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New York Stock Exchange Questionnaire

A SUGGESTED PROGRAMME OF WORK TO BE PERFORMED AND THE ARRANGEMENT OF SCHEDULES TO BE SUBMITTED IN ANSWERING THE QUESTIONNAIRE ISSUED BY THE NEW YORK STOCK EXCHANGE TO ITS MEMBERS.

By EUGENE V. PORTWAY

The Committee on Business Conduct of the New York Stock Exchange has recently issued a questionnaire to registered member firms, requiring certain information as to their financial status at a specific date.

This questionnaire will undoubtedly produce beneficial results, as, in the first place, the figures when completed will bring out features of the business that may not have received special attention before; and, secondly, it will place in the hands of the committee financial statements of its members from which can be ascertained their solvency and the policy pursued in conducting their business for customers.

In issuing the questionnaire there is no doubt that the object of the Stock Exchange is to protect the investing public, and where necessary to give advice to members who, from lack of attention, may be conducting their business along lines that might not reflect sound judgment.

The questions are seven in number and the information required is clearly set forth in the questionnaire. From the answers to these questions it will be possible to prepare a statement of assets and liabilities of the firm, and by segregating the security balances, debits and credits, the two sides should balance (see schedules "A" and "B," page 162).

Schedule "A"

BALANCE-SHEET

PREPARED FROM ANSWERS TO QUESTIONNAIRE

Debits			Credits		
QUESTION 1.	TOTAL BANK BALANCES, Contributions to clearing funds and margin deposits	$	QUESTION 2.	TOTAL MONEY BORROWED	$
				STOCKS LOANED	
				FAILED TO RECEIVE	
2.	STOCKS BORROWED		3.	NIL	
	FAILED TO DELIVER		4.	CUSTOMERS' ACCOUNTS, Stock cr. balances against short sales free balances, grain cr. balances	
3.	NIL		5.	CAPITAL ACCOUNTS	
4.	CUSTOMERS' ACCOUNTS, Stock dr. balances, secured, partly secured, unsecured, grain dr. balances		6.	PROFIT-AND-LOSS AND SURPLUS	
5.	PARTNERS' INDIVIDUAL ACCOUNTS, Firm investment and trading accounts, underwriting and syndicate participation accounts, exchange seats, furniture and fixtures, other fixed assets		7.	OTHER CREDIT BALANCES	
7.	OTHER DEBIT BALANCES				
		$			$

Schedule "B"

SUMMARY OF SECURITIES

Debits			Credits		
CUSTOMERS' ACCOUNTS	"LONG"	$	CUSTOMERS' ACCOUNTS	"SHORT"	$
PARTNERS' SECURITIES			SECURITIES IN BOX AND TRANSFER		
ERROR ACCOUNT	"LONG"		IN BANK LOANS		
JOINT ACCOUNTS	"LONG"		JOINT ACCOUNTS	"SHORT"	
INVESTMENT DEPARTMENT	"LONG"		INVESTMENT DEPARTMENT	"SHORT"	
STOCKS BORROWED			STOCKS LOANED		
FAILED TO DELIVER			FAILED TO RECEIVE		
CONTRACTS—Delayed delivery	"LONG"		CONTRACTS—Delayed delivery	"SHORT"	
		$			$

NOTE:—If the securities in these accounts are uniformly extended at market price, at any date, the two sides should balance.

If the security items do not balance, it may be due to the following reasons:

That the prices of securities in "loaned" and "borrowed" are not identical with market; or that the prices used in valuing securities in box, transfer, loans, etc., are different from those used in valuing securities in customers' accounts; and lastly, but not least, there may be a discrepancy on the books not known to the firm.

The answers to Nos. 1, 5, 6 and 7 of the questionnaire can be readily answered by using the ledger balances in the various accounts, but particular care and attention must be observed in preparing the answers to questions Nos. 2, 3 and 4. The object of this paper is to provide a programme which may be helpful to accountants who are called in to render professional services to Stock Exchange firms.

It might be as well to emphasize at this point that the prices used in valuing securities must be uniform for box, transfer, loans, etc., and customers' accounts; and the prices used must be the "market closing" at the date of the questionnaire.

As soon as the books are finally closed for the period and the trial balances taken off, a balance-sheet should be prepared therefrom and the figures should agree with those used for the questionnaire. Where there is more than one office of the firm and where books of accounts are kept at these branch offices it will be necessary for each office to prepare its own answers. These branch-office figures must be consolidated with the main-office figures and it is at this point that the advantage of preparing balance-sheets for each office is invaluable. (See schedules "A" and "B.")

In consolidating the figures, all inter-office accounts and controls must be eliminated, and items in transit must be taken up.

Particular attention should be given to the arrangement of the schedules and working papers built up to provide the final figures to the questions. These should be indexed to the questionnaire or balance-sheet, so that if further details are required or an audit is called for, the schedules will properly support the information returned.

For general guidance, a set of questions and answers in dummy form is inserted in this programme. These forms have been drawn up to try to meet the requirements of firms transacting a general stock and bond business. They can, of course, be amplified or modified to suit the nature of the accounts. Each question should be answered on a separate sheet so as to facilitate the analysis of the figures by the Stock Exchange.

Question 1. *Total bank balances.*

These figures should comprise:

The bank balances as shown by the bank statements less outstanding cheques, together with the petty cash on hand, cheques on hand but not deposited and any special free deposits.

Deposits made by the firm with stock, cotton, coffee, produce, clearing corporations.

Margin deposits on account of open contracts on cotton, coffee, sugar, etc., stating the name of the bank with which the deposits are made.

It is the practice of some firms to draw cheques for all "failed to receive" items on the clearance day, and these cheques are not issued until the securities are actually received, which, in some cases, may be several days or even weeks later. This method cleans up the "failed to receive" account each day, thus reducing the actual cash balance. In order to show the true cash balance at the date of the questionnaire the total of these cheques should be added to the cash balance and the amount shown as "failed to receive" on the liability side of the statement.

Question 2. *Total money borrowed and total value of collateral.*

The total money borrowed from banks can be obtained from the ledger balance and this figure should agree with the sum total of the loan sheets. It will be necessary to extend each item in the loans at market to ascertain the total value of collateral, as the prices used for loan purposes may not agree with market at the date of the questionnaire.

The best method for preparing working schedules for valuing the securities in loans will largely depend upon the internal system in vogue.

If only loan sheets are used to record the securities hypothecated it will be necessary to extend each item on the loan sheet or to summarize the securities, but where a "loan finder" is in use and the securities are arranged alphabetically the work will be simplified.

The securities should be listed in advance on schedules arranged alphabetically and will run thus:

Security in loans	No. of shares	Market value	Total value of collateral
U. S. Liberty 1st 4's:			
City bank	$10,000.00	$	$
Chase bank	10,000.00		
Guaranty	10,000.00		
Seaboard	10,000.00		
	$40,000.00	$ par	$40,000.00

In valuing securities, fractions should be entirely eliminated, as this will facilitate the work and prevent irregularity in pricing.

The sum total of the extensions on this schedule will, of course, represent the total market value of the securities deposited with the banks as collateral against loans.

An interesting comparison can be made between the actual value of securities in loans and the values of the securities required in loans, and the market value of securities in loans against actual bank loans, viz.:

Market value of securities in loans	$
Value of securities as used in loans	$
Excess margin as required by banks	$
Market value of securities in loans	$
Total loans	$
Actual margin with banks	$

Another feature can be brought out by segregating the loans and finding the percentage of the different kinds of securities used in such loans as:

Description	Amount of loan	Value of security	Percentage
Bonds	$	$	%
All industrials	$	$	%
Rails and industrials	$	$	%
	$	$	100%

These comparisons will, no doubt, be of considerable interest to partners not familiar with this feature of their business.

The securities in the following accounts should be verified by letter with other houses at the date of the questionnaire and the totals should agree with the balances as shown in the ledger accounts:

Stocks borrowed	Dr.
Stocks loaned	Cr.
Failed to deliver	Dr.
Failed to receive	Cr.

QUESTION 3. *Market value of negotiable securities in box and in transfer.*

At the close of business at the date of the questionnaire the securities in the box should be counted, listed alphabetically, priced, extended and classified as follows:

BOX COUNT AND VALUATION.

Description of security	Market price	Listed on N. Y. Stock Exchange		Not listed on N. Y. Stock Exchange	
		Market Value over $5 per share	Market Value under $5 per share	Market value over $5 per share	Market value under $5 per share

The totals as shown in the various columns will represent, in the aggregate, the total value of the securities in the box. It would be as well when listing the securities to keep bonds separate from stocks, when the following recapitulation can be made, in order to ascertain the different classes of securities in the possession of the firm.

SUMMARY.

Stocks listed on New York Stock Exchange	$
Stocks not listed on N. Y. Stock Exchange	$
Bonds listed on N. Y. Stock Exchange	$
Bonds not listed on N. Y. Stock Exchange	$
Total	$

It must be observed that the value of securities in safe keeping and the value of any securities carried as "long," if paid for in full by customers, must not be included in the above figures. The value of the securities in transfer should be worked out in the same manner as the securities in the box. These items will, of course, be obtained from the transfer register.

QUESTION 4. *Total ledger debit balances in customers' accounts and the value of securities deposited as collateral against same.* These are to be classified as follows:

I. Secured
II. Partly secured
III. Unsecured

A list of the customers, alphabetically arranged, should be prepared in advance and the working schedule should be set up as follows:

Name of Customer	Balances as shown by ledger		DEBITS Securities long			CREDITS	
			Secured	Partly Secured	Unsecured	Short	Free credit balances
	Dr.	Cr.	Market value of security	Market value of security		Market value of security	
Total	$		$	$	$	$	$

These lists having been prepared showing the names of the customers, the debit and credit balances can be inserted as soon as the trial balances have been taken off. These schedules should then be reconciled with the trial balances.

The most important feature of this question is the valuation of the securities in the accounts; the method of performing this work depends largely upon the system in vogue and size of the accounts. As this work must be completed within a limited time, it is advisable to be as expeditious as possible. The following method is suggested:

It is assumed that margin cards or records are kept for all accounts on the books, and, as these cards or records will be complete at the close of business on the date of the questionnaire, whereas there may be a delay in posting the customers' ledger accounts and taking off the trial balances, working to the margins has a distinct advantage.

As the Stock Exchange requests that all schedules used in building up the figures shall be filed away for future reference, the prices and extensions on the customers' accounts must be preserved. It is therefore advisable either to file the margin cards or to list the securities in each of the customers' accounts on separate schedules. The pricing and extending can then be made without hindrance to the regular margin work.

As soon as the trial balances are taken off, the balances as shown by the margins and the collateral deposited with the firm should be compared with the ledger accounts. If, however, the ledger postings and trial balances are not delayed it would be preferable to list the balances and securities direct therefrom.

An analysis of each debit account will disclose whether it is fully secured, partly secured or unsecured; and on the credit side, if against short sales or a free-credit balance.

A summary of these debit accounts should then be prepared as follows:

Accounts	Total debit balances	Value of collateral	Percentage of equity
Secured	$	$	%
Partly secured	$	$	%
Unsecured	$	$	
	$	$	

The difference between the total debit balances and the total value of securities in the customers' accounts will, of course, represent the customer's equity and the firm's protection.

In stating the partly secured and unsecured account it is advisable to give a brief explanation of the balances in the larger accounts, stating the value of the securities and whether or not it is protected by other collateral such as life insurance policies, notes, etc. By giving information of this kind, one may obviate the necessity of further inquiry.

The total value of the securities against such accounts as clients' cash investment accounts (securities charged but not yet delivered) and contracts on account of delayed delivery trades should equal the ledger balances. There is an advantage in showing these items separately, as by doing so the percentage of equity in the regular customers' accounts will not be affected.

Total ledger credit balances in customers' accounts:

The working sheet of customers' accounts will show the credit balances against short sales and free-credit balances and the following schedules should be prepared therefrom:

CREDIT BALANCES AGAINST SHORT SALES

Accounts	Credit Balances	Value of securities short at market	Number of Shares	Margin requirements
Total				

The credit balances should exceed the value of the securities short by the marginal requirement, the customary margin being based upon the number of shares rather than the security value. If, however, these accounts are protected by excess margin in the customers' long accounts a statement to this effect should be made.

The option accounts, grain, cotton, etc., should be carefully analyzed and the following information set forth:

1. Customer's accounts:—Cr. balances	Equity or deficit	Total balance at market
2. Customer's accounts:—Dr. balances	Equity or deficit	Total balance at market
3. Customers free-credit balances: These should be added to the free-stock balances........................		$
4. Customers' debit balances: No commodities		$

As the debit balances in item No. 4 may be made up of amounts owed by street brokers and are good and collectible, a statement to this effect should be made.

Free-credit balances will consist of the total of items shown in customers' stock account working schedule, together with free-credit balances in the option accounts.

In listing the free-credit balances care should be used not to include any credit balances which are in reality an offset or protection against debit-margin accounts. Credit balances of this nature should be deducted from the total customers' debit balances. Under this heading should be set forth balances in syndicate accounts, that is to say, margin deposited by participants against syndicate operations.

QUESTION 5. *Partners' accounts including capital accounts.*

Should any of the partners have open accounts on the books other than their capital accounts, a full explanation of the nature of them should be given, stating the value of collateral, if any.

Under subheading "firm's investments" and "trading accounts" the following items should appear:

Account	Balances Dr.	Balances Cr.	Value of Securities
1. Error account:			
Securities, marked to market........................			
2. Bond trading accounts:			
Securities long, marked to market............			
Securities short, marked to market..........			
3. Joint accounts with other firms:			
Securities long, marked to market............			
Securities short, marked to market..........			

The securities in these accounts should equal in value the debit or credit balances shown by the books.

The capital accounts of the partners should be set forth in total and a statement should be made as to whether the amounts consist of cash or cash and securities owned by the individual partners. Securities in these accounts should be valued at market at the date of the questionnaire.

Stock and other exchange seats should be stated in total and at cost.

Office furniture and fixtures should be stated at cost, less depreciation if a reserve is set up on the books.

Other fixed assets should be listed and the nature of the investment should be clearly set forth.

QUESTION 6. *Profit-and-loss accounts.*

The balances in the profit-and-loss accounts may be listed credits and debits, but, if desired, a net figure can be given.

QUESTION 7. *Other accounts.*

Under this heading all other accounts appearing on the books should be listed—debits and credits—stating briefly the nature of them.

ANSWERS TO QUESTIONS SET UP IN SCHEDULE FORM

QUESTION 1. *Bank balances, etc.*

1. Cash in banks and on hand..		$
2. Contributions to clearing funds:		
Stock Exchange corporation..............	$	
Cotton Ex. Clearing corporation......	$	
Coffee Ex. Clearing corporation......	$	
Produce Exchange	$	
Etc.	$	
		$

3. Margin deposits:

New York Coffee and Sugar Clearing Ass'n deposited with bank........ $

New York Cotton Exchange Clearing Ass'n deposited with bank........ $
Etc. .... $

QUESTION 2. *Total money borrowed and total value of collateral.*

1. Total money borrowed:

New York .... $
Branch offices .... $
$

Total value of collateral........ $

2. Ledger balances in the following accounts:

Stocks borrowed .... $
Stocks loaned .... $
Failed to deliver .... $
Failed to receive........ $

NOTE.—State whether any accounts are carried for firm by other banking and brokerage houses.

QUESTION 3. *Market value of negotiable securities in box and transfer books.*

1. Listed on New York Stock Exchange:

Market value over $5 per share........ $
Market value under $5 per share........ $
$

2. Not listed on New York Stock Exchange:

Market value over $5 per share........ $
Market value under $5 per share........ $
$

NOTE.—The above figures must not include any securities in safe keeping nor the value of any securities carried as "long" if paid for in full by customers.

Question 4. *Customers' accounts.*

A. Total debit balances in customers' accounts:

	Amount	Value of collateral
1. Secured:		
Customers' and wire accounts..........	$	$
2. Partly secured:		
Customers' accounts	$	$

These accounts are protected as explained below:

	Amount	Collateral	
1	$	$	Give brief explanation of partly-secured accounts and state whether amounts will be collected eventually.
2			
3			
4			

	Amount	Value of collateral
3. Unsecured	$	
Clients' investment accounts.............	$	$
Contracts:		
Delayed delivery	$	$

B. Total credit balances and option accounts

	Amount	Value of securities short
1. Customers' and wire accounts................	$	$
Contracts:		
Delayed delivery	$	$

2. Customers' credits and debits on open contracts in grain, cotton and other commodities:

	Cr. balances	Equity	Deficit	Total balance at market
Customers' accounts	$	$	$	$
	Dr. balances			
Customers' accounts	$	$	$	$
Debit balances				
No commodities	$			
(State here nature of debits and whether collectible.)				
3. Free-credit balances	$	$	$	
4. Syndicate account				$

QUESTION 5. *Partners' accounts, including capital accounts.*

	Debit balance	Value of collateral
A. Partners' individual accounts other than capital accounts	$	$

	balance	Value of securities
B. Firm investments and trading accounts:		
1. Error account		
Securities marked to market	$	$
2. Bond trading department		
Securities long marked to market	$	$
Securities short marked to market	$	$
3. Joint accounts with other firms		
Securities long marked to market	$	$
Securities short marked to market	$	$

C. Capital accounts	$
Stock and other exchange seats—at cost	$
Office furniture and fixtures	$

QUESTION 6. *Profit-and-loss accounts.*

QUESTION 7. *Other accounts.*

Debits: List here all other debit accounts which have not been included in one of the answers to the questionnaire.	$
	$
Credits: List here all other credit items which have not been included in one of the answers to the questionnaire.	$
	$

IN CONCLUSION

The preparation of the foregoing figures is, in effect, an internal audit of the assets and liabilities of the firm at a specific date, and a close study of them will reveal interesting and valuable information.

