at the rate of turn-over during any given period of time. Column 13 is obtained by applying the percentage of column 14 to column 8 which by means of the known cost of goods sold enables the accountant to make out statements and satisfy the management that the business is progressing in the right direction. The gross profit is found by subtracting

number thirteen from number eight. Quite often the gross profit of a store is very satisfactory, but when the various operating expenses have been deducted the net profit is entirely inadequate. It is therefore illuminating to think of the gross profit in terms of per cent of sales. The assumed operating expenses amounting to \$6,500 are of course arbitrary, but by subtracting this amount from the gross profit of \$11,817 we have left \$5,317 as net profit. It is always interesting to know what per cent of sales the net profit is, and as before we divide the net profit by the net sales figure and secure as our result 13.22 per cent. Item 21 which is "discount given" amounts to \$25, and must also be deducted from net operating profit. This leaves us the amount of \$5,292.00 as net gain, or total profit. Again the manager would ask, "What is the per cent of gain on our investment?" This last information is desired by everyone having the least interest in the business. The chart which we have just discussed is quite naturally termed a Merchandise Synopsis, because it brings together into one picture a large amount of interesting data, which makes valuable comparisons possible and finally more efficient and profitable control.

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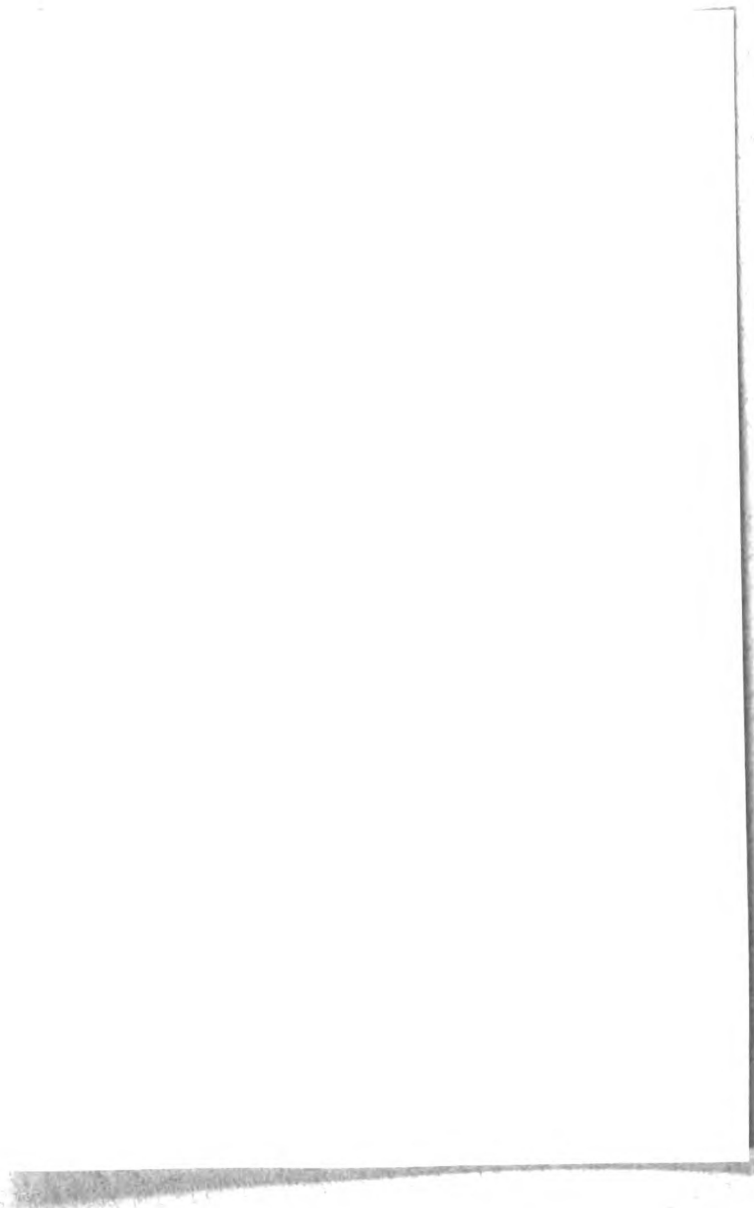
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