It would be desirable, if possible, to calculate the customers' equities monthly, but the volume of work involved renders it impracticable—and this feature can be taken care of by an efficient margin system.

In some firms which have branch offices, the percentage of customers' equities is shown on the monthly trial balances, which enables the main office to see that the branch-office customers' accounts are properly margined.

The questionnaire will no doubt do for brokerage firms what the income tax has done for the commercial world: it will bring about a closer and better knowledge of financial business as it relates to stock-brokerage business and improved accounting.

Twenty-Five Years of Accountancy

By Edward L. Suffern

The association of words in the title is due to the fact that this year the twenty-fifth anniversary of the organization of the New York State Society of Certified Public Accountants was held and, as was natural, thought reverted to the accounting conditions prevailing at and the changes since that beginning date.

We will have to go much further back, however, to reach what was really the beginning of the practice of public accounting in our own country and perhaps no one can say with exactness just when that was. Certain it is that more than forty years ago there were some men in large cities who were called public accountants and who audited or "checked up" books with the object mainly of discovering or safeguarding against irregularities rather than for constructive work. Somewhat later the foreign shareholders and bondholders of a number of large enterprises, mainly but not exclusively railways, desired that the accounts should be audited after the fashion of home companies and sent out auditors from England to perform such service. This practice led to the opening of offices here and thus were established a number of the firms which have become so influential in the accounting world. To most of these early comers and to their successors and associates accountancy owes an acknowledged debt. They brought with them and developed in their staffs a large learning in the principles, procedure and traditions of accounting and have stamped their impress upon its history here. Coinciding with and closely following them, American accountants became more numerous, and in the larger cities a choice of accountants was offered the prospective clients who could find well-qualified men to render the service desired. It is true that such men had acquired their knowledge not in schools but through experience under actual working conditions, which has been always an excellent form of education. There is something to be said in favor of Mr. Squeer's system, under which as soon as a boy learned how to spell "winder" he was sent to wash it.

In 1887 there were in New York sufficient numbers of practising accountants to justify calling them together and organizing a society, and the American Association of Public Accountants was incorporated. It was intended to be and was from the beginning a national organization, although naturally most of its members were residents of New York, and it was a start toward bringing together men of like calling to discuss matters of common interest and through acquaintance to create mutual confidence and respect. Perhaps this latter object was not so distinctly conceived, but it was enfolded in the other.

During the succeeding ten years the growth of public accounting was marked. Corporation accounts were being more generally audited, special financial examinations were being made and there was a wider spread of knowledge in the minds of the public that there existed a class of men whose services were available when required. This enlightenment, however, was very, very slow and far from general—as it is still, for that matter. The common idea was that "books" were things you wrote figures in. And, if the figures were correct, why was one man any better qualified than any other? So no review of figures was necessary unless someone had stolen something.

As the years progressed a number of New York accountants became greatly interested in securing the enactment of a law which should create a definite status and title for such public accountants as should be able to comply with the requirements which the law should prescribe. The effort was persistently pursued, and in December, 1896, the first law defining the title and qualifications of certified public accountants was enacted. This gave encouragement to accountants in other states to obtain similar legislation and, with various modifications, enactments were obtained in rapid succession in Pennsylvania, Illinois, Missouri and other states, until in the course of time the whole quota became filled.

One common feature of these laws provided a waiver clause, i. e., that a certain time limit was prescribed in which applicants for certificates who should produce evidence that they possessed the required qualifications might be granted such certificates without examination.

Shortly after the passage of the New York law some of the grantees met and organized (on March 30, 1897) the New York State Society of Certified Public Accountants, eighteen signing the roll and becoming charter members. Charles Waldo Haskins was elected president, a position he continued to hold until his death in January, 1903.

In some states quite active and efficient societies antedated the enactments, but as soon as the laws were passed societies were organized with restrictive memberships and became, in most cases, the centers of co-operative effort in establishing and advocating standards of practice. In all of them (presumably) emphasis was placed upon maintaining and elevating these standards, and in the larger societies there rapidly developed a spirit of mutual co-operation and confidence dispelling suspicion and distrust.

This movement came none too soon. The times demanded that there should be some classification of accountants which should distinguish (at least theoretically) between those who were supposed to be competent and those who were not. For several years the country had suffered great business depression. Among other causes the "free silver" question had demonstrated its economic injury and had been the paramount issue in the presidential campaign of 1896. With the election of McKinley this menace was believed to be removed, and with his inauguration in March, 1897, the country took courage and became hopeful. A widespread revival of business ensued, for which there were some substantial reasons as well as a general optimism. In the fall of that year the writer well remembers seeing in a small Western town some rather hilarious farmers showing from their wagons on Saturday afternoon rolls of bills and shouting: "A dollar a bushel for our wheat."

This general business recovery manifested itself in some very striking ways. For years before there had been combinations and mergers of separate enterprises into larger units, and this became a popular financial pastime. To bring together a number of separate concerns in any industry (it did not seem to matter what), consolidate them into one corporation, capitalize them for whatever sum it was thought the public might be induced to pay for the larger part of the preferred shares—while keeping as much of both kinds of stock as possible for the promoters—this seemed to constitute the formula for successful flotation. If there were added to the formula elements of conscience and ability, so much the better were the chances of survival, and those which did have more than a brief existence owed their good fortune to the increased percentage of these elements.

It was a wild time, speaking generally, and in nothing more wild than in the utter disregard of the fundamental principles which we have come to regard as controlling. Properties acquired for cash and capital stock issued to vendors (and promoters) on bases of valuation calculated to include prospective earnings were all too common transactions. Figures, not facts, were what were wanted, and accountants could be found whose ideas as to the distinction between them were very nebulous.

Because of this great impetus to business the services of accountants were more largely demanded than before, and the supply of alleged accountants became noticeable. Those firms which were already well established in most of the large cities and were ably serving important and distributed clientages were seeking trained assistants, of whom there were comparatively few, and this led to the conviction that one of the first efforts of the organized societies should be toward developing systematic instruction and training in accountancy for men who wished to fit themselves for a career. Such training previously had been in offices and elementary schools, but it was evident that more thorough and advanced work was necessary. Therefore, we find that early in the history of the New York society steps were taken to secure the co-operation of some educational institution which would establish a course in accountancy to meet the future needs for trained assistants. The institutions were skeptical as to the feasibility or advisability of such a step, but at length, heeding the urgings of the committee making such effort, the New York University instituted, in 1901, the course and established the school of commerce, finance and accounts, with a registry of sixty-three students, appointing as its dean Charles Waldo Haskins, whose untiring energy and promise of support had served such good purpose. Thus was established the first distinctive school of accounting in the country, an example which was followed shortly after by the Wharton school in Philadelphia in 1902 and in fairly rapid succession by other institutions of learning.

As one looks back at those beginnings when the first classes were so small and compares them with the scores of undergraduate and graduate schools today with their individual registries of many thousands of students, one is amazed at the progress made and the recognized place accountancy occupies in the scheme of education. In addition to the institutional education, there are the great schools under more personal and private direction which are doing a work worthy of honor. This does not apply, however, to all such endeavors, some of which advance such claims for patronage through specious advertising and solicitation that it is a question whether or not they constitute a menace to serious accounting education. Such advertising as the "demand is greater than the supply" is to be deplored. One is tempted to suggest as a slogan to such advertisers, *Accountancy before breakfast—ten-thousand-dollar position before lunch.*

To establish the first courses demanded pioneer work. In a general way the separate subjects to be studied were known, but the text, the plan, the procedure, had to be determined, prepared and revised. Necessarily the earlier efforts were of an experimental character both for the teacher and the student, but gradually a systematic, constructive course of study was evolved which in its main characteristics is common to all institutions. To these simple beginnings the amplified comprehensive curricula of today, including economics, banking and related subjects, bear the same resemblance only that the full flower bears to the implanted seed—but the seed contains the germ and the principle of life.

To give honor to all those men through whose unselfish and intelligent efforts this development has been possible would make this record a roster of the well deserving; to omit any would be invidious; but to those men accountancy as represented by its practitioners owes gratitude and admiration.

The need of a technical literature in those early years was conspicuous. Very little had been produced in this country and we were dependent upon the English works, which while valuable indeed were not wholly adaptable to our conditions; but these needs did not long continue unsupplied. Almost immediately the most essential books were published, precursors of the immense number covering all subjects relating to accountancy, finance, commerce, economics, production and law which fill our shelves. The accountant of today, no matter whether he be a student or has been practising forty years, has at his disposal and use a wealth of knowledge beyond the capacity of any one man to absorb; therefore, his reading and study should be selective. The *Accountants' Index,* compiled and published by the American

Institute of Accountants, has nearly 1,600 pages of listings of authors, subjects and publications, and this gives us some idea of the product of these years. Every accountant should have a copy of this *Index;* to be without it is to forego a most useful implement.

As the number of societies increased it became apparent that, while each might have some individual problem, there were larger ones common to all. If it were a good thing to dispel jealousy among the members of one society, it would be equally well to do so between the societies. Intelligence and conscientiousness were attributes confined to no one place; high character, technical attainments and earnest purpose knew no geographical limits, so it might be worth while to combine effort toward a common end.

This somewhat vaguely perceived object took shape and plan in the mind of one man, George Wilkinson, now of Philadelphia, who had a widely distributed professional acquaintance. He saw and he acted. Like Cecil Rhodes, he had a "continental mind," and, with untiring energy, he formulated a plan to bring together all the societies in an organized association or federation for the general welfare of the members and of the practice of accountancy. His plan met with favor; delegates representing a number of societies met in Washington in October, 1902, in response to a call issued at the instance of the Illinois Association of Public Accountants; an organization was effected, and the Federation of Societies of Public Accountants in the United States was launched. Mr. Haskins was elected president and Mr. Wilkinson secretary. Committees were appointed with due deference to the susceptibilities of the societies represented and a channel was opened for mutual intercourse and consultation. This organization accomplished much in engendering a co-operative spirit and respect and friendship among those brought together.

The American Association of Public Accountants was organized in 1887, as has been said, and had a few members resident in other cities, but did not have a constituency representative of the country at large, as did the federation, and consequently could not undertake the co-ordinated work which the latter could do. So manifest did it become that the federation had a place to fill and a function to perform that in 1905 the two organizations came together under the title of the older society and under the presidency of John R. Loomis, retaining for the most part the plan of the federation and the representation of the member societies through delegates elected in accordance with the provisions of the newly-adopted constitution. With the growth of the association, its stimulating influence, the excellent work of its committees and the progress made in the reputation of its membership, accountants are familiar. Its main impediment to greater advancement, however, was the complication of its organization. Its membership (after the merger of the two constituent bodies) was confined to members of state societies; it could exercise very little discipline (if any) over its members except through the societies, and the relation of a member to the association was not that of an individual but as a member acting through his society only. Therefore, in September, 1916, the organization was again reconstructed and became the American Institute of Accountants, with its much more flexible and effective structure in its immediate relations to its members. All members in good standing in the association became *ipso facto* members of the institute, which thenceforward regarded each as such irrespective of his society affiliations.

It was fortunate that the change took place when it did, for in the spring following, when we entered the war, there was provided a means through which the services of accountants were made immediately available to the government as could not have been done otherwise.

Since then, while the growth in members has not been particularly rapid, there has been a steady gain in the public estimation of the members, a continually increasing spirit of co-operation among them and a greater recognition of the advantages membership affords. Perhaps the best exemplification of this is the bureau of information conducted by the institute, which provides for every member (and others, for that matter) an opportunity to obtain an opinion on any problem which may arise in his practice. Through an inquiry to the bureau he will receive the opinion of others who, having considered the same conditions, have reached satisfactory conclusions. This is a great proof of the disposition which the members have to share with others the benefit of their own research and experience.

All that has gone before relates to what may be called the subjective development of accountancy, the increasing enlightenment of the accountant, the means for such enlightenment, the encouragement toward higher ethical standards of practice and relations with his fellows. Not less important nor less demonstrable is the change in the objective relations to and attitude of the clients for whom services are rendered.

One of the most trying and discouraging features of these relations years ago was the marked indifference (still speaking generally) of the client toward matters which the accountant developed through his work and which to him seemed worthy of serious consideration. All too often the client's attitude might be reflected by a remark, "Tell me how much I have made; never mind the details." The final result was desired; the factors making up such result were ignored. The elaborate analysis which today is common with its instructive demonstrations was considered superfluous.

This change is due to at least two influential causes: first, the larger knowledge of economic principles, the closer scrutiny of conditions on the part of investors, the regulatory governmental supervision of some classes of affairs and the requirements of detailed tax returns, and, second, the greater confidence of the client in the accountant's knowledge, intelligence and disinterested effort.

When one considers the elaborate study and revelations embodied in cost accounts, for example, or the carefully segregated exhibits of causes and effects as shown in reports of today, one who has the background of remembrance can appreciate the happy changes. All this augurs well for the future, for the maintenance and further development of such relations is the accountant's hope and promise. That some accountants have been found unworthy of confidence is undeniable and deplorable, but not unexpected. When one is found to be such it is well to have it known for the benefit of all others and for such discipline as the case may warrant should the offender be a member of any society or of the institute. Furthermore, unjust and extortionate fees should be discountenanced by all reputable practitioners. The standards of the vast majority are high, and they should be maintained.

Purposes and Limitations of a Balance-sheet Audit

By George B. Buist

Briefly stated the object of a balance-sheet audit is to verify by satisfactory evidence the existence, possession and ownership of all assets and the values at which they are shown in the balance-sheet and to ensure the disclosure thereon of all liabilities—all as at a particular moment of time. The basis for such verification is found in the books of account, subsidiary records and collateral and even external sources of information which circumstances may suggest and an effective audit demand.

Thus, it is not sufficient that all assets appearing on the balance-sheet be on hand or in proper custody or under proper control, but it must be definitely ascertained whether other assets not shown on the balance-sheet and not available for verification should be so available, and, as to liabilities, that the liabilities as shown are actual obligations, that they comprise all the obligations and have all been properly contracted. The outstanding capital stock, surplus and undivided profits in the case of corporations or investment accounts of a co-partnership or individual business representing the net worth are determined both as a result of and concurrently with the verification of the assets and liabilities, and are also susceptible to verification in themselves. A certificate by the auditor that the balance-sheet has been audited by him and sets forth the true financial condition of the concern follows, and a report, informative and explanatory of the balance-sheet, usually accompanies it. No certification as to profits is involved.

It is not intended, in this paper, to discuss balance-sheet audit procedure except as it may be affected by the purposes for which the audit is undertaken or by the limitations imposed. Textbooks with which we are all familiar furnish us, in a greater or less degree, with the pro-forma procedure appropriate to the audit of a balance-sheet; but experience brings the inevitable conclusion that the requirements of each particular case call for more or less deviation from stereotyped formulæ and demand the exercise of individual judgment, initiative, tact and courage on the part of the auditor who would maintain a high professional standard, satisfy his own conscience and retain the respect and confidence of his client.

What, then, must be our guide in the use of such skill as we possess in auditing a balance-sheet, the work on which is inextricably bound up with the purposes for which the audit is made and the limitations which may restrict it? The purposes of a balance-sheet audit are numerous, but it will perhaps suffice to mention the following as being those usually behind the undertaking of such work.

1. To secure credit;
2. To furnish a certified balance-sheet to prospective purchasers of stock;
3. For the information and assurance of stockholders, directors and partners;
4. To furnish a basis for merger or other reorganization;
5. In the termination and settlement of a co-partnership;
6. In the purchase or sale of a business;
7. In bankruptcy or insolvency as a basis for the construction of a statement of affairs.

Balance-sheet audits are called for both as of a current date and as of a date long past, as in the case of bankruptcy, where a statement showing an insolvent condition long prior to the date of petition is required.

A natural question arises at this point, namely, to what extent the auditor's duties are affected by the purpose for which the audit of the balance-sheet is undertaken, and to what extent the auditor himself may be influenced by such purpose.

The purpose of the audit is of course conveyed to the auditor by the client in his instructions. If it is not, the auditor should request information on this point. Lack of knowledge as to the purpose of an audit can only deprive the client of intelligent coöperation on the part of the auditor. Instances are not unknown in which certain purposes have been alleged by the client and the real object in seeking the auditor's services concealed. Alertness on the part of the auditor and care in the presentation of the results of his work will generally defeat any ulterior motive in such cases, and the client usually loses rather than gains by withholding his full confidence from the auditor he employs.

In considering the auditor's duties in the audit of a balance-sheet as affected by its purpose and limitations one's mind not unnaturally turns to the various oft-quoted judicial definitions with which we have been regaled under the subject of the auditor's duties and responsibilities.

We are told that "he (the auditor) must be honest; that is, he must not certify what he does not believe to be true." "He must exercise all reasonable care, skill and diligence in ascertaining that the balance-sheet correctly reflects the true financial condition." "It is no part of his duty to take stock." "He is not called on to seek for knowledge outside the company or to communicate with customers or creditors." "He is not an insurer against fraud or error." "He must do more than ascertain the mere arithmetical accuracy of the accounts." "He must examine the books, but he does not discharge his duty by doing this without enquiry and without taking any trouble to see that the books themselves show the company's true position; he must take reasonable care to ascertain that they do so." "What is reasonable care in any particular case must depend on the circumstances of that case."

It is not difficult to discover from the foregoing excerpts the legal conception of the limitations which an auditor himself may place on his work in the audit of a balance-sheet. Surely under these definitions no undue hardship nor unreasonable onus handicaps the competent and conscientious auditor. On the other hand, the moral conception of the auditor's duties may well add much to what has been established from the bench. In instances where limitations are imposed by the client, there may not be and often there is not any relation to the purpose of the audit. On the other hand the client's instructions might call for work in excess of the bare requirements of the auditor's duties as judicially defined, and, if accepted, the auditor must faithfully perform such work.

Limitations imposed by the client cannot always be observed. They may, from their nature, prevent the attainment of the very purpose for which the audit is undertaken, or, as in the illustrative case referred to later, they may in themselves present a moral barrier. On the other hand, the limitations imposed by the judgment of the auditor himself, based on his individual recognition of moral and legal responsibility, are affected by the purpose of the audit, the circumstances peculiar to the individual case and the instructions of the client.

From the brief statement, at the outset of this paper, of the object of a balance-sheet audit, it will be readily apparent that limitations to a degree which impairs the efficacy of the verifications called for removes the audit from the scope of our subject. The audit cannot be deemed a balance-sheet audit—it is a partial audit.

A plea for the time-honored institution, the audit report, may not be out of place in the light of the present tendency to eliminate the report or at least abbreviate it to almost the vanishing point.

If the client is content with the assurance of the auditor's certificate, it might be urged that no report is necessary; but if he is, can the auditor in justice to himself dispense with the means offered him for confirming his instructions, placing himself on record as to what limitations have governed his work and, in view of the many uses to which an audited balance-sheet may be put, of generally protecting his client and those who may be interested in the balance-sheet, and incidentally himself, from possible misunderstanding? Should not the client or the reader of an audited balance-sheet be placed on notice as to both the purpose and the limitations of the audit and have accessible information without which, unless the audit certificate is to do away with all need for intelligent interpretation on the part of the reader, the audited balance-sheet is too often merely a comprehensive note of interrogation? Average clients or readers of a balance-sheet are not familiar with the legal definitions of auditors' duties. More often they entertain fanciful notions regarding them, and, if the auditor is to be fair with his client, it does seem important that the extent of the audit work and its limitations should be succinctly stated; what has not been done being perhaps emphasized more than what has been done. Many a misunderstanding may be thus avoided. This appears especially true when we remember that the average balance-sheet must bear on its face certain assumptions and conclusions reached as a result of inquiry into relative facts, and that the ramifications of the audit work depend largely on the nature and character of the enterprise, the actual conditions and requirements of the business as a whole and its relation to other businesses and to the community. The provisional character of many of the items appearing thereon, contingent and potential values, reliance on certain premises, conventional or otherwise, all call for careful consideration in the presentation of the result of the auditor's work.

No limitations can be recognized in the verification of cash assets, the existence of which, in proper custody, must be determined.

Accounts receivable need not be, and often are not, verified by independent communication, although in cases where the books and records of the concern bear evidence of their unreliability and are not susceptible to satisfactory internal verification, the auditor is in duty bound to except them in any certificate he may furnish; or if the accounts receivable constituted the principal asset of the business, he might not be justified in certifying the balance-sheet at all unless he were permitted to communicate with the parties concerned.

Notes are accepted at their face value, and nothing short of warranted suspicion as to their bona-fides would ordinarily justify an auditor in going further.

From the history of these receivable items and careful inquiry, the auditor should satisfy himself that due provision has been made for probably uncollectible items.

The verification of merchandise inventory is subject to limitation as to the physical correctness of its make-up and the condition of the items listed thereon. It is customary to take a certificate from the parties responsible for the inventory and confine the audit work to checking its clerical accuracy, the prices used, and ascertaining that no items are included thereon for which payment has not been made and the liability therefor not duly set up. While this procedure would ordinarily cover the legal responsibility of the auditor, the importance of the terms "reasonable care, skill and diligence" must not be overlooked. An instance recently occurred where the procedure outlined above had been followed. In reviewing the balance-sheet after audit, three salient features of the inventories were apparent—

1. The inventories were by far the largest items on the balance-sheet.
2. The inventories at the end of the year under review were more than twice what they were at the end of the previous year (nearly all the increase was in manufactured stock).
3. The concern had sustained a substantial operating loss during the year.

Further investigation disclosed the fact that about ninety per cent. of the finished stock had been manufactured under contracts, according to special specifications, for certain mushroom growth manufacturers of world-war origin, delivery had been refused, and the other parties to the contract were financially unable to accept delivery and practically bankrupt. As a result of this disclosure, the inventory was adjusted to reflect the anticipated loss from cost to junk value, and by reason of this adjustment alone a friendly receivership ensued. The concern is slowly recovering. It has since been clearly demonstrated that had attention not been called to the conditions, the receivership would have been deferred, but it would not have been a friendly one and its termination unquestionably would have been disastrous.

A careful review of the manufacturing or trading account will sometimes reveal abnormalities which point to evident error in the inventory. In such cases the auditor must exhaust every reasonable means to ascertain the cause of such abnormality and as a result thereof may require a revision of the inventory.

The degree of limitation in the audit work in relation to inventories must also depend largely on the relative importance which the inventory bears to the balance-sheet as a whole.

In the case of mining or oil-producing companies, the auditor would not be expected to pass on depletion reserves, except to assure himself that the estimate of ore or oil on hand had been furnished by some competent person or source and that the reserve set up had been correctly calculated on the output or yield in its ratio to such estimate.

In the verification of fixed assets, such as real estate, buildings, machinery, equipment, furniture and fixtures, no limitation would ordinarily operate against the verification of title record, cost, propriety of all items charged to such accounts, and the absence of any liens or liabilities thereon not disclosed on the books. It is sometimes deemed advisable to take a certificate from the client, or in the case of a corporation from a responsible officer, to the effect that no liabilities other than those shown on the books exist. This is especially desirable in the case of partnerships or individual businesses, or what are known as one man or family corporations, where transactions in their recording are given neither the attention nor formality which they should receive, and such a thing as the mere giving of a note is not always shown on the books.

In conclusion, the following instance of what might be termed "unlimited limitations" may not be inappropriate or without interest:

A certified balance-sheet was requested. The purpose of the audit was to furnish such certified balance-sheet to prospective purchasers of stock, although this purpose was not disclosed till later. The company owned investments (common stock) in subsidiary companies for which the holding company had paid nothing—the stock was received in payment for services in promotion and organization. This stock was carried on the holding company's books at about $1,000,000.00. The books of the subsidiary companies, which numbered twenty, showed that twelve had an aggregate earned undistributed surplus (no dividends paid) of about $32,000.00; while the other eight showed an aggregate deficit (all operating loss) of about $15,000.00. The holding corporation owned about 90% of each subsidiary company's common capital stock. The auditors were requested to increase the value of this investment in the subsidiary companies to $2,000,000.00 on the balance-sheet of the holding company, on the ground that the stock could be readily sold at a price to yield that amount.

Unwillingness on the part of the auditors brought the corporation's attorneys to convince them and to disabuse their minds of any misunderstanding as to what they were engaged to do. After some discussion as to auditors' duties generally, the following accommodating suggestion was offered:

Either the auditors might receive limited instructions withdrawing the troublesome investments which would then appear at a value of $2,000,000.00 from within the scope of the audit, and the auditors might protect themselves by stating in the accompanying report, if they thought it necessary, that under the instructions received the said investments were not verified, or they would be furnished with affidavits as to the value sought to be placed upon these investments in the balance-sheet. The attorneys impressed the auditors with the fact that they would thus have fully protected themselves and fully discharged their duty legally.

A counter suggestion was made by the auditors that if a value of about $30,000.00 was used in the balance-sheet and the manner in which such value was computed was set forth in the report, there would be nothing to prevent any intelligent person from being convinced as to any potential value beyond that shown on the balance-sheet which this investment might have, but that for audited balance-sheet purposes fanciful valuations could not be accepted.

The investment in the subsidiary companies was shown on the audited balance-sheet at an amount equal to 90% of the $32,000.00 aggregate undistributed surplus. The audited balance-sheet was rejected by the holding company, which refused to pay the audit fee on the grounds that the auditors had presumed to appraise property which the clients held was not within the duties or functions of an auditor. As a matter of fact, the auditors had refrained from any attempt to appraise, but had declined to accept an appraisal by interested parties, and this of course was the real reason for the clients' objection. A suggestion that the courts be asked to pass on the clients' contention led to the acceptance of the audited balance-sheet, and thus ended an unpleasant incident in which the auditors had been tempted by instructions with limitations and by assurances as to legal immunity to become a party to deliberate misrepresentation.

Accounting for a Portland Cement Mill

By HAROLD S. MEINHARDT

Before discussing the accounts of a Portland cement mill a few words relative to the product may be in order. The cement which is generally used in the construction of concrete roads, tunnels, bridges, buildings, etc., is known as Portland cement. It is the strongest and most durable form of cement and will set or harden under water. The name was derived from its resemblance in color to a natural stone found at Portland, England. There is no definite chemical formula for Portland cement, although the concrete made from it must meet certain requirements from a structural point of view.

Portland cement is made by burning a mixture of pulverized materials that contain compounds of calcium carbonate, silica, alumina and iron oxide in the proper proportions. The forms of calcareous matter used are limestone, chalk or marl and for convenience will be referred to hereinafter as "material No. 1." For the silica, alumina and iron contents, which will be referred to as "material No. 2," clay, shale, slate or blast-furnace slag is used.

The manufacturing process may be described briefly as follows:

The first step is the excavation of the raw materials. As the plant is usually situated in proximity to the quarries, the raw materials are carried directly to the rock crushers and grinders.

The second step is the crushing, grinding and mixing of the raw materials. If the "dry process" is to be used, proper proportions of material No. 1 and material No. 2 are mixed after being thoroughly dried. The "wet process" is more common, however, as the mixing can be done more efficiently with the aid of water. The mixture is a thin mud known as "slurry." As the quality of the cement depends upon the fineness of the mixture as well as its composition, the slurry is stored in large tanks until it has been analyzed and approved by the chemical laboratory.

The third step is a chemical process, being the burning or calcining of the raw materials. The slurry is fed into the upper end of the kiln, which is a slightly inclined, revolving cylinder from five to nine feet in diameter and from sixty to two hundred feet in length. The kiln is made of sheet steel lined with fire brick, and is heated to a temperature of from 2,000° to 4,000° F. by the combustion of jets of oil or pulverized coal and air which are blown in at the lower end of the kiln. The water evaporates immediately and the mixture forms a chemical combination known as Portland cement clinker. The clinker, in the form of small pebbles, rolls out at the lower end of the kiln into another revolving cylinder where it is cooled by passing a current of air over it. The current of air is thereby heated and is used to facilitate the combustion in the kiln. The clinker is then placed in storage until it has seasoned, when it is ready for the finishing mill.

The fourth and final step is the grinding of the clinker, to which is added a small quantity of gypsum to prevent the cement from setting too rapidly when it is used. The product is now Portland cement and is conveyed to immense bins where it is stored awaiting shipment, at which time it is packed into barrels, cloth sacks or paper bags.

Accounts

It is not intended to describe in detail the accounting systems which have been devised by the trade associations and are being used by the cement companies, but the following condensed chart of accounts may serve to indicate the nature of the accounts:

- Plant accounts:
  - Mill land
  - Buildings
  - Machinery
  - Quarry lands
- Investments
- Inventories:
  - Cement
  - Clinker
  - Raw materials
  - Gypsum
  - Coal (kilns—power house)
  - Packages (sacks, barrels, paper bags)
  - Stores
- Accounts receivable:
  - Customers'
  - Advances
- Bills receivable
- Cash
- Deferred charges:
  - Shut-down expense

Insurance unexpired
Taxes prepaid
Capital stock
Bonds
Current liabilities:
Bills payable
Trade accounts payable
Unclaimed sacks
Payroll accrued
Bond interest accrued
Taxes accrued
Royalties accrued
Reserves:
Depreciation of buildings
Depreciation of machinery
Depletion of quarry lands
Contingencies
Doubtful accounts
Redemption of sacks (unearned profit)
Surplus
Profit and loss
Manufacturing expenses:
Quarrying
Raw grinding
Clinker burning
Clinker grinding
Mill overhead
Sack and shipping expenses:
Sack cost
Sack handling
Sack allowances
Packing and loading
Selling expenses:
Sales office salaries
Sales office expenses
Salesmen's salaries
Salesmen's expenses
Advertising
Commissions
Association dues
General and administrative expenses:
Officers' salaries
Office salaries
Rent, heat and light
Stationery and printing
Telegraph and telephone

Postage
Legal expenses
Miscellaneous expenses
Interest paid
Bad debts
Federal income taxes
Sales:
Sales allowances
Discount on sales
Interest received
Discount on purchases
Unclaimed sacks
Foreign sacks unclaimed
Miscellaneous income

Subsidiary ledgers are kept for the plant accounts, inventories, accounts receivable, etc. The operating accounts, which are found in the cost ledger, may be summarized under the following general groups which embrace the accounts up to "bin cost":

1. Quarrying:
   - Operating labor
   - Operating supplies
   - Repair and maintenance labor
   - Repair and maintenance materials
   - Power
   - Fuel
   - Explosives
   - Quarry overhead
   - Insurance
   - Taxes
   - Depreciation
   - Depletion of quarry lands
2. Raw grinding:
   - Raw materials used
   - Operating labor
   - Operating supplies.
   - Repair and maintenance labor
   - Repair and maintenance materials
   - Power
3. Clinker burning:
   - Fuel
   - Operating labor
   - Operating supplies
   - Repair and maintenance labor
   - Repair and maintenance materials
   - Power

4. Clinker grinding:
   - Clinker used
   - Gypsum used
   - Operating labor
   - Operating supplies
   - Repair and maintenance labor
   - Repair and maintenance materials
   - Power
5. Mill overhead:
   - Superintendence
   - Mill office and storeroom
   - Laboratory
   - Machine-shop overhead
   - Shut-down expenses
   - Maintenance of yard and buildings
   - Insurance
   - Taxes—state and local
   - Depreciation of buildings
   - Miscellaneous

The "bin cost" of cement, as determined by a summary of the above accounts, is transferred to the cement inventory account. By summarizing the quantities shown in the daily production and sales reports a book inventory is obtained from which the average cost per barrel, as well as the value of the inventory at the end of the period, can be determined. The cost of cement sold is obtained by crediting the cement-inventory account with the inventory at the end of the period. By adding the shipping expenses the "cost on board cars" is obtained.

The determination of costs depends upon the accuracy of the production figures and the physical inventories. The production figures are estimates and may be calculated, for instance, from the amount of slurry that has been extracted from the slurry tanks. It is necessary, therefore, that periodical physical inventories be taken to check the accuracy of such records. But the physical inventory is also an estimate because of the difficulty of measuring the cement in the bins. The bins are almost inaccessible to the surveyor, whose task is complicated further by the extent to which the cement is packed down. Monthly physical inventories are therefore out of the question. A check upon the book inventories may be maintained, however, by comparing the quantities shown by the bin records with the actual quantities in such bins as can be gauged accurately, particularly bins which have been emptied.

A similar situation exists in the records for quarrying, except that here the accuracy of the records is not of such importance because the values involved are not so great. The quantity of rock produced does, however, determine the amount charged for depletion of quarry lands, which is calculated on the following basis:

From the cost of the quarry lands is deducted the residual value, if any, of the lands after quarrying. This amount divided by the number of tons of rock or clay which it is estimated by the engineers is commercially available will give the depletion charge per ton, which is added to the cost of every ton of raw material quarried.

The mill-overhead accounts do not contain any unusual items except perhaps the account "shut-down expense." It is customary for many mills to suspend operations during the winter months on account of the falling off of orders and the increased cost of operation, particularly in the quarries. As the kilns operate continuously for twenty-four hours a day during the remainder of the year, an opportunity is afforded during the shut-down period for general overhauling and repairs. The cost of such repairs, as well as the mill-overhead expenses for the shut-down period, are charged to a deferred-asset account which is written off to manufacturing costs in equal instalments during the remainder of the fiscal year.

Portland cement is generally quoted in terms of barrels containing 380 pounds, but the cement is seldom shipped in barrels. It is sometimes shipped in paper bags at the customer's risk of breakage. The almost universal method of shipment, however, is in cloth sacks, each of which contains one-fourth of a barrel of cement. The customer is charged a standard price for the sacks and the company agrees to repurchase such second-hand sacks as are returned by the customer in good condition.

In the above chart of accounts the item "unclaimed sacks," which is shown as miscellaneous income, represents the elimination from the accounts of the liability for returned sacks, the shippers of which could not be ascertained or which were not claimed by customers. The liability is carried for at least two years before it is written off. Customers sometimes inadvertently return sacks branded with another cement company's trade-mark. Such "foreign sacks" are held for the customers' instructions for a period of thirty days, after which they are deemed to have been forfeited by the customers and may then be sold to the respective cement companies.

The treatment of the sack accounts presents an interesting problem in accounting. Before the war the price quoted for a barrel of cement included 40 cents for the four cloth sacks. The sacks ordinarily cost the company less than 10 cents each when new, so that the problem here was whether the excess of selling price, 10 cents, over cost was an earned profit, in view of the fact that the company agreed to repurchase the sacks at 10 cents, and also contracted to count, inspect, clean and if necessary repair sacks when returned. Various solutions were offered, the soundest of which provided for the setting up of the unearned profit as a reserve for redemption of sacks.

During the war, however, on account of the advance in the price of cotton, the cost of new sacks increased to about 25 cents each. The standard price to the customer was therefore raised by some companies during 1918 to 25 cents.

The proper redemption of the sacks is accomplished by keeping a memorandum of the number of sacks in the hands of each customer at the various prices, and the sacks themselves bear some distinguishing mark to indicate to which lot they belong. When a customer returns sacks which he has purchased at 25 cents each, his account is credited with 25 cents; but the sack inventory account is charged with only the average cost which prevailed at the time when the sacks were sold to the customer, the difference being charged to the reserve for redemption of sacks. Inasmuch as sacks lose their identity as soon as shipped, the cost which prevailed at the time the sacks were sold is determined for practical purposes by crediting to the inventory account the oldest relative portion of the reserve.

At the time when 25-cent sacks are being returned, 10-cent and 15-cent sacks are also coming in for redemption, for which perhaps no reserve has been provided because the average cost at the time of sale was more than 10 cents or 15 cents, respectively. It seems reasonable, in this case, to charge the inventory account with the price at which the sacks were repurchased, namely, 10 or 15 cents.

The sack inventory account then reflects an average cost per sack which is not in excess of original cost, but below cost in some instances. The average cost will be reduced toward the present selling price of 10 cents as the inventory is turned over, so that the loss will be absorbed in costs over the period during which the high-priced sacks are used. It is therefore customary to state the inventory of sacks at average cost and as they are sold to charge the excess of cost over selling price to shipping expenses. If the selling price, however, is greater than cost, conservatism demands that such profit be regarded as unearned until the particular lot of sacks is no longer in use.

In the case of a company which has on hand a large number of sacks that were acquired at high prices, it would seem that the inventory should be stated at the present selling price rather than at average cost. Although this would be the conservative course to follow, many companies do not wish to charge such a radical reduction in the value of their sack inventory to the earnings of any particular period. The accounting procedure described above, whereby the values are reduced gradually, has therefore met with favor. As to reducing the sack inventory to market it will be seen that the market quotations for new sacks have no bearing upon the value of sacks which are branded with the company's trade-mark. Regardless of their value, they will be sold to customers and repurchased from them at the present arbitrary price of 10 cents each. The question remains as to whether or not the books should reflect the liability of the company for the repurchase of sacks in the hands of customers. The company is contingently liable, and, theoretically, the liability should be reflected in the balance-sheet. A going concern, however, may safely ignore such liability because it will need the second-hand sacks which it purchases from its customers and it can sell them again for the same price which it pays for them. It is true, however, that where the company has contracted to pay 15 cents or 25 cents for a sack which it will resell for only 10 cents, a loss will be incurred for which due provision should be made. The reserve for redemption of sacks mentioned above will provide for the difference between 15 cents or 25 cents and the cost when the sack was sold to the customer, but the cement companies do not always provide for the further reduction to 10 cents. The conservative thing to do, however, is to provide a reserve for redemption of sacks which will be adequate to provide for a 10-cent valuation of all sacks which are to be redeemed at higher prices.

Cost Systems and Operating Statistics

By A. F. Wagner

Business conditions during 1921 again impressed executives with the fact that timely operating and balance-sheet information is indispensable to intelligent and, consequently, profitable management. Observation leads to the conclusion that adequate current statistics in many instances enabled executives to determine policies which not only prevented losses but often resulted in a considerable net profit.

In almost every field of business during the deflation period there have been a few outstanding concerns which, by reason of their profitable operation or avoidance of operating losses common to the trade, have earned the respect of their stockholders, bankers and less fortunate competitors. The marked contrasts in operating results (which public accountants have recently been privileged to witness) can be largely attributed to disparities in managerial ability. Furthermore, foresighted executives have been consistently fortified with accurate statements of operation and financial position received at frequent, regular intervals.

The aim of this paper is to point out the statistical inadequacy of many cost systems designed and installed before the United States entered the world war and to propose a simple supplement to existing cost records by means of which valuable additional statistics can be easily prepared for executives.

The directing heads of large or even moderate-sized manufacturing enterprises do not and cannot profitably take the time to study all detailed costs of separate articles or jobs; but they should have monthly statements from which they can determine the ratio of the various component elements entering into the cost of product manufactured, that is, materials, labor and overhead. Furthermore, is it not desirable for a manufacturer to know from month to month the average rate at which his inventories of materials and finished goods are being turned and the average length of time that goods remain in process of manufacture? All real merchants closely watch the turnover of their goods in order to avoid excessive investment in inventories, but many manufacturers apparently forget that one of their functions is merchandising materials as well as changing their form.

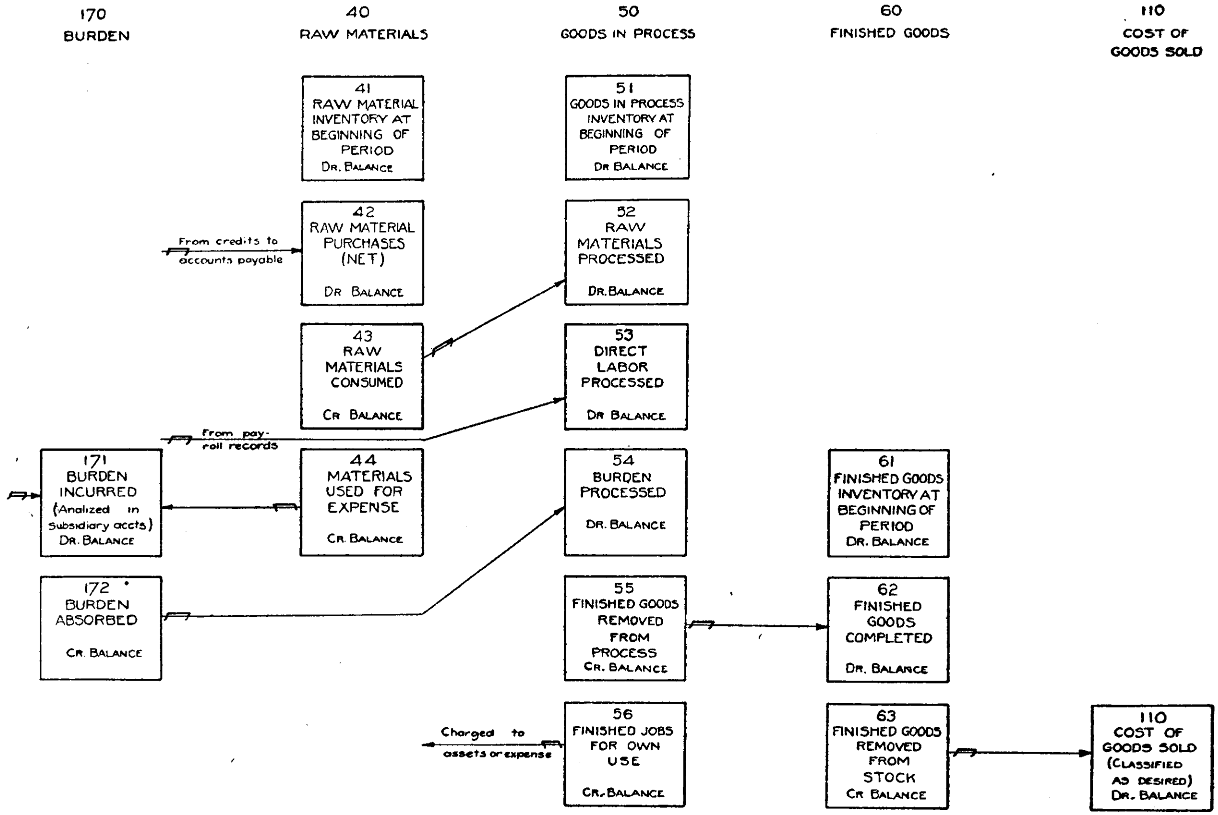
Established maximum and minimum quantities of materials or general instructions concerning such limits may be disregarded by purchasing agents—how can the management judge the efficiency of such subordinates unless current statistics reveal the average length of time that articles are on hand or in process of manufacture? Managers should be constantly striving to shorten the period of time between receipt of raw materials and shipment of finished product; accountants should provide executives with data which indicate the results of changes in policies and whether or not additional steps are necessary to accomplish a desired end.

Data described in the foregoing may be easily obtained from most "tied in" cost systems now in operation if proper analyses of accounts be made. The writer suggests that the classification of general and cost-ledger accounts be so changed that the necessary details will automatically appear in the company's records. A chart (exhibit "A," page 200) illustrates the operation of such a classification of accounts. The arrangement therein set forth consists simply in running analyses of the usual perpetual inventory accounts. This classification can be expanded to include as many kinds of materials, work-in-process and finished goods as may be desirable in a particular case and can be readily fitted to any plan of departmental operations. The accounts listed in the chart may be further amplified so as to subdivide the balances of goods in process, finished goods and cost of goods sold into their component parts, namely, materials, labor and burden. Account number 44, materials used for expense, has been included on the chart because some manufacturing companies purchase materials which are used both directly in the product and indirectly in factory operations.

With the operating details of a manufacturing plant perpetually analyzed as indicated in the chart, monthly statements similar to the specimen presented in exhibit "B" (page 201) can be promptly prepared. Such statements, when furnished executives, should contain comparative figures for the corresponding periods of the preceding year. The relationship between inventories and movement of goods is brought forcibly to the attention of a manager studying reports in this form. The data on turnover submitted at the bottom of exhibit "B" are calculated in the usual manner by dividing average inventories into cost of

EXHIBIT "A"

CHART ILLUSTRATING OPERATION OF SUBSIDIARY COST LEDGER ACCOUNTS



NOTE: Account captions at head of chart indicate general ledger accounts which control the subsidiary accounts directly thereunder Accounts 40, 50 and 60 are the usual perpetual inventory accounts. The balance in account 170 represents the amount of burden over or under-absorbed. Account numbers hereon are the same as those listed in Exhibit "B".

EXHIBIT "B"

Specimen Statement of Cost of Goods Sold

(With account numbers referring to chart presented in exhibit "A")

	Month of July, 1920		Twelve Months ended July 31, 1920	
Raw materials:				
Inventory at beginning of period (No. 41)		$298,910.00		$ 238,840.00
Net purchases (including inward freight) (No. 42)		68,730.00		649,340.00
		367,640.00		888,180.00
Less: Expense materials (No. 44)	$ 210.00		$ 3,930.00	
Inventory at end of period (No. 40)	316,370.00	316,580.00	316,370.00	320,300.00
Materials used in manufacturing (No. 52)		51,060.00		567,880.00
Direct labor (No. 53)		26,130.00		330,220.00
Manufacturing burden:				
Indirect labor (No. 171a)	4,810.00		56,120.00	
Superintendence (No. 171b)	2,500.00		29,750.00	
Loose tools, etc. (No. 171c)	2,830.00		29,930.00	
Power (No. 171d)	1,020.00		16,930.00	
Fuel (No. 171e)	970.00		12,370.00	
Repairs (No. 171f)	1,130.00		12,590.00	
Depreciation of plant (No. 171g)	1,300.00		15,560.00	
Other manufacturing expenses (No. 171h)	1,410.00		16,460.00	
Total burden incurred (No. 171)	15,970.00		189,710.00	
Plus: Burden over-absorbed (No. 170)	660.00		9,980.00	
Burden charged into process (No. 54)		16,630.00		199,690.00
Total goods processed		93,820.00		1,097,790.00
Deduct: Goods manufactured for own use (No. 56)		....		3,950.00
Total goods processed for sale		93,820.00		1,093,840.00
Add: Inventory of goods in process at beginning of period (No. 51)		178,910.00		155,750.00
		272,730.00		1,249,590.00
Deduct: Inventory of goods in process at end of period (No. 50)		210,650.00		210,650.00
Cost of goods completed (No. 62)		62,080.00		1,038,940.00
Add: Inventory of finished goods at beginning of period (No. 61)		113,210.00		148,990.00
		175,290.00		1,187,930.00
Deduct: Inventory of finished goods at end of period (No. 60)		33,520.00		33,520.00
Cost of goods sold (No. 110)		$141,770.00		$1,154,410.00
Percentages of elements of total goods processed:				
Raw materials	54.4%		51.5%	
Direct labor	27.9		29.9	
Manufacturing burden	17.7		18.6	
Totals		100.0%		100.0%
	Average Inventory	**Rate of Annual Turnover**	**Average Inventory**	**Rate of Annual Turnover**
Approximate data on turnover of goods:				
Raw materials	$307,640.00	2.0	$298,720.00	1.9
Goods in process	194,780.00	5.8	171,250.00	6.1
Finished goods	73,370.00	23.2	113,510.00	10.2

goods moved and may also be stated in terms of *average* length of time that goods are on hand or in process, as follows:

	Rate of movement of goods in terms of average number of months on hand	
	Month of July, 1921	Twelve months to July 31, 1921
Raw materials	6.0 Mo.	6.3 Mo.
Goods in process	2.1 "	2.0 "
Finished goods	0.5 "	1.2 "
Average total period from receipt of raw materials to shipment of product manufactured therefrom	8.6 Mo.	9.5 Mo.

Statistics similar to the foregoing (especially when compared with like data for prior years) are of real value to managers. Furthermore, they can be prepared from almost any good, existing cost system. The only additional records required are the subsidiary accounts set forth in the appended chart, and these may be dispensed with by the use of multi-column ledger sheets.

The classification and analyses suggested in this paper have one additional advantage, namely, that the treasury department's requirements as to form of the statement of cost of goods sold on annual returns of income can be strictly followed without hurried analyses of accounts at the end of the year. The suggestions presented in this paper are offered, not with a view of eliminating unit costs, percentages of normal production and other valuable data now secured from cost systems, but rather with the idea that analyses be added which will afford executives additional indices of the efficiency of operations. Actual experience with records such as those described herein has demonstrated that they require no greater time than was necessary before the running analyses were added and, furthermore, that real operating statistics and annual returns of income are now more expeditiously prepared than was the case before the records were changed.

The JOURNAL *of* ACCOUNTANCY

Official Organ of the AMERICAN INSTITUTE *of* ACCOUNTANTS

A. P. RICHARDSON, *Editor*

EDITORIAL

What Is Accountancy?

From time to time it is the practice of this magazine to draw attention to advertisements which indicate a lack of knowledge of what constitutes accountancy. We are particularly interested in advertisements of educational institutions.

For example, the New York *Times* of July 25th contained an advertisement in which the following appeared:

> "Register now to become a junior accountant by December, 1922. Salary range, $35 to $50 per week, and
> "Senior accountant by June, 1923. Salary range, $50 to $200 per week."

The advertisement appeared on July 25th. This would have given the applicant if he had applied at once a little over four months in which to become a junior accountant and demand a salary of $35 to $50 a week. This might happen. It is conceivable that a bright young man or woman could receive enough training in that length of time to merit employment as an extremely junior junior. If the firm were generous the salary might be paid.

The real feature of the quotation, however, is the thought that in less than a year one may become a senior accountant and demand a salary of from $2,600 to $10,400 a year.

We have a fairly wide range of acquaintance among accounting firms. It is known to everyone that occasionally a man may be engaged as a senior and be paid a fair salary without proper investigation as to his ability. We maintain, however, that the accountant who would offer even $50 a week to an applicant who had had less than a year's training or experience would be either a philanthropist or a fit subject for observation in the psychopathic ward.

And yet, no doubt, there are scores of young men and women who would be encouraged by such an advertisement and would be quite properly disappointed at the end of the time to find that the promises could not be made good.

Mail-order Prices

A few days ago we received copy of a circular issued by a concern representing itself as an investment brokerage house describing in a great deal of detail and with the usual optimism an issue of bonds of a corporation supposed to be engaged in the production of an important commodity.

The circular had been sent to a physician in a country town who called up the office of this paper to obtain some information in regard to the corporation and to the brokerage house.

Neither of the subjects of inquiry was known to us, but investigations were made. It was discovered that the brokerage house apparently had desk-room in another office, and it was further discovered that there was such an issue of bonds by the corporation which had been mentioned.

There is nothing absolutely thrilling in the recitation of events so far, but when it is explained that the brokerage house was offering these bonds at 105 and that they could be bought on the street for 67 the matter begins to be interesting.

Upon inquiry it appears that there may be nothing absolutely illegal in the actions of the so-called brokerage house. Under the doctrine that the buyer should beware there is perhaps no cause for complaint in such a case as this. But there is a great deal to be said on the ground of common honesty.

Of course, no one can have much sympathy with an investor who will deal with an unknown house in unknown securities. It is the existence of many gullible persons which is responsible for the great number of unethical if not absolutely illegal transactions daily conducted. Of recent years, however, there has been a tendency to protect the buyer against himself, and it is increasingly difficult for wild-cat stocks and bonds to find a market. But so far there is nothing except public opinion to prevent a dealer in securities from charging his unsuspecting customer any price which the customer will pay.

Here is a field for investigation and the suggestion of protective legislation. It seems to us that it would be possible to enact a law preventing public offering of securities at any price varying more than a few points from the legitimate market.

Annual Meeting of American Institute

Attention of our readers is drawn once more to the annual meeting of the American Institute of Accountants which is to be held in Chicago, September 19th and 20th. The programme includes papers of exceptional interest and there are to be many matters of professional importance under discussion.

Beta Alpha Psi

Accounting instruction has reached such a high scholastic plane in some of the universities of the country that the students have sought recognition for their efforts through an honorary professional fraternity known as Beta Alpha Psi.

Membership in this fraternity is obtained by invitation only and is based on a high scholastic standing in accounting courses pursued in the university, good moral character and an expressed interest in the accounting profession. One of its main purposes, as stated in the constitution, is to encourage and foster service as the basis of the accounting profession and to secure the highest ethical ideals in the practice of accountancy. The members of the several chapters hold regular meetings at which they discuss accounting subjects and listen to articles prepared and read by the members. These meetings afford excellent opportunities for the discussion of interesting topics that cannot be included in class-room schedules because of lack of time. In the institutions where this fraternity has chapters the members have a reputation for doing things. They seem to take more interest in the work of the organization than do the members of a great many other honorary or professional fraternities.

At present there are chapters at the University of Illinois (where the fraternity was founded), Northwestern University, University of Washington, University of Oregon and Oregon Agricultural College.

Such an organization as this should be a source of inspiration for the young accountants who hope to be the leaders of the profession in the future. It should be a distinguishing mark for the accounting student as Beta Gamma Sigma is for the commerce student in general or Phi Beta Kappa for the student of literature and arts.

Income-tax Department

Edited by Stephen G. Rusk.

The district court of the United States, southern district of Ohio, has made an interesting decision with respect to the features that must be present in the business transacted by building and loan associations if they are to be exempt from the provisions of the revenue act of 1918. To those familiar with the law and regulations relating to exempt associations of this kind it is difficult to understand why a suit should be brought to establish itself as exempt by a building and loan association that has "as its chief business dealing for profit with the general public by the methods of an ordinary savings bank." The court for this reason among others held that the Lilley Building & Loan Co. was not entitled to exemption from income taxes.

Stock subscription rights are dealt with in a comprehensive manner by the supreme court of the United States in the case of *Miles, Collector, versus Safe Deposit & Trust Company, Guardian.* The questions as to rights and responsibilities of taxpayers owning or dealing in such rights to stock may be considered as definitely answered by this decision.

A decision of importance is that (No. 3367) which amends article 836 of regulations 62. The amending language sets forth quite definitely the proof required by the department of internal revenue of corporations which seek to include in invested capital "tangible property paid in; value in excess of par value of stock." The limitations as to appraisals as proof will be better understood as a result of this amendment of article 836. There are many corporations that are unquestionably entitled to include in invested capital such tangible property, but have found it difficult to furnish proof of the fact because of lack of knowledge as to what would be accepted as proof. It is probable that the text of this article will be amplified further when the taxing officers obtain more experience by handling concrete cases of the kind involved by the section of the revenue acts dealing with this difficult question.

TREASURY RULINGS

(T. D. 3355, June 17, 1922.)

Income tax—Revenue act of 1918—Decision of court.

1. Exemptions—Building and Loan Associations—Essential Characteristics.

   Mutuality is the essential principle of a building and loan association. Its object is to raise a fund to be loaned among its members or such as may desire to avail themselves of the privilege. Its business is confined to its members.

2. Building and Loan Associations—Exemption from Tax.

   When a building and loan association ceases to be substantially mutual and adopts as its chief business dealing for profit with the general public by the methods of an ordinary savings bank, it is no longer entitled to exemption under section 231, paragraph 4, of the revenue act of 1918.

3. SAME—INCIDENTAL TRANSACTIONS.

The making of loans to nonmembers or borrowing from nonmembers does not defeat exemption under section 231, paragraph 4, of the revenue act of 1918, if such transactions are simply incidental to the primary business of operating a building and loan association.

The appended decision of the United States district court, southern district of Ohio, eastern division, in the case of the *Lilley Building & Loan Co. v. Newton M. Miller, collector,* is published for the information of internal revenue officers and others.

DISTRICT COURT OF THE UNITED STATES, SOUTHERN DISTRICT OF OHIO, EASTERN DIVISION, No. 2105.

The Lilley Building & Loan Company, plaintiff, v. *Newton M. Miller, as Collector of Internal Revenue, etc., defendant.*

PECK, district judge: Action to recover corporate income taxes paid under protest for the years 1918, 1919, and 1920, under the revenue act of 1918. Submitted on the evidence, without jury.

The essential question is whether the plaintiff was exempt from the tax. Section 231 (4) exempts "domestic building and loan associations and cooperative banks without capital stock, organized and operated for mutual purposes and without profit." It is claimed by the government that the plaintiff does a banking business under the guise of a building association; by the defendant, that its activities are no broader than those permitted to be exercised by such associations organized under the laws of Ohio. *General Code Ohio,* 9643, et seq.

The facts are not in dispute. Plaintiff does not hold meetings at stated intervals, as such associations frequently do, but keeps its place of business open during the usual business hours of the day.

It receives deposits from nonmembers, evidenced by entries in books such as are ordinarily used by savings banks. Withdrawals may be made on presentation of books. On these accounts (which constitute the bulk of its business) it pays interest at the stated rate of 4 per cent. It also receives time deposits, for which it issues certificates bearing interest at the rate of 5 per cent. It has paid-up stock, also "running stock," on which instalment payments are made. Both classes of stock receive semiannual dividends at the rate of 5 per cent per annum. Its statement for the year 1920, which may be taken as typical of the period of time involved, shows running stock at $121,000; paid-up stock at $123,000; deposits of $830,000; borrowed money, $20,000; and a reserve fund of $18,500 (odd figures are omitted). Its stockholders numbered 301; its borrowers 495, of whom but two were stockholders; and its savings depositors were 2,239. Its loans were all made upon homes, the average amount of each being about $3,500. It had no checking accounts. A depositor wishing to make a withdrawal presented his passbook and for the amount was given a check to his own order, which he indorsed and returned to the association, receiving thereon the cash. The association then put the check through its bank. Its mortgage loans were usually payable in monthly instalments. The few loans made to members took the same course as those to nonmembers. The borrowing members gave their notes and paid them off in instalments, such obligations being entirely disassociated from their obligations to pay for stock. The ordinary building association method of subscribing for stock to the amount of the loan, the stock when paid up extinguishing the loan, was not pursued.

It will be observed that about 80 per cent of its receipts and 97 per cent of its loans are transactions with nonmembers. Thus, by far the greater number of those with whom it does business have no interest in its profits, and as long as it remains solvent they have none in its losses. The earnings accrue to the stockholders. Mutuality of interest between stockholders, on the one hand, and the depositors and borrowers, on the other, is lacking.

This course of business seems to be within its charter powers as prescribed by the statutes of Ohio, particularly sections 9648 and 9657, *General Code* of Ohio. It does not, however, conform to the general conception of the functions of such an association. "Mutuality is the essential principle of a building association. Its business is confined to its own members; its object being to raise a fund to be loaned among themselves, or such as may desire to avail themselves of the privilege." *Eversmann* v. *Schmitt* (53 O. S. 175, 184). "The leading feature of such an association is that its members are kept upon a strictly co-operative basis with mutual advantages and benefits, sharing alike in the profits and sustaining their proportionate share of the losses." 4 R. C. L. Building and Loan Associations (p. 344). In *Halsell* v. *Merchants Insurance Co.* (105 Miss. 268) a concern organized under the building association act of the state of Mississippi, with powers similar to those exercised by the plaintiff, was held not to be such an association in the real meaning of the term. Having regard, therefore, to its general character as distinguished from its mere charter powers, there is no doubt that the business conducted was in the main not that of a building association as ordinarily conceived.

Plaintiff's counsel, however, contend that the definition adopted by the statutes of Ohio of the term "building association," and not that of general usage, is controlling. But it must be remarked that the statutes referred to do not attempt to define a "building association" as distinguished from a "savings association." "A corporation for the purpose of raising money to be loaned to its members shall be known * * * as a 'building and loan association' or as a 'savings association.'" G. C. 9643. The statutes carry the distinction no further. Both are treated alike. The same powers are conferred on each. Such a corporation may combine both phrases or parts thereof in its name. It may as truly be said that the corporation is designated as "savings association" as a "building association" by the laws of Ohio. Plaintiff has named itself a "building association." It might have named itself a "savings association." Its powers, liabilities, structure, character and place in the law would have been the same. It may even now change its name to a "building association." Would it be exempt as a "savings association"? If not, would it secure exemptions by such change of name, its character remaining precisely the same?

It is pointed out that the revenue acts of 1909 and 1913 exempted domestic building and loan associations "organized and operated exclusively for the mutual benefit of their members"; that these qualifying words were omitted in the act of 1918, that they were restored in the act of 1921 in this phraseology: "* * * domestic building and loan associations substantially all the business of which is confined to making loans to members," and it is argued that the omission of such language in the 1918 statute indicates a purpose of congress to exempt all corporations organized as domestic building associations under the laws of the several states, without any condition or qualification whatsoever; that congress took them with their charter powers and their activities as they existed, and exempted them from the tax; and it is further insisted that the intention of congress to tax them must clearly appear, and that they are not to be taxed by implication. *Gould* v. *Gould* (245 U. S. 151). But did congress omit the qualifying language in the act of 1918?

Having resort to the text of the act itself, it is to be noticed that the exception concludes with the words "organized and operated for mutual purposes and without profit." In Holmes *Federal Taxes,* 1922 edition, page 318, the author puts a comma before this clause, indicating an interpretation that would make these words modify not only cooperative banks but building associations. While the comma is not found in the act, and the usual presumption is that a phrase modifies its immediate antecedent, yet there is good reason for taking these words as referring to both antecedents. By so doing, the act is in conformity with the general policy of the acts of 1909, 1913 and 1921. Furthermore, there seems to be just as much reason for requiring that building associations, to be exempt, must be organized and operated for mutual purposes and without profit, as there is for applying that requirement to cooperative banks. Plaintiff's interpretation is that corporations organized under building association laws are exempt, although operated not for mutual purposes and with a profit to a limited number of stockholders, be they ever so few. Such an interpretation would seem to violate the intent of the act. Recurring to the matter of nonmenclature under the Ohio statutes, if we regard the plaintiff as a "savings association" we would have a mutual bank, *with* capital stock, *not* organized and operated for mutual purposes and *not* without profit. The matter certainly can not rest so lightly as on the arbitrary choice of a name. The facts must control. But if it be linguistically inaccurate to take the adjective phrase in question as modifying "building associations," nevertheless the rule of nescitur a sociis, which, in this instance, it seems proper to apply, would lead to the same interpretation.

It is not thought that the making of loans to nonmembers, or borrowing from nonmembers, or receiving deposits to be withdrawn on demand or on time, so long as such transactions are simply incidental to the primary business of operating a mutual building association, would defeat the exemption. In *Central Building Loan & Savings Co.* v. *Bowland* (216 Fed. 526) the question was whether the existence of such powers necessarily put the corporation out of the exempt class, and it was concluded that it did not, and that conclusion is thoroughly concurred in. But here the association has put aside the attribute of mutuality; indeed, it is most difficult to distinguish its activites from those of the ordinary savings bank. Its primary design no longer is to be an instrumentality of mutual helpfulness among its contributors in saving and borrowing for home owning, but its object now is the receiving of deposits from and lending money on interest to the public for the profit of the stockholders. Counsel argue that the people are better served thus; that mutuality is inefficient; that a concern of 10 stockholders and many customers is more beneficial to the public than one containing in its body corporate all of its depositors and borrowers. This may be true. But the statute has not exempted all corporations that receive deposits and loan money on homes.

It may not be possible to define precisely how far a building association may go in extraneous activities without losing its essential character, but it seems clear that when it ceases to be substantially mutual and adopts as its chief business dealing for profit with the general public by the methods of an ordinary savings bank, it is no longer a building association entitled to be exempted from income taxation under the statute in question.

It is therefore concluded that the petition must be dismissed.

(T. D. 3365, July 6, 1922.)

Income Taxes—Act of February 24, 1919—Decision of Supreme Court.

1. STOCK SUBSCRIPTION RIGHTS—NATURE—INCOME.

   A stockholder's privilege of subscribing to new shares of stock before they are offered to the public is an incident of his stock ownership, and the acquisition of that privilege, while it may increase the value of the stockholder's interest in the corporation, does not constitute a segregation of the profits of the corporation, and is not gain, profit, or income to the stockholder.

2. SAME—SALE OF RIGHTS—EXTENT OF TAX LIABILITY.

   A stockholder of a corporation who receives the right to subscribe for shares of a new issue of stock is, on sale of such right, liable to income tax on so much of the proceeds as exceeds the cost of the right (citing *Merchants Loan & Trust Co.* v. *Smietanka*, T. D. 3173).

3. SAME—SALE OF RIGHTS—COMPUTATION OF GAIN.

   The new shares, if and when issued, are indistinguishable from the old shares, and as they are received by reason of the ownership of the old shares, the average of the price paid for the old shares and of the subscribing price for the new shares constitutes cost for either an old share or a new share in computing taxable gain, following the analogy of the computation employed in the case of the sale of stock dividend shares. On the sale of stock rights, cost and selling price are determined by assuming that the stockholder, instead of selling his rights, subscribed for new shares and sold them, and the gain taxable to a stockholder who sells his rights is equal to the gain taxable to a stockholder who subscribes for a new share and sells his new share. In ascertaining the selling price it is assumed that the stockholder, if he had subscribed, would have refused to sell his new share for any amount less than the sum of the subscribing figure and the prevailing price offered for the rights, and the sum of these two amounts is assumed to represent the selling price of the stock rights. The taxable gain, therefore, is found by taking the sum of the subscribing price and the market value of the rights, and subtracting from that sum the average of (1) the cost of one old share, and (2) the subscribing price of one new share.

4. Stock Subscription Rights—Sale of Rights—Computation of Gain.
The acquisition of a new share by the exercise of a right to subscribe is merely an exercise of one of the rights of stock ownership, and until the new share has been sold, no profit has been realized, and there is no taxable income.

Supreme Court of the United States. No. 416. October Term, 1921.

Joshua W. Miles, collector of internal revenue for the district of Maryland, plaintiff in error, v. *Safe Deposit and Trust Co. of Baltimore, guardian of Frank R. Brown.*

Error to the district court of the United States for the district of Maryland.

[May 29, 1922.]

Mr. Justice Pitney delivered the opinion of the court:

D fendant in error, a corporation organized under the laws of Maryland and authorized to act as guardian, was on January 30, 1919, appointed by the orphans court guardian of Frank R. Brown, an infant whose father had died intestate about a year before. The son as next of kin became entitled to 35 shares of the stock of the Hartford Fire Insurance Co., and they were transferred to defendant in error as such guardian, and still are held by it in that capacity. At that time the capital stock of the insurance company issued and outstanding consisted of 20,000 shares of the par value of $100 each. Later in the year that company, under statutory authority, increased its capital stock to 40,000 shares of the same par value. The resolution of the stockholders sanctioning the increase provided that the right to subscribe to the new issue should be offered to the stockholders at the price of $150 per share, in the proportion of one share of new stock to each share of stock held by them; subscriptions to be payable in instalments and the directors to have power to dispose of shares not so subscribed and paid for in such manner as they might determine to be for the best interests of the company. In July, 1919, defendant in error, pursuant to an order of the orphans court, sold the subscription right to 35 shares owned by its ward for $12,546.80, equivalent to $358.48 per share. The commissioner of internal revenue, holding that this entire amount was income for the year, under the provisions of the act approved February 24, 1919 (ch. 18, 40 Stat. 1057), assessed and plaintiff in error collected a tax amounting to $1,130.77 by reason of it. Defendant in error, having paid this under protest and unavailingly appealed to the commissioner, claiming that none of the amount so received was income within the meaning either of the act or of the sixteenth amendment, brought this action against the collector to recover the entire amount of tax so assessed and paid. The case was tried before the district court without a jury on stipulated facts and evidence. Plaintiff's extreme contention that the subscription right to new stock and also the proceeds of the sale of the right were wholly capital and not in any part subject to be taxed as income, was overruled upon the authority of *Merchants' Loan & Trust Co.* v. *Smietanka* (255 U. S. 509), then recently decided. The trial court, in the second place, held that, of the proceeds of the sale of the subscription rights, so much only as represented a realized profit over and above the cost to plaintiff of what was sold was taxable as income. In order to compute the amount of the profit, the court commenced with the value of the old shares prior to authorization of the stock increase, which upon the basis of evidence contained in the stipulation was taken to be what they were assessed at by the United States for purposes of the estate tax at the death of the ward's father, viz., $710 per share, and added the $150 necesary to be paid by a stockholder or his assignee in order to obtain a share of the new stock, making the cost of two shares (1 old and 1 new) $860 and half of this the cost of one share.

The sale of the subscription rights at $358.48, the purchaser to pay the issuing company $150 per share, was treated as equivalent to a sale of the fully paid shares at $508.48 each, or $78.48 in excess of the $430 which represented their cost to plaintiff; and this difference multiplied by 35, the number of shares or rights sold, yielded $2,746.80 as the gain realized out of the entire transaction. Upon this the court held plaintiff to have been properly taxable, and upon nothing more, no income tax being assessable with respect to the 35 shares still retained, because although they were considered worth more, ex-rights, than the $430 per share found to be their cost, the difference could not be regarded as a taxable profit unless or until realized by actual sale (273 Fed. 822). To review the final judgment entered pursuant to the findings and opinion, which sustained only in part plaintiff's demand for a refund of the tax paid, the collector of internal revenue prosecuted a direct writ of error from this court under section 238, *Judicial Code,* because of the constitutional questions involved.

There is but one assignment of error, based upon a single exception, which denied that plaintiff was entitled to recover anything whatever; hence the correctness of the particular recovery awarded is not in form raised; but the trial judge, having the complete facts before him, almost of necessity passed upon them in their entirety in order to determine, according to truth and substance, how much of what plaintiff received was, and how much was not, income in the proper sense, as is proper in a case involving the application of the sixteenth amendment (*Eisner* v. *Macomber* (252 U. S. 189, 206); *United States* v. *Phellis* (Nov. 21, 1921, 257 U. S.—); and in order to review the judgment, it will be proper for us to analyze the reasoning upon which it was based.

It is not in dispute that the Hartford Fire Insurance Co. is a corporation of the state of Connecticut and that the stock increase in question was made under authority of certain acts of the legislature and certain resolutions of the stockholders, by which the right to subscribe to the new issue was offered to existing stockholders upon the terms mentioned. It is evident, we think, that such a distribution in and of itself constituted no division of any part of the accumulated profits or surplus of the company, or even of its capital; it was in effect an opportunity given to stockholders to share in contributing additional capital, not to participate in distribution. It was a recognition by the company that the condition of its affairs warranted an increase of its capital stock to double the par value of that already outstanding, and that the new stock would have a value to the recipients in excess of $150 per share; a determination that it should be issued pro rata to the existing stockholders, or so many of them as would pay that price. This privilege of itself was not a fruit of stock ownership in the nature of a profit; nor was it a division of any part of the assets of the company.

The right to subscribe to the new stock was but a right to participate, in preference to strangers and on equal terms with other existing stockholders, in the privilege of contributing new capital called for by the corporation—an equity that inheres in stock ownership under such circumstances as a quality inseparable from the capital interest represented by the old stock, recognized so universally as to have become axiomatic in American corporation law.—*Gray* v. *Portland Bank* (3 Mass. 364); *Atkyns* v. *Albree* (12 Allen 359, 361); *Jones* v. *Morrison* (31 Minn. 140, 152-153); *Eidman* v. *Bowman* (58 Ill. 444, 447); *Humboldt Driving Park Ass'n* v. *Stevens,* (34 Neb. 528, 534); *Electric Co.* v. *Electric Co.* (200 Pa. 516, 520-523, 526); *Wall* v. *Utah Copper Co.* (70 N. J. Eq. 17, 28 et seq.); *Stokes* v. *Continental Trust Co.* (186 N. Y. 285). Evidently this inherent equity was recognized in the statute and the resolution under which the new stock here in question was offered and issued.

The stockholder's right to take his part of the new shares therefore—assuming their intrinsic value to have exceeded the issuing price—was essentially analogous to a stock dividend. So far as the issuing price was concerned, payment of this was a condition precedent to participation, coupled with an opportunity to increase his capital investment. In either aspect, or both, the subscription right of itself constituted no gain, profit, or income taxable without apportionment under the sixteenth amendment. *Eisner* v. *Macomber* (252 U. S. 189) is conclusive to this effect.

But in that case it was recognized (p. 212) that a gain through sale of dividend stock at a profit was taxable as income, the same as a gain derived through sale of some of the original shares would be. In that as in other recent cases this court has interpreted "income" as including gains and profits derived through sale or conversion of capital assets, whether done by a dealer or trader, or casually by a nontrader, as by a trustee in the course of changing investments.—*Merchants' Loan & Trust Company* v. *Smietanka* (255 U. S. 509, 517-520.)

Hence the district court rightly held defendant in error liable to income tax as to so much of the proceeds of sale of the subscription rights as represented a realized profit over and above the cost to it of what was sold. How the gain should be computed is a matter of some contention by the government in this court; but it admits of little doubt. To treat the stockholder's right to the new shares as something new and independent of the old, and as if it actually cost nothing, leaving the entire proceeds of sale as gain, would ignore the essence of the matter, and the suggestion cannot be accepted. The district court proceeded correctly in treating the subscription rights as an increase inseparable from the old shares, not in the way of income but as capital; in treating the new shares if and when issued as indistinguishable legally and in the market sense from the old; and in regarding the sale of the rights as a sale of a portion of a capital interest that included the old shares. What would have happened had defendant in error decided to accept the new shares and pay the issuing price instead of selling the rights is of no consequence; in that event there would have been no realized profit, hence no taxable income. What resulted or might have resulted to defendant in error's retained interest in the company, depending upon whether the purchaser exercised his right to subscribe or allowed it to lapse, or whether in the latter event the stock was sold by the directors is of speculative interest only. Defendant in error resorted to the market for the sale of a part of its capital interest, concededly sold at an advance over cost, and what the profit actually was is the sole concern here; not whether it might have been more or less, nor whether the purchaser disposed of the stock to advantage.

That a comparison of the cost at acquisition and the selling price is proper under section 202 (*a*) of the act (40 Stat. 1069), where, as here, the property was acquired and sold within the same taxing year, we understand to be conceded. Under the stipulation, the court below was warranted in finding $710 per share to have been the fair market value of the old stock when turned over to the guardian, and treating this as its cost to the trust. It was proper to add to this the $150 required to be paid to the company and treat the total as the cost to plaintiff of each two shares one of which was to pass to the purchaser. This in essence is the method adopted by the treasury department in the case of a sale of dividend stock, in regulations No. 45 (1920 ed., art. 1547), which reads:

ART. 1547. *Sale of stock received as dividend.*—Stock in a corporation received as a dividend does not constitute taxable income to a stockholder in such corporation, but any profit derived by the stockholder from the sale of such stock is taxable income to him. [Following *Eisner* v. *Macomber,* supra.] For the purpose of ascertaining the gain or loss derived from the sale of such stock, or from the sale of the stock with respect to which it is issued, the cost (used to include also, where required, the fair market value as of March 1, 1913), of both the old and new shares is to be determined in accordance with the following rules:

"(1) Where the stock issued as a dividend is all of substantially the same character or preference as the stock upon which the stock dividend is paid, the cost of each share of both the old and new stock will be the quotient of the cost, or fair market value as of March 1, 1913, if acquired prior to that date, of the old shares of stock divided by the total number of the old and new shares. * * *"

That the averaging of cost might present more administrative difficulty in a case more complicated than the present, as where the old shares were acquired at different times, is not a sufficient ground for denying the soundness of the method itself.

Various suggestions, more or less ingenious, as to how the profit ought to be computed, made by counsel for defendant in error and by an amicus curiae, have been examined and found faulty for reasons unnecessary to be mentioned. Upon the whole, we are satisfied that the method adopted by the district court led to a correct result.

Judgment affirmed.

(T. D. 3367, July 10, 1922)

War excess profits tax.

Article 836, regulation No. 45 (1920 edition), and article 836, regulations No. 62, amended.

Article 836, regulations No. 45 (1920 edition), and article 836, regulations No. 62, are hereby amended to read as follows:

ART. 836. *Tangible property paid in; value in excess of par value of stock.*—The paid-in surplus allowed in any case is confined to the value definitely known or accurately ascertainable at the time the property is paid in. Evidence offered to support a claim for a paid-in surplus must be as of the date of the payment. It may consist among other things of (*a*) an appraisal of the property by disinterested authorities; (*b*) a certificate of the assessed value in the case of real estate, or (*c*) evidence of a market price in excess of the par value of the stock or shares. Opinion evidence, expert or otherwise, of the value of property as of a prior date will not be accepted. Retrospective appraisals submitted in support of a claim for a paid-in surplus will not be accepted in any case where other reasonably satisfactory evidence is available and in any case will be accepted only after rigid scrutiny and will be followed only to the extent to which their reasonableness is fully established. The property which was paid in is the basis of the appraisal, and the appraisal must reconcile the accounts so as to reflect accurately the actual value on the date as of which the appraisal is made and the depreciation sustained. Proper consideration must in all cases be given to depreciation and the expired and remaining serviceable life of the property must be shown. To be acceptable retrospective appraisals must show: (1) The history of the business and manner in which the information or data was acquired; (2) the manner in which the appraisals were constructed; (3) the inventory on the date of the appraisal in detail; (4) the date of acquisition of all items remaining in the inventory as of the date of appraisal; (5) the elimination from the inventory of all items acquired subsequent to the date as of which the appraisal is made and how this was effected (all items, the date of acquisition of which cannot be definitely determined, should be listed separately and all the facts bearing upon the date of acquisition given); (6) the replacement cost at the date as of which the appraisal is made of each item accepted as on hand on that date determined upon competent data, with a statement of the method employed in arriving at such cost (estimates and general statements will not be accepted); (7) the rate and total amount of depreciation as shown by the books; (8) the rate and total amount of depreciation taken upon each item included in the appraisal for the purposes of the appraisal (if other than normal rates of depreciation are used the reason therefor and the method of computing depreciation must be fully explained); (9) the actual cost when ascertainable of each item included in the appraisal; (10) the book value on the date as of which the appraisal is made of all the items included in the appraisal; and (11) a detailed statement of all plant facilities and additions, represented by capital expenditures previously written off, which were still in use on the date as of which the appraisal was made and all the depreciation actually sustained or accrued on such items. No claim will be allowed for paid-in surplus in any case in which the addition of value has been developed or ascertained subsequent to the date on which the property was paid in to the corporation, or in respect of property which the stockholders or their agents on or shortly before the date of such payment acquired at a bargain price, as, for instance, at a receiver's sale. Generally, allowable claims under this article will arise out of transactions in which there has been no substantial change of beneficial interest in the property paid in to the corporation, and in all cases the proof of value must be clear and explicit.

Franklin K. Moyer

Franklin K. Moyer, member of the American Institute of Accountants, certified public accountant of Pennsylvania, died at Souderton, Pennsylvania on August 12th. Mr. Moyer was a partner of the firm of Moyer & Schectman, Philadelphia.

Mack E. Stewart

Mack E. Stewart, member of the American Institute of Accountants, died June 26th as a result of a gasoline explosion. Mr. Stewart had been a member of the institute since 1920 and was an active member of the profession in Oklahoma.

Frank H. Walker

Frank H. Walker, member of the American Institute of Accountants, died August 16, 1922. Funeral services were held at Amherst on August 18th. Mr. Walker had been associated for many years with the firm of Herbert F. French & Co. of Boston.

Oklahoma Society of Certified Public Accountants

At a meeting of the Oklahoma Society of Certified Public Accountants, held June 16, 1922, the following officers were elected: President, Homer C. Hammonds; treasurer, Mack E. Stewart; secretary, Carl L. Rice; auditors, Arthur Jones, Mack Porter; trustees, Robert E. Garnett, Hugh M. Rush and William C. Beck.

Arthur E. Chandler and Howard E. Murray announce the admission to partnership of Floyd Chilton, under the firm name of Chandler, Murray & Chilton, with offices at 816-818 Second National building, Akron, Ohio.

William Bryden & Co. announce change in name to Bryden & Fauble and the removal of their offices to 638 Securities building, Omaha, Nebraska.

Patterson, Teele & Dennis announce the admission of Harold Burton Hart to partnership as of July 18, 1922.

Seward, Stone & Monde announce the opening of an office in the Aeolian building, 33 West 42nd street, New York.

Students' Department

EDITED BY H. A. FINNEY

INSTITUTE EXAMINATIONS

(NOTE—The fact that these answers appear in THE JOURNAL OF ACCOUNTANCY should not lead the reader to assume that they are the official solutions of the American Institute of Accountants. They merely represent the personal opinion of the editor of the *Students' Department*.)

AUDITING

May 18, 1922, 9 A. M. to 12:30 P. M.

Answer all questions.

No. 1 (10 points):

In listing the balances from creditors' ledger (assumed to be in agreement with controlling account) you find several debit balances. State three causes which may account for these. How would you treat cases arising from each cause?

Answer: First, goods may have been returned to a creditor, or an allowance may have been claimed and charged to his account after the account was settled. The debit should be verified by inspection of a credit memorandum or by correspondence received from the creditor and on file. Mere evidence of shipment of the goods is not sufficient, for such evidence would not show that the creditor has granted or will grant the credit.

Second, advances or deposits may have been made on purchase commitments. These should be verified by inspection of contracts or correspondence on file.

Third, the creditor may have purchased goods which were charged to his account in the subsidiary creditors' ledger instead of to an account with him in the subsidiary accounts-receivable ledger. The sale and consequent debit would be verified by an examination of invoices and shipping records.

The question now arises as to how these debit balances should be dealt with in the books and on the balance-sheet. Debit balances arising from the first cause may be set out on the asset side of the balance-sheet as "debit balances of accounts payable," but there is no necessity of doing so unless they are of considerable amount.

Advances and deposits should be shown as such on the asset side of the balance-sheet, and it would be better to carry them as assets in the general ledger than as debits to personal accounts in the subsidiary ledger.

The treatment of debit balances arising from the third cause would depend on the conditions of each case. Unless an understanding had been reached with the creditor which provided for an offset of the account receivable and the account payable, there should be open balances in both the accounts-payable and accounts-receivable subsidiary ledgers. If there has been no such agreement, the balance-sheet should include the account payable and the account receivable rather than the net amount. If an offset agreement has been reached, the debit balance in the account-payable ledger should be transferred to an account in the subsidiary accounts-receivable ledger, and it should be included among the accounts receivable in the balance-sheet.

No. 2 (15 points):

(a) Give particulars of the nature of the examination you would make of inventories submitted to you as representing merchandise and the operating supplies on hand at the date of the balance-sheet of a retail grocery business operating a chain of stores.

(b) The company's sales are on a "cash" basis. The balance-sheet shows that the only assets are inventories and cash, the inventories representing 90% of the total assets. Would that condition suggest to you the need for any special consideration as to the extent of the auditor's examination of the inventories?

Answer: (a) The verification of an inventory involves a consideration of prices, extensions and footings and quantities. Prices would be verified by examination of invoices. Extensions and footings would be verified in the usual manner, in total or by tests of larger items. As to quantities, it would probably be impossible to make any physical inspection of the goods because of the elapsed time between the balance-sheet date and the audit date and because the inventories are in a number of different places. Various tests could be made which would probably disclose irregularities.

In the first place, the quantities appearing in the inventories could be compared with the deliveries from the central warehouses to see whether the quantities are reasonable or not. For instance, the records at the central office may show that weekly deliveries of about one hundred units of a certain article have been made to one store throughout the year. This gives a good indication of the volume of business done in this particular article, and the quantity of stock which should be carried. If the inventory shows four hundred or five hundred units of this article, there might be reason to believe that the inventory is inflated.

In the second place, comparisons should be made of the various stores. For example, if all the stores showed about the same condition as that described in the preceding paragraph there would be no reason for doubting the accuracy of the inventory, but if the inventories of all of the other stores showed quantities of this particular item equal to about a week's deliveries to the store, there would be reason to be suspicious of the inventory which showed quantities on hand equal to the receipts for four or five weeks.

In the third place, an adaptation of the gross-profit method may be used. Since the stores are all dealing in the same classes of goods, the rates of gross profit should be fairly uniform among all the stores. Any serious overstatement of the inventory at one store might cause enough of a variation in its rate of gross profit to attract attention.

In the fourth place, many businesses running chain stores bill the goods at retail prices, so that billings less income from sales should represent the inventory on hand at selling prices. But this method of verifying the inventory is subject to two objections: in the first place, the system of accounting will have to be very highly developed to take care of mark-ups and markdowns in a thoroughly satisfactory manner and maintain a balance representing the present selling price of the goods on hand at the store; in the second place, an overstatement of the inventory to offset unreported cash sales would not be detected unless periodical tests were made by checking the goods actually on hand.

Before making the tests suggested above, it would of course be necessary to separate the merchandise and supplies inventories.

(b) Since the sales are on a cash basis, any understatement of sales for the purpose of concealing a cash shortage would be offset by overstatements in the inventories. This would be particularly true in stores where goods are billed at selling prices, with the intention of maintaining a check on inventories, sales and cash, for in such cases the cash receipts and the inventories at selling price would have to equal the billed price of shipments after adjustments for mark-downs and mark-ups. For this reason the verification of the inventories would be especially important because of the relation of the inventories not only to profits, but also to cash.

No. 3 (10 points):

State in detail how you would audit and verify the notes receivable of a large trading corporation with several affiliated concerns, giving due attention to collateral, notes discounted, makers, etc.

Answer: In the first place, a distinction should be made between notes received from customers and notes received from affiliated companies, because notes of the first class are presumably current assets to be collected in accordance with the credit customs of the trade, while notes of the second class are likely to be permanent advances to the affiliated companies.

All notes on hand should be examined and checked against the notes-receivable register, comparing the register and the notes as to maker, time, interest rate, collateral and face. The open items of the register should then be totaled and compared with the balance of the notes-receivable account. A schedule should be made up showing these facts if there is no notes-receivable register, and may be made in any case.

The register should contain information of the collateral received with the notes; and this collateral should be examined to see that none of it has been improperly sold or used for unauthorized purposes.

Any notes received otherwise than in the course of trade should be set out as a separate item in the balance-sheet, so that the balance-sheet will show trade notes receivable as distinguished from all others. Any overdue notes should be charged back to the customers' accounts. The notes should be valued in the light of any available information as to note losses in the past and the credit reputation of the various makers.

If the accounts receivable are verified by circularizing, a similar verification may be made of the balance due from debtors on notes, and such verification would be particularly desirable in case of overdue and demand notes, as total or part payments may have been made on these notes without having been recorded.

Bankers and note brokers who have discounted the client's paper should be asked for a statement of the discounted paper held. Discounted trade notes should be separated from discounted notes received from affiliated companies, because, while the former represent only contingent liabilities, the latter will be shown as actual liabilities if a consolidated balance-sheet is prepared.

No. 4 (10 points):

The T. N. T. Corporation is organized October 1, 1921, to exploit a new and untried patent. On that date it issues its entire capital stock of no par value, 100 shares for cash at $100 a share, and 900 shares for the patent, the latter being expressly stated in the authorizing resolution as "having no cash value." Its fiscal year is fixed as beginning January 1st, and on December 31, 1921, the treasurer makes up the corporation's first income-tax return based on the following

BALANCE-SHEET

Cash	$1,000	capital stock (1,000 shares)	$100,000
Patent	90,000		
Plant and equipment	7,000		
Expenses to date	2,000		
	$100,000		$100,000

Across the face of schedule A of the income-tax return the treasurer writes: "No business done as yet so there is no net income to report." In schedule B he writes:

"Cash paid in	$10,000
"Patent (25% of stock issued, said stock valued at same amount as that sold for cash on same date)	22,500
"Total invested capital	$32,500"

He submits this return and balance-sheet to you for your criticisms. What are they? Give reasons.

Answer: There are several points here which should be called to the treasurer's attention. First, from an accounting standpoint, the capital-stock account should be credited only with the amounts paid for the stock, since it is no-par-value stock. If the patents really had no value there should be no patents account, and the capital stock should be carried at $10,000.

Second, from the tax standpoint, the fact that the patents were stated to have no cash value will not prevent the corporation from establishing the fact that they have a cash value if there is evidence to support such a contention.

Third, the 25% limitation applies to the total stock outstanding at the beginning of the taxable year, and not to the stock issued for the patent.

Fourth, and most important, the company has made no profit during the year 1921 and it therefore has no tax to pay, regardless of the amount of the invested capital. And as 1921 was the last year in which the amount of invested capital affected the tax on corporations, the valuation of the patent has no bearing on taxes.

No. 5 (8 points):

To what extent is it an auditor's duty to concern himself with the validity of transactions coming under his notice?

Answer: The answer to this question depends upon what is meant by validity. The word valid is defined as "sufficiently supported by actual fact," and also "good or sufficient in point of law."

The first definition of valid can hardly have been meant, for since transactions are facts it is difficult to see how they would be supported by facts. If the word entries had been used instead of transactions, the question would mean, Should the auditor determine whether the entries are supported by facts? There is no question that he should.

But since the word transaction is used, the question must mean, Should the auditor concern himself with the legality of the transactions? In other words, if he is convinced that the management of the corporation has committed acts *ultra vires,* such as engaging in a business not authorized by the charter or paying dividends out of capital or without a formal declaration of dividends, is it his duty to advise his client of this fact? I should say that it is his duty, and that advice of this kind is along the modern line which auditors are following in rendering service as general business advisors. Advice to clients is a different matter, however, from publishing such facts in a report.

No. 6 (10 points):

In making up an income-tax return for a client an auditor makes a serious clerical error in calculations. The client files the return as made and pays the tax. Two years later the treasury department calls attention to the error, and it appears that the client has paid a larger tax than he should have paid. What is the duty of the auditor in the case?

Answer: This seems to be a question of professional ethics and business expediency rather than of accounting principles. I should say that the auditor should perform without compensation whatever clerical work was necessitated by his error and compensate his client to his satisfaction, within reasonable limits, for any loss resulting from the tying up of capital by the payment of excess taxes.

No. 7 (10 points):

A corporation has insured the life of its president for its own benefit and is carrying the amount of premiums paid on its balance-sheet. What position should an auditor take in regard to these premiums?

Answer: The corporation should carry as an asset only the cash-surrender value of the insurance policy. The premiums paid during the year minus the increase in the cash-surrender value accrued during the year should be charged off as an expense.

No. 8 (7 points):

Explain the points of difference in procedure in a detailed audit of earnings and expenses and in a balance-sheet audit.

Answer: The detailed audit involves a fairly exhaustive checking of the entries in the various books of original entry against vouchers of all sorts to see that these entries are adequately supported by documentary evidence; it also involves considerable footing of books of original entry and proof of posting.

In a balance-sheet audit, the income is verified by various tests to see whether the transactions are in general recorded in accordance with correct principles. For instance, are consignments recorded as such or as sales? Is a proper distinction maintained between capital and revenue expenditures? Is there provision for depreciation and bad debts? Is proper recognition given to accrued and deferred items? Determining such facts as these requires only a general inspection of the accounting system and sufficient tests and examination of vouchers to satisfy the auditor that a proper effort is being made to apply correct principles.

No. 9 (10 points):

"Net income" of individuals is defined in the income-tax law of 1921 as "the gross income as defined in section 213 less the deductions allowed by section 214." Name (in brief titles ignoring provisos and exceptions) six items of allowable deductions. What are some unallowable expenses?

Answer: Six allowable deductions:

Business expenses.
Interest paid or accrued.
Taxes.
Depreciation and depletion.
Bad debts.
Contributions.

Some unallowable expenses:

Personal and living expenses.
Special assessments for local benefits.
Life-insurance premiums.

No. 10 (10 points):

The town of X erects a school building from the proceeds of bonds issued for the purpose. The building is estimated to last twenty years. The bonds also mature in twenty years and contain a sinking-fund clause to provide the funds for their payment at maturity. The school board makes no provision for depreciation on the building in the annual tax rate, and a controversy arises in the town as to whether or not such provision should be made. Discuss briefly both sides of this question.

Answer: It is important to distinguish between the relation of depreciation to the tax rate and the relation of depreciation to the revenue statement. The statement of the school district ought to show the depreciation of the school building as one of the expenses of operating the school system, but it is not necessary to include in the tax rate a provision for sinking-fund payments and also a provision for depreciation, unless the taxpayers wish to tax themselves during the next twenty years to pay for the school building which they are now using as well as for the one which they expect to have to build twenty years hence.

COMMERCIAL LAW *

May 19, 1922, 9 A. M. to 12 30 P. M.

NEGOTIABLE INSTRUMENTS

Answer three of the following four questions:

No. 1 (10 points):

To what requirements must an instrument conform to render it negotiable?

Answer: These requirements are set out in section 1 of the negotiable instruments law as follows:

"(1) It must be in writing and signed by the maker or drawer.

* Answered by John C. Teevan, instructor in business law, Northwestern University School of Commerce.

"(2) It must contain an unconditional promise or order to pay a sum certain in money.

"(3) It must be payable on demand or at a fixed or determinable future time.

"(4) It must be payable to the order of a specified person or to bearer; and

"(5) Where the instrument is addressed to a drawee, he must be named or otherwise indicated therein with reasonable certainty."

No. 2 (10 points):

How is a person secondarily liable on a negotiable instrument discharged from liability?

Answer: Section 120 of the negotiable instruments law provides as follows:

"A person secondarily liable on the instrument is discharged:

"(1) By an act which discharges the instrument.

"(2) By the intentional cancellation of his signature by the holder.

"(3) By the discharge of a prior party.

"(4) By a valid tender of payment made by a prior party.

"(5) By a release of the principal debtor, unless the holder's right of recourse against the party secondarily liable is expressly reserved.

"(6) By any agreement binding upon the holder to extend the time of payment, or to postpone the holder's right to enforce the instrument, unless made with the assent of the party secondarily liable, or unless the right of recourse against such party is expressly reserved."

A party secondarily liable is also discharged from liability by failure of the holder to take the proper steps to hold such party; such steps being presentment for payment to the party primarily liable at the proper time and place or proper presentment for acceptance, protest in case of foreign bills of exchange and proper notice of dishonor for non-payment or non-acceptance as the case may be.

Discharge of a party secondarily liable is also possible, under section 122 of the act, where the holder expressly renounces his rights against any party either by so stating in writing or by delivering the instrument.

No. 3 (10 points):

What is the effect of a material alteration of a negotiable instrument and what constitutes a material alteration?

Answer: The effect of such alteration is to release all parties to the instrument who did not authorize or assent to such alteration; but an innocent purchaser for value may enforce the instrument as it was before the alteration. Section 124 of the negotiable instruments law provides as follows:

"Where a negotiable instrument is materially altered without the assent of all parties liable thereon, it is avoided except as against a party who has himself made, authorized or assented to the alteration and subsequent endorsers.

"But when an instrument has been materially altered and is in the hands of a holder in due course, not a party to the alteration, he may enforce payment thereof according to its original tenor."

As to what constitutes a material alteration, section 125 of the act provides that

"Any alteration which changes (1) the date; (2) the sum payable, either for principal or interest; (3) the time or place of payment; (4) the number or the relations of the parties; (5) the medium or currency in which payment is to be made; or which adds a place of payment, where no place of payment is specified, or any other change or addition which alters the effect of the instrument in any respect is a material alteration."

No. 4 (10 points):

Rowe, private secretary for Foster, brought to Foster a cheque for signature payable to cash. The cheque was made out in figures for $50.00, but no words were inserted in the space left for writing. Rowe raised the cheque to $500.00, which Foster's bank paid. Was the bank liable?

Answer: The bank is not liable. It should be noted, first, that this cheque being payable to cash was therefore payable to bearer; second, that it was delivered by the maker, Foster, to Rowe; third, that it was an incomplete instrument. From the wording of the question it must be assumed that the amount in figures, $50.00, was altered by Rowe to read $500.00, and that Rowe also inserted the amount, $500.00, in words in the space left for writing. Technically, the marginal figures on a negotiable instrument are not part of the instrument, but are merely a memorandum of or convenient reference to the amount. Hence the act of raising $50.00 to $500.00 did not constitute a material alteration or a forgery. Section 14 of the negotiable instruments law provides that where an instrument is wanting in any material particular, the person in possession thereof has a prima facie authority to complete it by filling up the blanks therein. This cheque, therefore, was a valid negotiable instrument. The courts have given two reasons why the maker of such an instrument must bear the loss. One is that the maker of an instrument by leaving a blank therein impliedly authorizes the person to whom it is delivered to fill in the blank. The other reason is the negligence of the maker in executing an instrument containing unfilled blanks.

CONTRACTS

Answer two of the following three questions:

No. 5 (10 points):

Define (a) a bailment, (b) a conditional sale.

Answer: (a) A bailment consists in a transfer by one person (the bailor) to another (the bailee) or a holding by such bailee of personal property under a contract or a legal duty, pursuant to which the bailee is obligated to return the same property in its original or altered condition to the bailor or on the order of the bailor to deliver it to a third person. Generally a bailment exists by reason of delivery by the bailor to the bailee under a contract express or implied. Delivery or contract, however, is not essential to the existence of a bailment, as the finder or thief of personal property is technically a bailee.

(b) A conditional sale is one in which the possession of the goods passes from the seller to the buyer, the vesting of title to the goods in the buyer or the revesting of title in the seller depending upon the occurrence or non-occurrence of some condition. Such conditions may be precedent or subsequent. A sale upon condition precedent exists where the title in the goods is not to vest in the buyer until he has performed or fulfilled some condition. A sale on the instalment plan and a sale on approval are both sales upon condition precedent. In a sale upon condition subsequent, the title passes at once to the buyer, subject to being divested on the performance or happening of some specified condition. A "sale or return" transaction is an illustration, as where goods are paid for and delivered on the condition that the buyer may return the goods within a specified time, if he so desires, and receive his money.

No. 6 (10 points):

A, in Chicago, sold certain goods to B in Boston. The goods were shipped to B by express. After shipment, and while the goods were in the possession of the express company, A ascertained that B was insolvent and unable to pay for his purchase. A notified the agent of the express company at Boston, in whose custody the goods were, to withhold delivery to B and to return the goods to A. The goods were, however, delivered to B upon his payment of the express charges. A sued the express company for conversion. Could he recover?

Answer: Under what is known as the seller's right of stoppage in transitu, A can recover. Under sections 57 to 59, inclusive, of the uniform sales act, when the seller learns that either at the time of the sale or subsequent thereto and while the goods are in transit, that is, in the possession of a carrier to whom they were delivered for transmission to the buyer, the buyer was or has become insolvent, the seller may exercise the aforesaid right by obtaining actual possession of the goods or by giving notice to the carrier. He is then entitled to the same rights in regard to the goods that he would have had if he had never parted with possession. Goods are in transit from the time when they are delivered to a carrier for transmission to the buyer until the buyer takes delivery of them from such carrier. In the present case, A having learned after shipment of the goods that B was insolvent, and the goods still being in transit, and A having given notice to the express company while the goods were in transit, the company delivered the goods to B at its peril and is liable to A for damages.

No. 7 (10 points):

What is meant (a) by the words "substantial performance" as applied to contracts; (b) by the term "quantum meruit"?

Answer: (a) The words "substantial performance" as applied to contracts indicate an exception to the general rule that the performance of a contract must be in strict compliance with all the terms thereof. By substantial performance is meant that the party has made a bona-fide effort to live up to all terms of the contract, that there has been no wilful or intentional departure from such terms and that the deviations or defects in performance are of a minor nature only.

As above indicated, the strict common-law rule requires literal compliance with all the terms of the contract, failing which the party cannot recover—or if he is allowed to recover it is on an implied contract and not on the express contract. To apply the strict rule in every case would frequently work a hardship; hence where the terms of the contract involve numerous and complex details (building contracts being a notable example), the courts will allow recovery if the plaintiff can prove substantial performance, a deduction from the contract price being allowed to equalize matters. In courts of equity substantial performance is sufficient, unless the contract expressly provided for strict performance. As to the time of performance, the common-law rule is that time is of the essence of the contract—that is, delivery or performance must be on the date specified. The rule in equity has been indicated. If the contract provides for performance to the "satisfaction" of a party, the rule is that such party is the sole judge as to such satisfaction, where the element of personal taste or fancy is involved, as in the making of a suit of clothes, a portrait, a statue, etc. Where such elements are not involved, that performance which would satisfy a reasonable requirement is held sufficient.

(b) Quantum meruit is a technical term used in pleading and means "as much as he deserved." The action of assumpsit on a quantum meruit is proper where one person has employed another to work for him without any agreement as to compensation, and where, after the work has been performed, the employer refuses to pay. Such an action is brought on the implied promise of the employer to pay the employee reasonable value of his service or as much as he reasonably deserves. Where the rate or amount of compensation was agreed upon, the action would be on the express contract and not on a quantum meruit.

Partnerships

Answer one of the following two questions:

No. 8 (10 points):

X acquired the interest of A in the copartnership of A and B by purchase at a sale under execution issued on a judgment against A individually. Subsequently A and B gave a chattel mortgage on firm property to Y, a firm creditor. Were X's rights in the property superior to Y's or vice versa?

Answer: When A's interest was sold to satisfy X's judgment, A ceased to be a partner; in other words, the sale dissolved the partnership. A therefore had no title or interest in the firm property and hence could convey none to Y either by chattel mortgage or in any other way. B's duties, the partnership being dissolved, were to liquidate the assets, pay off the creditors and wind up the business. Such duties do not include the execution of chattel mortgages on firm property. For these reasons the chattel mortgage to Y was null and void, and conveyed no right or interest whatever in the firm property to Y. Hence as far as the chattel mortgage is concerned, X's rights are superior to those of Y.

Y, however, is a firm creditor and as such has superior rights in the firm property to X. The purchaser of the partner's interest in the partnership gets such partner's pro rata share in the firm assets after all firm debts and liabilities have been discharged and an accounting has been made between the parties. A's interest, therefore, could not be ascertained until Y, together with all the other firm creditors, had been paid. Hence X's rights in the firm property are subject and inferior to those of Y.

No. 9 (10 points):

What is a limited partnership?

Answer: A limited partnership is defined by the uniform limited partnership act as "a partnership formed by two or more persons under the provisions of section 2, having as members one or more general partners and one or more limited partners." Such partnerships are purely statutory and are unknown to the common law. Under the common law all partners are general partners—that is, are subject to unlimited liability for partnership obligations. Limited or special partners are liable for firm obligations only to the extent of the capital they have invested. Section 2 of said act requires persons about to form a limited partnership to sign and swear to a certificate including among other things a statement of the character of the business, firm name, names of partners, amount of contributions, duration of the business, etc. Such certificate must be filed for public record and serves as notice of the limited liability of the special partners. It should be noted that a limited partnership must include at least one general partner whose liability is unlimited. Limited partnerships are not very numerous. Incorporation provides for limited liability with equal if not greater effectiveness, besides having other advantages over a limited partnership.

CORPORATIONS

Answer both the following questions:

No. 10 (10 points):

A corporation is formed in Delaware which is empowered by its charter or certificate of incorporation to do business in all states of the United States. Specify what steps in general should be taken by the corporation before operating in states other than Delaware and what would be the result, if any, of failure to take such steps?

Answer: In all the states other than Delaware, this corporation would be considered as a foreign corporation, and prior to doing business in any other state it would have to comply with the foreign-corporation laws thereof. While these laws are not uniform, the steps to be taken by this corporation would include the filing of a certified copy of its charter with the secretary of state; the payment of certain fees; the filing of a sworn statement setting forth the name of the corporation and its principal place of business, the names of other states in which it is qualified to do business, the character of business intended to be carried on, an estimate of corporate property to be used within the state, the name and address of a resident agent of the corporation upon whom service of summons and other legal process may at all times be made, and the names and addresses of its officers and directors.

If this corporation proceeded to do business in another state without first complying with the foreign-corporation laws of such state, it would render itself liable to certain penalties or disabilities. These usually include the imposition of a fine, the forfeiture of a right to maintain suits on contracts or other rights and exclusion from the state.

No. 11 (10 points):

Is there any distinction between the "capital" and the "capital stock" of a corporation? And if so explain such distinction.

Answer: Yes, the law recognizes a marked distinction. By the capital stock of a corporation is meant the total amount fixed by the charter or certificate of incorporation paid in or to be paid in as the fund with which the corporation is to do business. It remains a fixed sum in amount and does not vary, except by amendment to the charter, when it again becomes fixed. It is true that the capital stock may fall below the amount as fixed by the charter, but up to such amount the corporate property is to be regarded as capital stock. If there is an excess or surplus, such surplus is not legally part of the capital stock. It may be disbursed in the form of dividends, which is not true of capital stock.

By the capital of a corporation is meant simply the money and other property owned by the corporation at any given time. Capital may be the same as capital stock or, as is usually the case, may be greater or less. Unlike capital stock the corporate capital may vary from time to time.

Bankruptcy

Answer the following question:

No. 12 (10 points):

What is the difference between a receiver in bankruptcy and a trustee in bankruptcy?

Answer: A receiver in bankruptcy is an officer appointed by the court to take temporary charge of the bankrupt's property until a trustee is elected. A trustee is an officer elected by the creditors of the bankrupt at their first meeting. He takes title to the bankrupt's estate, liquidates and administers the estate, and pays dividends to creditors. On payment of the final dividend, he prepares his report and account, on the approval of which he is formally discharged. The appointment, classification, duties, etc., of trustees are described in sections 44 to 50 inclusive of the federal bankruptcy act.

Federal Income Tax

Answer the following question:

No. 13 (10 points):

Explain the meaning of depreciation and of depletion as used in the federal income-tax act.

Answer: Taking depreciation first, this term appears in the revenue act of 1921 in section 214 (a) (10) and in section 234 (a) (9), the former having to do with deductions allowed to individuals and the latter with deductions allowed to corporations. Both clauses are the same and read as follows:

"In the case of mines, oil and gas wells, other natural deposits, and timber, a reasonable allowance for depletion and for depreciation of improvements, according to the peculiar conditions in each case, based upon cost including cost of development not otherwise deducted."

Hence the term depreciation as used in the act has a special meaning, applying only to improvements related to the exploitation of natural resources. However, depreciation is allowed as a deduction in other business, as provided for in section 214 (a) (8) and section 234 (a) (7), in the following language:

"A reasonable allowance for the exhaustion, wear and tear of property used in the trade or business, including a reasonable allowance for obsolescence."

This clause is itself an explanation of the meaning of depreciation in the act, although the word itself is not used in the clause.

The term "depletion," as used in the act, is the deduction allowed for the exhaustion and wasting of minerals, oil, timber and other natural resources.

Profits on Canceled Sales

Editor, Students' Department:

SIR: Will you favor me with an answer to the following question:

A agrees to purchase a tract of land from B for $500,000.00 on January 1, 1921, paying $100,000.00 at that time and giving four notes of $100,000.00 each at 6%, maturing in one, two, three and four years. On June 30, 1921, they cancel the contract and notes by mutual agreement; B retains the original $100,000.00 as a forfeited option payment, but in case he sells the land again will return to A any excess of the sale price over $500,000.00, but not exceeding $100,000.00, less an amount equal to interest on $400,000.00 at 6% from January 1, 1921, to the date of re-sale. The land not being resold as yet, what profit (if any) should B take into account on his books at June 30, 1921, and at December 31, 1921, and under what caption should he enter it in his profit-and-loss statement?

B carries the land on his books at a very low figure. He may sell again at any time or price.

Yours truly,
A. D. A.

San Francisco, California.

It appears that B has made a profit of $100,000.00, minus any expense connected with the sale to B and the forfeiture. At the present time B has his land and $100,000.00. It is true that he may have to return a part of the $100,000.00, but this will happen only if he sells the land for more than $500,000.00. That means that he is bound to make his $100,000.00 profit. If he does not re-sell the land he will keep the $100,000.00. If he does re-sell, he will make as a profit the difference between the original cost of the land and $500,000.00, and since he bought at a "very low price" this profit will apparently be more than $100,000.00. Therefore I think that his profit-and-loss statement at June 30th should show miscellaneous income of $100,000.00.

It appears that the interest feature is not operative unless B re-sells. There is no unconditional promise on A's part to pay B interest. Hence there does not seem to be any justification for accruing interest on B's books. That would mean that there would be no additional income to show in the statement at December 31st.

Taxes and Bonus

Editor, Students' Department:

SIR: Regarding the formulas which have appeared in THE JOURNAL OF ACCOUNTANCY from time to time for computing commission after deducting federal taxes, in view of the change in the law affecting 1921 and 1922, particularly where the fiscal year ends in 1922, it seems now very difficult to determine the proper amount of commission after allowing for these taxes. The writer has a complex problem in this respect and he suggests that if you would have this problem worked out and published, it would no doubt be of assistance to him and also to other subscribers who have a similar difficulty before them. The following is an outline of the points of the problem:

A bonus of 10% of the net profit is to be allowed to an employee. This bonus is to be based on the profits according to the books, including interest on obligations of the United States, dividends on personal-service-corporation stock, profits on dealings in the corporation's own stock, with deductions for amortization of organization expense and other items which enter into schedule L—reconciliation of net income and analysis of changes in surplus.

The profits according to the books are $49,700.00, and the profits subject to tax (before deduction of bonus) are $49,900.00. The bonus is not to be considered an expense in computing the net profit subject to bonus.

The invested capital is $800,000.00; hence there is no excess-profits tax as the profit is less than 20% of the invested capital. The taxable profit even after the commission is deducted is over $25,250.00, so there is no $2,000.00 exemption from the normal tax. The fiscal year ends on February 28th; therefore the tax would be computed as follows: 10/12 at 1921 rates and 2/12 at 1922 rates.

You will observe that there are a great many unusual conditions that enter into this particular example, and it would be of some satisfaction to the writer to see it worked out in a clear and intelligible form so that the average accountant could work out and prove the result.

Respectfully yours,

A. S. S.

Boston, Massachusetts.

Solution: The tax is composed of two elements:

At 1921 rates: 5/6 of 10% of the net profit, or .50/6 of the net profit.

At 1922 rates: 1/6 of 12½% of the net profit, or .125/6 of the net profit.

Then the total tax is .50/6 + .125/6 or .625/6 of the net profit.

This simple computation gives us a single rate which overcomes any difficulties arising from the fact that the fiscal year covers portions of two years with different tax rates.

Expressing the tax by the letter T, and the bonus by the letter B, we have

$$B = \frac{\$49{,}700 - T}{10}$$

$$\text{and } T = \frac{.625}{6} (\$49{,}900 - B)$$

Re-stating the second equation by eliminating the symbol B and replacing it by the value of B as shown in the first equation, we have

$$T = \frac{.625}{6} (\$49{,}900 - \frac{\$49{,}700 - T}{10})$$

The various steps in the process of solving for T are given below:

$$T = \frac{.625}{6} [\$49{,}900 - (\$4{,}970 - .10\,T)]$$

$$T = \frac{.625}{6} (\$49{,}900 - \$4{,}970 + .10\,T)$$

$$T = \frac{.625}{6} (\$44{,}930 + .10\,T)$$

$$T = \$4{,}680.21 + .0104166\,T$$
$$.9895834\,T = \$4{,}680.21$$
$$T = \$4{,}729.48$$

$$\text{Then } B = \frac{\$49{,}700 - \$4{,}729.48}{10}$$

$$B = \$44{,}970.52 \div 10$$
$$B = \$4{,}497.05$$

Proof:

Net taxable profit, before bonus	$ 49,900.00
Deduct bonus	4,497.05
Net taxable profit	$ 45,402.95
Tax:	
At 1921 rates: 5/6 of 10% of $45,402.95	$ 3,783.58
At 1922 rates: 1/6 of 12½% of $45,402.95	945.90
Total tax—as above	$ 4,729.48

Collins, Morris, Keller & Co. and Theodore J. Witting announce the consolidation of their practices under the firm name of Collins, Morris, Keller & Co., with offices in the Foster building, Denver, Colorado.

Barrow, Wade, Guthrie & Co. announce the removal of their offices to 120 Broadway, New York.

Terminology Department

CONDUCTED BY THE SPECIAL COMMITTEE ON ACCOUNTING TERMINOLOGY OF THE AMERICAN INSTITUTE OF ACCOUNTANTS

The committee on terminology presents in this issue of THE JOURNAL OF ACCOUNTANCY definitions of:

Depreciation
Depletion
Amortization
Appreciation
Obsolescence
Inadequacy

The first thought of the committee was to publish definitions of these words by various authorities and at a later date to formulate its definitions based upon the consensus of opinion as reflected by the comments and criticisms received. This course would only delay final results and the committee therefore decided to formulate definitions at this time and, as far as possible, to establish definite lines of demarcation between the words discussed. These definitions are, of course, subject to revision and amplification after all communications on the subject have been duly considered.

Depreciation:

The basic idea conveyed by this word is indicated by its derivation—*de,* down, and *pretium,* price—that is, a reduction in price or value.

Depreciation is loss in physical or functional value of physical property other than wasting assets due primarily and chiefly to ordinary wear and tear which has occurred *theoretically* in the past and which is not offset by adequate repairs and/or replacements. Obsolescence and inadequacy are included by regulatory bodies and taxing authorities as contributary causes, but it is more in accordance with fact to treat these two elements as separate from ordinary wear and tear on the ground that the loss incident thereto does not usually accrue and cannot be foreseen with any degree of accuracy. Depreciation, however determined, is at best only an *estimate.*

Unfortunately for the possibility of clear accounting terminology, depreciation is also commonly used to denote shrinkage in the conversion value of property (securities, real estate, etc.) or mediums of exchange (coins, bullion or paper currency) and indicates in this sense a temporary or permanent loss arising from economic or related causes.

It is of interest that in some lines of business, e. g., long-distance telephone service, extraordinary casualties due to the action of the elements are regular visitants and are provided for by a so-called reserve for extraordinary depreciation which may be estimated in advance quite closely, based upon experience extending over a period of years.

Depletion:

Depletion conveys the idea of emptying, reducing or exhausting the source of supply and is used chiefly

> (a) In reference to natural resources, such as mines or timber-lands, indicating loss in physical value properly commensurate with the removal of the product,

and less frequently

> (b) In reference to financial strength, as, for example, the "depletion of the treasury."

Depletion differs from physical depreciation in that the former implies the removal of an asset for consumption purposes, whereas the latter indicates a reduction in value caused by use or neglect.

The word is seldom found in the writings of British accountants, as is indicated by its omission from various word-books edited by Damson, Lisle, Pixley and Porter, and is usually interpreted by these writers in the sense of "expired capital outlay," forming one of the elements of depreciation.

Amortization:

The basic idea suggested by this word is that of reducing, redeeming or liquidating the amount of an account already in existence.

In finance and accounting this word means the gradual extinguishment of an asset, a liability or a nominal account by prorating the amount thereof over the period during which it will exist or during which its benefit will be realized.

Amortization is caused by, and the computations are based upon, efflux of time or units of production, the life of a right or obligation or the loss of possession or use being the governing factors, e. g., amortization of a patent or of debt discount and expense or of a bonus paid for a lease or of the value of machinery, buildings, etc., on leasehold property which revert to the landlord upon expiration of a lease, or of the value of mine equipment whose useful life is known to exceed the productive life of the mine and is necessarily to be abandoned upon ceasing operations.

Amortization is also used to denote the gradual extinguishment of a debt by means of a sinking fund.

The distinction between amortization and depreciation is clearly brought out in the case of a tributary asset such as mine shafting, where the life of the mine is estimated as less than that of the shafting. In such a case the shafting should be *amortized* over the life of the mine, and not *depreciated* on the basis of physical deterioration. If the mine product were no longer salable *obsolescence* would be the proper designation for the loss in value of the shafting.

In law, amortization has an additional meaning, namely, the act of alienating lands or tenements to a corporation in mortmain. In old French law this could only be done by permission of the king and there was involved the payment of a tax by the corporation so that in time the word was often used to signify this tax.

Appreciation:

This word indicates an increased conversion value of property (securities, real estate, etc.) or mediums of exchange (coins, bullion or paper currency) due to economic or related causes which may prove to be either temporary or permanent.

Appreciation is the antonym of depreciation in so far as the latter is used to denote shrinkage in conversion value.

Obsolescence:

The basic idea conveyed by this word is that of becoming out of date or falling into disuse.

It is usually applied to plant and equipment which although in good physical condition have become old fashioned through progress of invention or advance in the arts, results being achieved more efficiently and/or at less cost under new methods.

Obsolescence may also be caused by the cessation of a demand for the particular articles for the production of which a plant or unit thereof was constructed or installed. This element of loss would be eliminated if the plant or unit could readily be converted to other use.

Regulatory bodies and taxing authorities provide that obsolescence is to be considered in conjunction with wear and tear and inadequacy in arriving at depreciation rates, but in fact obsolescence, except in certain industries, rarely accrues and a plant unit is usually up-to-date until it actually becomes obsolete. Any provision for obsolescence is, therefore, in most cases, a mere segregation of surplus. Coming events occasionally but not usually cast shadows before.

Inadequacy:

The basic meaning of this word is lack of size or of capacity in its broadest sense.

The word usually refers to plant and equipment which, although in good physical condition, is inadequate to carry the productive load required of it. This element of loss would be eliminated if it were found practicable to continue the use of the old unit in conjunction with other units of like or larger capacity.

The element of accrual with respect to inadequacy is usually a matter of conjecture, but it can be better determined than with respect to obsolescence, the trend of business being the governing factor.

Regulatory bodies and taxing authorities provide that inadequacy is to be considered in conjunction with wear and tear and obsolescence in arriving at depreciation rates.

Communications should be addressed to any one of the undersigned.

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